

OXFORD IB STUDY GUIDES

Lloyd Gutteridge

# Business Management

FOR THE IB DIPLOMA

2022 edition

OXFORD



2022 edition

# Business Management

FOR THE IB DIPLOMA

Lloyd Gutteridge

Great Clarendon Street, Oxford, OX2 6DP, United Kingdom

is a department of the University of Oxford.

It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of in the UK and in certain other countries

© 2 0 2 2

The moral rights of the author have been asserted

First published in 2022

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of , or as expressly permitted by law, by licence or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, , at the address above.

You must not circulate this work in any other form and you must impose this same condition on any acquirer

British Library Cataloguing in Publication Data  
Data available

978-1-38-202294-1

10 9 8 7 6 5 4 3 2 1

Paper used in the production of this book is a natural, recyclable product made from wood grown in sustainable forests.

The manufacturing process conforms to the environmental regulations of the country of origin.

Printed by Golden Cup in China

#### Acknowledgements

The publisher and author would like to thank the following for permission to use their photographs and artworks:

**Cover:** Oliver Helbig/EyeEm/Getty Images. **Photos: p11:** "Certified B Corporation™," "B Corporation™," "B Corp™," and the "Certified B Corporation™" logo, and all related names and marks, are trademarks of B Lab Company, and are used in this book with explicit permission from B Lab Company; **p12:** Claudio Divizia/Shutterstock; **p110:** ariadna de raadt/Shutterstock; **p142:** Rens Original; **p150:** Courtesy of Daniel Flynn/Thankyou; **p155:** speedshutter Photography/Shutterstock; **p161:** Alexander Friedman/Shutterstock.

Artwork by Integra Software Services, and .

The publisher and author are grateful to those who have given permission to reproduce the following extracts and adaptations of copyright material:

Chris Bell, extract from "**Monster's University: What's it Like to Work at Pixar?**", Daily Telegraph, 10 July 2013. © Telegraph Media Group Limited 2013/2014. Reprinted by permission.

Wayne Thompson, extract from "**ARC paid \$2.9m for David Beckham**", New Zealand Herald, 21 February 2009. Reprinted by permission.

Trout, J. and Rivkin, S., republished with permission of JOHN WILEY & SONS, INC., from **Differentiate or Die: Survival in Our Era of Killer Competition**, Trout, J. and Rivkin, S., 2nd edition, 2008; permission conveyed through Copyright Clearance Center, Inc.

Extracts from "**Business Management Higher level Paper 2, May 2017 (M17/3/BUSMT/HP2/ENG/TZ0/XX)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Questions from "**Business Management Higher level Paper 2: Specimen Paper (SPEC/3/BUSMT/HP2/ENG/TZ0/XX)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Extracts from "**Business Management Higher level Paper 2: Specimen Paper Mark Scheme (SPEC/3/BUSMT/HP2/ENG/TZ0/XX/M)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Extracts from "**Business Management Higher level Paper 3: Trial paper (TrialPaper/BM/HP3/English)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Extracts from "**Business Management Pre-released Statement: Mapping Tech, Ltd. (MT) (SPEC/3/BUSMT/BP1/ENG/TZ0/XX)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Question 1 from "**Business Management Standard level Paper 2: Specimen Paper (SPEC/3/BUSMT/SP2/ENG/TZ0/XX)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Extracts from "**IB DP Business Management Guide (first assessment 2016)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Extract and a figure from "**IB DP Business Management Guide (first assessment 2024)**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Excerpt from "**IB DP Business Management past paper: 2009 HL Paper 2 May**", © International Baccalaureate Organization, 2022. Reprinted by permission.

Every effort has been made to contact copyright holders of material reproduced in this book. Any omissions will be rectified in subsequent printings if notice is given to the publisher.

# Contents

## Introduction

Study guide essentials	2
Introduction to the Business Management concepts	9
Introduction to the Business Management toolkit	13

## Unit 1: Introduction to business management

1.1 What is a business?	20
1.2 Types of business entities	22
1.3 Business objectives	27
1.4 Stakeholders	30
1.5 Growth and evolution	32
1.6 Multinational companies	36

## Unit 2: Human resource management

2.1 Introduction to human resource management	38
2.2 Organizational structure	41
2.3 Leadership and management	46
2.4 Motivation and demotivation	49
2.5 Organizational (corporate) culture (HL)	55
2.6 Communication	58
2.7 Industrial/employee relations (HL)	60

## Unit 3: Finance and accounts

3.1 Introduction to finance	63
3.2 Sources of finance	64
3.3 Costs and revenues	67
3.4 Final accounts	69
3.5 Profitability and liquidity ratio analysis	73
3.6 Efficiency ratio analysis (HL)	75
3.7 Cash flow	77
3.8 Investment appraisal	81
3.9 Budgets (HL)	84

## Unit 4: Marketing

4.1 Introduction to marketing	87
4.2 Marketing planning	90
4.3 Sales forecasting (HL)	94
4.4 Market research	97
4.5 The seven Ps of the marketing mix	100
4.6 International marketing (HL)	112

## Unit 5: Operations management

5.1 Introduction to operations management	115
5.2 Operations methods	117
5.3 Lean production and quality management (HL)	118
5.4 Location	122
5.5 Break-even analysis	124
5.6 Production planning (HL)	129
5.7 Crisis management and contingency planning (HL)	137
5.8 Research and development (HL)	139
5.9 Management information systems (HL)	143

## Unit 6: Assessment

6.1 External assessment guidance for SL/HL Papers 1 and 2	151
6.2 External assessment guidance for HL Paper 3 (HL)	155
6.3 Internal assessment – the business research project	159
6.4 Revision strategies and examination preparation for SL/HL Paper 2	162

References and further reading	174
--------------------------------	-----

Index	175
-------	-----





# Introduction

Thank you for purchasing this third edition of the *Business Management Study Guide*. This edition has been rewritten to highlight the changes to the Business Management syllabus in terms of content, concepts and assessment. This new iteration of the syllabus will be examined for the first time in May 2024, and this study guide covers all of the new aspects.

In common with the intent of previous editions, the rationale for this study guide is to provide concise guidance for the Business Management course rather than considerable depth and detail. Consequently, this study guide should be used alongside both online resources and course books such as the *Business Management Course Companion*.

This study guide will help you not only to prepare for your final IB exams but also to deepen your understanding of business content, concepts and skills, which could drive your future learning of business management at tertiary level. Much of the content and material presented in this guide will therefore be useful for first and even second-year business undergraduate programmes.

In addition to the business management content provided in the main text, you are prompted to review films, documentaries and other resources to assist in your learning.

Some aspect of self-directed learning in Business Management is critical to deepen understanding but also to ensure that you follow the IB learner profile. Self-directed learning is a good way to keep your knowledge of business case studies up to date. There will be a number of sections in this study guide where you will be asked to be inquirers, open to new ways of thinking about business management.

For the first examinations in May 2024, four concepts that underpin the new Business Management course have been selected: change, creativity, ethics and sustainability. These concepts are introduced below (page 9), and will be included and linked to business content wherever possible.

These are some of the important features of the *Business Management Study Guide*:

- This guide has been updated to satisfy the new IB Business Management course for first examinations in May 2024. There have been a significant number of changes, including to external and internal assessment, which need to be noted.
- The “study guide essentials” chapter is an important introduction to how to use this study guide and the depth of study necessary. There is also reference to the IB learner profile which dominates the learning process adopted by the IB. You are strongly encouraged to read this chapter first.
- Many of the chapters begin with guiding questions, which try to give an overview of the business content and concepts that follow to assist in planning your study.

- For definitions of terms which have been used in the business content sections, you are strongly encouraged to refer to the IB Business Management glossary which can be found in the IB Business Management teacher support material.

- Business examples and case studies have been refreshed since the last edition, and there are new activities too. (Case studies are indicated with the globe icon, and activities with the pencil icon.) Examples which feature predominantly throughout this new edition include the rise and impact of social media on business organizations. There are also examples related to the film industry to illustrate accounting and finance topics.



Another strong business context running through this guide is the global coffee market. Coffee is the second most heavily traded commodity in the world after oil. It provides an excellent way to illustrate business content and the four concepts, as well as providing a context for the new SL/HL internal assessment business research project.

## Acknowledgments

I would like to thank the International Baccalaureate for their permission to adapt Business Management past paper questions, which we have used to provide some indication of future Business Management examination questions.

I would also like to thank the following:

- The numerous colleagues at OUP – especially Harriet Brinton – who have championed and supported all three *Business Management Study Guides* since 2009.
- The “dream” IB Business Management curriculum development team including Abeer, Alistair, Mark, Rob, Anthony and Angela.
- Harriet Power and Adrianna Ruiz for their invaluable comments and suggestions during the editing process.
- My wonderful family – Elaine, Sam and Joel – who once again have supported me in the writing process.

Special thanks go to Martin Muchena, who provided advice and guidance with enthusiasm.

And to all students, good luck: go well in your final examinations and chosen future careers.

This study guide is dedicated to the memory of our late colleague Gisela Fernandez, whose inspiration and desire for change within business management illuminates this study guide. We also acknowledge the work of Harry Beck, one of the unsung heroes of creativity.

Lloyd Gutteridge  
January 2022



# Study guide essentials

## Introduction

*"Give me six hours to cut down a tree and I will spend four hours sharpening the axe."*

Before we begin our investigation and study of the Business Management syllabus, there are several introductory steps that we need to take first to help with your study of business management. The quote above is an excellent illustration of how careful preparation can make a task much easier.

You are strongly advised to read through this "study guide essentials" chapter.

Early in your IB Diploma, you are also strongly encouraged to explore the website for the Business Management course, obtain a copy of the *Business Management Guide* from your teacher, and familiarize yourself with the glossary of business terms.

This chapter covers the following areas:

- The aims of the Business Management course.
- How the IB learner profile applies to your study of Business Management.
- The importance of the command words in determining how detailed and in-depth your study of business content needs to be.
- Some important business terms – not in the Business Management syllabus – which you will need to understand before you begin your study of this course.
- What online resources you can use to help with your study of Business Management, and why you should be careful using current business buzzwords/jargon.

## Aims of the Business Management course

Here is the IB mission statement and the aims of the Business Management course:

*"The International Baccalaureate® aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect."*

*The aims of the Business Management course at SL and HL are to enable students to:*

1. *develop as confident, creative, and compassionate business leaders, entrepreneurs, social entrepreneurs and as change agents*
2. *foster an informed understanding of ethical and sustainable business practices*
3. *explore the connections between individuals, business, and society*
4. *engage with decision-making as a process and skill."*

*Source: Business Management Guide*

In common with any business venture or decision, it is important to set out your aims describing what you want to achieve. The IB mission statement is an ideal place to start.

You are probably studying this Business Management course to build your business knowledge and understanding, so that you may eventually transition to either further tertiary study or employment.

However, the IB also hope that through your study of business management you will develop the skills and characteristics of a "change agent". Your actions as a change agent will encourage you to impact on a range of stakeholders positively and sustainably in your future professional lives. This is a critical aspect and the key driver for many of the themes explored in this study guide, especially ethical behaviour, change, creativity, sustainability, and social enterprise. For HL students only, the role of being a change agent is an important consideration in how you should prepare for the new HL paper 3.

By the end of this course, it is the IB's intention that you will move through the next stages of your life and career with the business content and concepts forming a powerful way of looking at the ever-changing world. As a global citizen, employee, or employer it is your responsibility to act and contribute positively.

## The IB learner profile and how to apply it

### Guiding questions

- What is the IB learner profile?
- How does it apply to the Business Management course?
- How is the IB learner profile applied in this study guide?

This part of the chapter will cover the guiding questions above. Nearly all of the chapters in this study guide will begin with similar guiding questions to introduce the business content you will learn about.

The IB learner profile represents 10 attributes or qualities valued by IB World Schools. The IB believes these attributes can help individuals and groups become responsible members of local, national and global communities.

The 10 attributes are shown in Table 0.1 along with an example of how they might link to the Business Management course.











IB learner attribute	Example of possible link to Business Management
Inquirers 	You could undertake an independent or group investigation into a real business to link it to a business concept such as creativity. You might be asked to research different types of circular business models.
Knowledgeable 	You will create a knowledge base of the four concepts and how these could be applied to business content. For example, creativity could be linked to promotion in the marketing mix, or ethical behaviour could be linked to financial reporting through something called the triple bottom line.
Thinkers 	You could bring together different sources of information from a case study and recommend a suitable course of action for an organization. This is a skill called "synthesis" and for HL students this is very important as it represents a critical skill for paper 3.
Communicators 	You communicate your business ideas effectively using appropriate business tools and methods of presenting data.
Principled 	You understand that interpreting data carries risks and uncertainties, and you acknowledge this in your conclusions/recommendations.
Open-minded 	You are open-minded enough to offer a range of possible solutions to a problem, each of which will have a different effect on the stakeholders.
Caring 	You appreciate that as a change maker, your actions could impact others, and your concern for individuals and societies is uppermost in your thoughts.
Risk-takers 	You explore the idea that creating new business opportunities involves risk, and you have an awareness of how to manage this risk.
Balanced 	You recognize that business organizations need to maintain a healthy work-life balance for stakeholders, and that as individuals we rely on each other. This has been critical during the Covid-19 pandemic.
Reflective 	You recognize that as change agents, we have strengths and weaknesses. You regularly seek out new sources of information to ensure that solutions you promote as a change agent are as effective as they can be given continuing uncertainty.

Table 0.1: IB learner attributes

At various points in this study guide, you will see the symbols for the different learner profile attributes. The learner profile is designed to encourage you to build new knowledge and research additional information, broadening your understanding. Sometimes it will provoke an opportunity to reflect on a discussion point. The learner profile is effectively designed to encourage you to use an inquiry approach to learning, using questioning to deepen your understanding. Deepening our learning is not about finding all the answers, it is about asking probing questions and seeking new ways of thinking.

Applying the learner profile will build your capacity to apply your knowledge and understanding of the subject across a range of different business contexts.

Being able to ask probing questions in response to a business situation or issue is also a key skill in developing understanding of an appropriate solution to the issue. Considered, balanced solutions to a business problem inevitably lead to good decisions being made and, of course, to higher marks in final exams.

An inquiry approach driven by asking deeper and/or probing questions based on the right context can be a very successful way of unlocking further understanding. Your study of theory of knowledge (TOK), for example, will be successful if you adopt an inquiry approach rather than just waiting for someone else to come up with an answer to a question raised in class.

As Daniel Lemire wrote in his technology blog:

*"Asking the right question is more important than getting the right answer."*

*Schools train us to provide the right answers to predefined questions. Yet anyone with experience from the real world knows that, more often than not, the difficult part is to find the right question."*

Source: <https://lemire.me/blog/2018/12/06/asking-the-right-question-is-more-important-than-getting-the-right-answer/>

Of course, this raises an important issue about what is the right question. This would provide a good TOK topic for discussion!

## The use of command terms to show the depth of study required

### Guiding question

- How much depth do I need to go into for each topic in the Business Management course?

In each chapter of this study guide, the content to be covered is labelled with one or more of the following AOs (assessment objectives): AO1, AO2, AO3 and AO4. These AOs determine the depth of teaching and learning that is required.

They also have a direct influence on the amount of writing you will need to undertake when answering examination

questions. More specific guidance on this will be given in chapter 6.1.

Here are some examples:

- Data mining (AO1)
- Vision and mission statements (AO2)
- The impact of MNCs on the host countries (AO3)

Assessment objective	Depth of study required
AO1	Only brief knowledge is required – a definition of a term or a brief description.
AO2	Requires knowledge of a term and some development to show understanding. For example, an AO2 question might ask you to define a mission statement and then continue to explain the role of one to an organization. AO2 questions require more depth of study than AO1 questions.
AO3	An AO3 question requires more knowledge and analysis, and a conclusion/recommendation. The depth of study here is considerable. You will need to investigate advantages/disadvantages of a particular piece of business content. For example, you may have to consider the benefits and costs to a local economy of a newly arrived MNC operating in the area. The ability to weigh up and judge the overall merits of multinational activity is a difficult skill to master and not surprisingly requires a lot of study.
AO4	For AO4 questions you will have to calculate, provide a clear answer, or construct a diagram such as a decision tree or breakeven chart. The question might ask you to provide a brief answer with working shown, or it could require you to fill in figures in a cash flow forecast. AO4 questions are mostly quantitative in nature and do not require the depth of study needed for an AO2 or AO3 question.

**Table 0.2:** Assessment objectives

Table 0.3 provides some guidance on how the command terms link to the assessment objectives. By knowing, for example, that “define” is linked to AO1 and “evaluate” to

AO3, you can gain an understanding of how much depth is required in answers to questions using these command terms. We will explore this further in chapter 6.1.

Assessment objective	Command terms	Depth of study required, with an example examination question
AO1	Define Describe List Outline State	<i>Define “price penetration”.</i> (2 marks) Students are required to show that they understand what this business term means. The key skill is to demonstrate knowledge of a term.
AO2	Analyse Apply Comment Demonstrate Distinguish Explain Interpret Suggest	<i>Explain two benefits to company X of introducing on-the-job training.</i> (4 marks) Students are required to show understanding of the benefits by firstly identifying and clearly explaining a benefit, and then making their answer <i>directly</i> applicable to company X. Key skills are to show application (linked to the company in the question) and analysis (showing how business ideas can be broken into simpler parts and highlighting benefits).
AO3	Compare and contrast Contrast Discuss Evaluate Examine Justify Recommend To what extent...	<i>Evaluate the two options available to company X to increase its market share.</i> (10 marks) Students are expected to analyse both options, highlighting positive and negative consequences of implementation. Answers should be linked or “contextualized” to the company in the question; they should not be generic (ie they should not consist of ideas that could be applied to any business). Students are also expected to provide a fully substantiated (or justified) conclusion based on the analysis which preceded this, and not merely repeat earlier arguments. A key skill is to provide convincing and justifiable analysis applied to the business in the question.

AO4	Annotate Calculate Complete Construct Determine Draw Identify Label Plot Prepare	<p><i>Construct a break-even chart for company Z identifying the break-even point and the margin of safety. (4 marks)</i></p> <p>A key skill is the ability to use a range of quantitative and qualitative business tools, techniques and methods.</p> <p>Students may have to redraw material to incorporate a change to a financial statement, clarify financial information using an accepted planning tool such as a Gantt chart, or prepare a seasonally adjusted sales forecast.</p> <p>You could develop AO4 skills by being an IB inquirer based on your previous knowledge of maths and/or graph drawing or statistical inference.</p> <ul style="list-style-type: none"> <li>• Can I construct a pie chart?</li> <li>• Can I draw a break-even chart using graph paper and correctly label the axes?</li> <li>• Can I plot points on an XY graph to show sales of a product over time?</li> <li>• Can I complete a decision tree and fill in the expected values?</li> </ul> <p>If you can answer yes to all these questions, then you have met the required depth of study for AO4!</p>
-----	---	--

Table 0.3: Assessment objectives linked to the command terms

## Important business terms not found in the Business Management syllabus

### Guiding question

- Which business terms do I need to study that are not listed in the Business Management syllabus but are important to help my understanding?

Pages 23–36 of the *Business Management Guide* contain the business content you need to cover for this course. The *Guide* also has the glossary of command terms used in the Business Management syllabus and other useful information, such as the accounting formula and formats for balance sheets and profit and loss accounts for both for-profit and not-for-profit organizations. This information will be used by your teacher. Increasingly many IB schools place a digital copy of the *Guide* on their online learning platform/management system such as Canvas, Google Classroom or the equivalent.

The Business Management course assumes no prior knowledge of business management. However, at this early stage in your learning, it will be useful to have a good understanding of the business terms shown in Table 0.4. These may not be in the *Guide* but they will be critical in helping with your understanding.

This table is designed to introduce you to content which will not be assessed in your final examinations but which is necessary for you to know. Links to the Business Management concepts are indicated in bold.

Business term	Definition and links to Business Management course
Risk	All organizations live in a world of uncertainty which carries significant risks. Any individual who decides to create a business has no certainty or guarantee that it will be a success. They may have to borrow significant sums of capital from personal sources to finance the new venture. Given the existence of “VUCA” (see below), even with an innovative idea, business success may take years to realize. An individual starting up their own business is also giving up the opportunity to earn a wage or salary with an employer. This is an example of opportunity cost and is also an indicator of risk. The higher the opportunity costs of starting your own business, the higher the potential risk.
Business model	In its simplest form, a business model (which is usually contained within a business plan) determines how the business is going to generate sales revenue and become a going concern through economic <b>sustainability</b> . The business model would naturally investigate potential customers and identify market needs that are not being fulfilled. In unit 5 we will look at circular business models, which link to environmental <b>sustainability</b> . Business models have a strong connection to business plans, which are introduced in chapter 1.1.
Pop-up	This is the name given to a temporary store which may exist for several hours, days or weeks. These can be virtual (online) or physical. Creating a pop-up can be an opportunity to test a new business idea and see if it has the potential to be economically <b>sustainable</b> .
Agile/Pivot	“Agile” and “pivot” are two terms which seemed to grow in importance during the Covid-19 pandemic to indicate that an organization needs to adapt and <b>change</b> . For example, an organization may have to pivot (change direction) and be agile (adapt quickly) in response to any lockdowns, and look at entering a new market or adapting an existing service. We could argue that the terms “agile” and “pivot” are new ways of describing the need to change in response to changes in external factors.

Agile project management, including sprints/ scrum/stand-up meetings	<p>"Agile" has a broader meaning within business management beyond the idea of adapting quickly. It has become part of a new way of operating and thinking <b>creatively</b>.</p> <p>The agile operations idea originated in the software development industry as a new way to manage the creation of new products and services. Many new software projects were failing or taking much too long to complete. Industry leaders realized they needed to find a new, innovative approach to meet customer needs or bring new innovations to the market.</p> <p>There are also leadership and management implications of the agile system.</p>
The external environment and/or external factors based on a STEEPLE analysis	<p>The external environment (encompassing all of the external factors outside an organization's control) can be summarized by the use of a STEEPLE analysis, which is a tool in the Business Management toolkit and can be used to assess the nature of any external factors that can impact on an organization. The external environment can impact both positively and negatively on an organization and its decision-making.</p> <p>In response to <b>changing</b> external factors such as a shift in society's approach to ethics or new legal frameworks, organizations will have to be agile.</p>
Transparency leading to greater accountability	<p>Given the rise of networking and social media tools, organizational activity and decision-making now face greater scrutiny than ever before. This scrutiny has forced many businesses to become much more transparent and <b>ethical</b>.</p> <p>Clear, consistent and accurate communication to stakeholders is now considered the norm for all organizations as part of their commitment to transparency. As we will see on page 11, some organizations are now applying for B Corporation status to indicate that they are intent on being more transparent and accountable for their actions.</p>
VUCA (stands for volatility, uncertainty, complexity and ambiguity)	<p>Business decision-making and risk-taking have always taken place in an uncertain and complex world. Even when taking into consideration external factors through a STEEPLE analysis, an entrepreneur can never be confident that every business decision they have taken will be successful.</p> <p>With intensifying competition and <b>change</b>, VUCA has become an important consideration in strategic business leadership.</p> <p>For your future in business management or in your own personal life, as a successful change agent you will need to be able to navigate VUCA. This means it is critical to be able to apply the concepts of <b>creativity</b> and <b>change</b> to your understanding of business content.</p>
Enterprise	<p>Enterprise refers to the idea of responsible risk-taking by an entrepreneur (or intrapreneur), to create new business opportunities by bringing together the three factors of production (capital, land and labour) for productive ends.</p> <p>Social enterprise also tries to bring these factors together but with strong <b>ethical</b> objectives. Profits with principles is a pithy way to describe this.</p> <p>Social enterprise has strong links to <b>sustainability</b>. Risk-taking should be carried out to add positive value to communities in terms of economic and social sustainability and not damage the environment.</p>
The design thinking framework/process	<p>As organizations wish to become more <b>creative</b> and <b>ethical</b> in their approach to problem-solving, there has been growing interest in the design thinking framework. We will look at this in chapter 6.2 as it is commonly applied to social enterprises. The first three steps of the framework are:</p> <ul style="list-style-type: none"> <li>• Empathise – the idea that the social enterprise is responding to a need yet to be filled.</li> <li>• Define – understanding the challenges arising from satisfying this unmet need.</li> <li>• Ideate – being able to generate a plan of action which will allow the social enterprise to meet this unmet need to ensure <b>sustainability</b> in the medium term.</li> </ul>
Going concern/ Matching	<p>Accounting concepts are not included in the <i>Guide</i>, but with respect to <b>sustainability</b>, the distinction between cash flow and profit, and the role of depreciation, they are fundamental and should be covered. They will be an important focus of our work in unit 3.</p> <p>"Going concern" refers to the idea that when a business presents its financial accounts, it is intending to remain in business and not be sold or broken up. The business is seen as a going concern that has a future. This has <b>ethical</b> implications for the value of financial accounts.</p> <p>The matching principle or accruals principle means that businesses must record in their financial transactions cash received or paid out in the trading period in which it was earned. It is a little more complex than this and we will develop this more in chapter 3.4 concerning depreciation.</p>
Rogers' diffusion of innovations model	<p>Like the product life cycle, the diffusion of innovations model has given us new ways of approaching how customers are classified in terms of purchasing behaviour and profile. It classifies customers, depending on how quickly they adopt a new product or technology, into "innovators", "early adopters", the "early majority", the "late majority" and "laggards".</p>

First mover advantage	A term linked to <b>creativity</b> , disruption and innovation. It describes a situation where an organization develops a new product or process before any competitors do and so gains an advantage by being first to market.
Overtrading	Overtrading describes when an organization is using too much working capital and putting pressure on machinery and human resources. Errors may be about to occur as the organization may exceed its existing productive capacity.
E-commerce	E-commerce or online retailing using the internet is an area of increasing importance. The Covid-19 pandemic has created a greater awareness of the need for organizations to have an online presence and be able to service customers remotely.
Globalization	This is an important concept. Globalization is defined as the increasing interrelatedness and liberalization of world markets, capital and human resources, driven by increased global travel and technologies such as the World Wide Web. The Covid-19 pandemic has somewhat reduced the spread of globalization, but it is still an important concept for organizations to be aware of when operating in international and global markets.

Table 0.4: Important business terms not found in the *Business Management Guide*

## Business buzzwords and useful internet-based resources

### Guiding questions

- What other business management resources can I use?
- How should I approach the use of business buzzwords and jargon?

It is likely that for your study of business management you will use a range of resources beyond this study guide. These resources could include additional course books, documentaries, websites and even TikTok and social media posts. The quantity of potential sources of information has increased dramatically. Careful research and selection of appropriate sources will be critical.

The following resources have been suggested to accompany your paper-based notes and course books. At the time of writing in 2021, they were all available. Some of these resources will be referred to later in the study guide to deepen your understanding of business management.

Resource	How it enhances your learning of business management
<i>The Great Hack</i> (2019)	<i>The Great Hack</i> focuses on the role which Cambridge Analytica and Facebook played in influencing public opinion in critical events such as the UK's Brexit vote and the 2016 US presidential elections. Links to Business Management: ethical behaviour and data analytics.
<i>The Social Dilemma</i> (2020)	<i>The Social Dilemma</i> highlights the unethical behaviour of organizations such as Google and WhatsApp in encouraging users to reveal personal details about their preferences, which are then used in unsolicited marketing communications. Links to Business Management: information systems, data analytics and ethical behaviour.
RSA Animates (www.thersa.org/video/animates)	The organization RSA Animates has created several excellent short videos presented in an imaginative and creative manner. They include but are not limited to: <i>Is our attention for sale?</i> (about the attention economy), <i>Drive</i> (about motivation theory) and <i>A framework for change</i> .
<i>Jobs</i> (2013) and <i>Steve Jobs</i> (2015)	These two films present different views of one of the most popular entrepreneurs/creators of the last 40 years. There are strong links to leadership styles, growth strategies and organizational culture.
<i>Moneyball</i> (2011)	This film provides an excellent way to investigate the contrasts and conflicts between the use of scientific and intuitive management techniques through the medium of baseball. It also has strong links to cultural clashes within an organization.
<i>Enron: The Smartest Guys in the Room</i> (2015)	No study of organizational ethical behaviour would be complete without an investigation into the Enron scandal of 2002 – one of the biggest corporate frauds in US history. The topics covered here include accounting, growth, leadership styles and organizational culture.

<i>The Founder</i> (2016)	<i>The Founder</i> features the life of Ray Kroc and is an excellent watch, especially from 18 minutes onwards when the McDonalds brothers explain how the famous batch production process of making burgers came about. This is the so-called "Speedee" process which changed the way fast-food organizations conducted operations. Strengths, weaknesses and opportunities are also discussed in a familiar business context.
YouTube/TED Talks	TED Talks from all over the globe have become a very informative and insightful source of information about current issues around business. The TED Talk premise is quite straightforward. The speaker only has 20 minutes to get their point across with multimedia support. One of the most popular TED Talks is by Sir Ken Robinson titled "Do schools kill creativity?" It is an engaging way to introduce one of the new Business Management concepts. YouTube also has some excellent videos and reference will be made to them at various points in this study guide. For example, for Herzberg's two-factor theory of motivation (chapter 2.4), "Jumping for the Jellybeans."
<i>The Social Network</i> (2010)	Business content such as partnerships, growth and evolution, conflict, motivation and leadership is superbly illustrated through one of the most famous start-ups of the twenty-first century.

**Table 0.5:** Other business management resources

### Care over the use of business buzzwords/jargon

As we noted above, any subject or discipline needs to develop and grow new language and content. Business management is no exception. New approaches to finance and business organization have given us the terms "micro-finance" (see chapter 3.2) and "social enterprise" (chapter 1.2), and in marketing we can look at the increasing growth and use of data analytics which has given us terms such as "big data" and the "internet of things" (chapter 5.9).

The final section of this chapter aims to highlight those business "buzzwords" or "jargon" which have fallen into everyday business language but may be misleading to the

uninitiated, or at worst may be used to confuse the real underlying meaning.

This section hopefully provides a little light relief from the demands of Business Management study, but as we shall see the use of business jargon is commonplace and has the potential to lead to confusion and prevent effective communication. As succinctly put by Steven Poole in his entertaining book *Who Touched Base in my Thought Shower?*:

*"Among the most spirit-sapping indignities of modern life is the relentless battering of workers' ears by the strangled vocabulary of office jargon ... Office-speak is a maddeningly viral kind of Unspeak engineered to deflect blame, complicate simple ideas, obscure problems, and perpetuate power relations."*

Buzzword or jargon	Actual meaning
Touch base offline	"Touch base" is a term used in baseball, but in a business context the phrase "touch base offline" refers to having a short conversation with someone in an organization face to face.
Outside the box/Blue-sky thinking	Buzzwords which effectively mean creative thinking. Outside the box thinking has increasingly been used by businesses, entrepreneurs, life coaches, football managers and more (without anyone being able to define what or where exactly the box is!).
Going forward	Top of many polls for the least favourite piece of business jargon for saying from now on or in the future. Going forward is particularly confusing because the implication is that an organization will do something "going forward", but this means it is not doing this now.
Deep dive/Granular	Refers to analysing or looking more closely at the details of a project or option for an organization to consider. For example, "Let's have a deep dive at this problem."
Ideation	A term used to describe the creative process for coming up with new ideas. It is a combination of the words "idea" and "solution".
Thought leader	A thought leader is a leader who thinks creatively and comes up with new ideas.
Bandwidth	Not having enough bandwidth means not having enough resources to complete a project or task.
Negative territory	Increasingly being used by market commentators to say that a variable – usually a share price or index – is falling in value. It has moved into negative territory.
Thought shower	Effectively a meeting or a thinking session where new ideas are created or discussed.

**Table 0.6:** Business buzzwords and jargon

There is no doubt that as we move through our third decade of the twenty-first century, other buzzwords will become popular. As IB learners following the IB learner profile, you are encouraged to research and define your own!

One final piece of advice is that as far as possible, the use of business jargon and buzzwords should be avoided when writing examination answers. Please stick to the accepted business content and concepts!



# Introduction to the Business Management concepts

## Guiding questions

- What are the Business Management concepts and how do they form part of my study at both standard level (SL) and higher level (HL)?
- What is business content and what is its connection to the business concepts?
- What is a business context and what is its connection to the business concepts?
- How can I use Business Management content/concepts/contexts so that I can deepen my understanding of this subject?

## Introduction

**Business concepts** refer to ideas or themes which connect business content to help you deepen your understanding of business management. There are four concepts in the *Business Management Guide* to develop this understanding. These concepts are change, creativity, ethics and sustainability.

You will apply the concepts to the business content you study, and will be assessed on them through the internal assessment research project for both SL and HL.

**Business content** refers to the business topics which you will cover as part of the Business Management course. This content will include business theories, the Business Management toolkit, and business topics like leadership, cash flow, and market research, as indicated by the Business

Management syllabus. Your school should provide you with a copy of the syllabus at the start of the course.

**Business contexts** refer to the use and understanding of real-life business case studies. The use of stories, examples or case studies is a very powerful way to bring business content and concepts to life. Wherever possible in this study guide, examples will be used to illustrate important points to help you engage with and remember important business content. Contexts will appear regularly throughout the study guide, and the IB learner profile will encourage you to research your own.

The four Business Management concepts are discussed in more detail below. We shall see how they can be linked together to deepen your understanding of business.

## The four concepts

The Business Management concepts which will be considered in turn are:



**Change**



**Sustainability**



**Ethics**



**Creativity**



**Change**

Change with respect to business management is defined as a process by which an individual or organization decides to take an alternative course of action, and move away from the current way of operating. This could be due to a change in either internal or external factors.

A common saying in business literature is “change is the only constant”. In an era of unprecedented change, this would seem to be the experience of many individuals and businesses. These “unprecedented” changes have been economic, political, social, and technological. We have also at times changed our business language to try to define and explain these changes (some new business terms not in the Business Management syllabus have been included in Table 0.4).

Change can have a direct and positive influence but also a devastating impact on an organization. Such is the power of this influence that some business commentators refer to change leading to the *disruption* of entire industries.

Examples of industries which have been changed permanently include but are not limited to:

- The tourism industry. Airbnb has become the largest hotel chain in the world, but it does not own any hotels.
- The transport industry. Uber is the largest taxi fleet in the world and owns only a fraction of its vehicles.
- The banking industry. This has been disrupted by the widespread introduction and use of the smartphone as a method of banking and payment.
- The home entertainment industry. Streaming services such as Netflix have disrupted viewing habits and patterns, and the ways in which traditional TV and film companies earn revenue.
- The communication industry. The home telephone is disappearing, to be replaced by online forms of communication including Zoom, Microsoft Teams, and Google Meet.
- The meat industry. The creation and increasingly widespread use of plant-based materials is threatening traditional meat and dairy industries in the casual dining and fast-food industries.

There are also other significant environmental, social, and technological changes which may lead to further disruption.

- Increasing flexibility in the workplace and in organizational structures (particularly with the rise of remote working) is becoming more popular locally, nationally and globally to boost productivity and reduce the carbon footprint.
- The retail landscape of many countries is changing, with online shopping becoming more ingrained in everyday life. The emergence of the “click and collect” culture is combining traditional distribution with online retail.
- The influence and dominance of social media continues to grow in our everyday lives, and is accompanied by the growth of “fake news”. The crowded social media marketplace has also meant that new smaller organizations have struggled to gain attention. Consequently there have been significant changes in the methods by which organizations undertake marketing.
- There is growing awareness of the importance of well-being and self-care in our business operations, particularly as a result of the Covid-19 pandemic.
- There is growing awareness of the use and misuse of personal data for commercial reasons.
- More temporary retail stores (often known as pop-ups) are being created and developed, as opposed to the more fixed and permanent high street locations.
- There is greater urgency, especially from younger stakeholders, around the issues of climate change and the responsibility of businesses to reduce their environmental impacts.
- There is an exponential increase in the generation of data, which can be used to drive new revenue streams and/or marketing strategies. Data could also be used in human resource and financial management, and in wider decision-making.
- And of course, there is the ongoing and devastating impact of Covid-19.\*From a business point of view, Covid-19 has led to not only a new normality in terms of lifestyle, but also a new language, new ways of doing business, and changes to strategic goal setting, the structure of organizations, supply chain management and more.

*\*References to Covid-19 in this study guide will focus purely on its impact on business operations and change as a concept. This is in accordance with IB policy around the inclusion of sensitive issues and the fact that Covid-19 is still present at the time of writing and will continue to be for the foreseeable future.*

The above list is merely a guide to the changes impacting on business operations. By the time this study guide is published, it is anticipated that there will be many more.



## Sustainability

Sustainability refers to an organization or community meeting current needs without compromising the ability of future generations to meet their own needs.

Sustainability with respect to business management can be defined through different perspectives.

- Firstly, the most common perspective is environmental sustainability. This refers to the idea that businesses

and their operations should try to minimize their environmental impact on a range of stakeholders, especially the wider community.

- Economic or financial sustainability refers to the idea that an organization should be able to generate sufficient income to allow it to survive and continue to benefit future stakeholders (the “going concern” concept).
- Social or cultural sustainability means that an organization should treat its human stakeholders in a fair and equal manner. This extends not just to employees, but also to suppliers and customers.

We will now briefly investigate one useful way in which we can develop our understanding of sustainability, with reference to the triple bottom line.

## The triple bottom line

The triple bottom line is an accounting framework with three parts: social, environmental (or ecological), and financial (economic). These aim to present a broader view of sustainability.

In essence, the triple bottom line refers to three “pillars”:

- People – where an organization practises fair and equal treatment of its employees and other internal and external stakeholders.
- Planet – where an organization has a long-lasting commitment to minimize the environmental impact of its business operations.
- Profit – which is achievable without compromising either of the above two pillars. Profit is the reward for successful entrepreneurial activity, but any damaging social or environmental impacts should be included when reporting overall profitability.

The overall conclusion is that when considering the concept of sustainability, we must include the aspects of people, planet and profit. The increasing use of social media is at the forefront of this influence. Any organization which does not fulfil its requirements to the three aspects is likely to receive rapid, unwelcome and sustained negative publicity. This could impact not only on customer perception but also on supplier relationships and employee motivation.



## Ethics

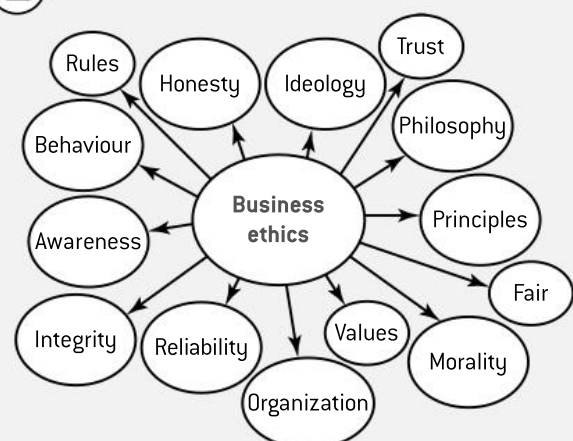


Figure 0.1: Business ethics

Ethics is a broad and wide-ranging concept, as Figure 0.1 indicates. In a business context, it refers to a “morally

acceptable" code of behaviour that a business will adopt to guide how it operates. We can assume that businesses will want to be viewed positively by their internal and external stakeholders.

Put simply, if a business is acting ethically or demonstrating ethical behaviour then it should be doing the "right thing".

## IB Learner Profile

### Principled

There is a great deal of debate and discussion as to the precise meaning of "morally acceptable" or what "doing the right thing" in a business context means. This debate is beyond the scope of this study guide but it could make for an excellent TOK discussion in class.

Ethical behaviour for an organization can apply to all aspects of a business. Here are a few examples of how ethics can apply across all departments:

- **Operations:** a business should produce goods and services which are safe for consumers to use. These products should meet national or international quality standards. The business should also limit the environmental impact of their operations and their products/services.
- **Marketing:** a business can promote their products ethically so they do not mislead customers or make promises about a good or service which may confuse or irritate customers.
- **Human resource management:** organizations should ensure that they treat employees fairly. They could do this by introducing a living wage or through transparent recruitment and promotion processes.
- **Finance:** ethical behaviour here could mean an organization paying appropriate levels of taxes following transparent accounting processes.

### Ethical behaviour and transparency

For an organization to be acting ethically, it needs to be able to demonstrate credible ethical behaviour to its stakeholders. In simple terms, is the organization doing what it is supposed to be doing, and can consumers, employees and other stakeholders trust the organization?

As we have seen with the concept of sustainability and the triple bottom line, organizations need to be transparent and provide clear reporting to show that they are meeting important milestones for their mission and vision.

Another way for an organization to give a clear indication of its ethical reputation and sustainability is by becoming a certified B Corporation.

*"Certified B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose ... B Corps form a community of leaders and drive a global movement of people using business as a force for good."*

Source: <https://bcorporation.net/about-b-corps>

An organization that becomes a B Corporation must continuously try to meet the standards of transparency and accountability demanded by the certification, and align with the certification's mission. This may mean that a B corporation cannot make business decisions or implement new strategies which conflict with the B Corp mission. B Corp certification provides an important connection between two concepts, namely ethics and sustainability. For example, a bank may not be able to finance projects that could impact on the environment in a negative way.

Some organizations, such as Allbirds, use B Corp certification as a marketing tactic. This organization has carried out a successful transition to a publicly listed company and has been acknowledged for their ethical and environmental commitments. We will discuss the organization in more detail in chapter 1.2.

To make transparency part of day-to-day operations, many organizations have an ethical "code of conduct" that drives their operations and relationships between internal and external stakeholders, especially between employees and managers. Codes of conduct can also be used to reduce conflict and lead to conciliation. This could result in more cooperative teamwork and motivation within the workplace.



### Creativity

There are many different interpretations of the concept of creativity. Here is a selection:

- "You can't use up creativity. The more you use, the more you have." (Maya Angelou)
- "When learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit." (Abdul Kalam)
- "The air is full of ideas. They are knocking you in the head all the time ... Suddenly the idea will come through. It was there all the time." (Henry Ford)
- "Creativity is making the familiar strange and the strange familiar." (Mike Hutcheson)

### What are the skills required to be creative in business?

Successful creativity in business management:

- Requires good subject and background knowledge around the decision to be made or the problem to be solved.
- Occurs when mistakes are encouraged in the creative process and a safe environment is provided to allow those mistakes to happen.
- Should try to create new ways of thinking or products or services which add value. There should be something tangible and valuable developed.
- Should be designed around solving a difficult problem which has a significant impact on a community.

An example will help to illustrate these points.



## Harry Beck and the London Underground map



Figure 0.2: Map of the London Underground

The name Harry Beck will probably be unfamiliar. However, Harry Beck created one of the most influential pieces of design in transport management and planning. It is still being used and adapted by communities and governments today, nearly 100 years after it was first launched.

Beck attempted to solve a difficult problem. The London Underground network was growing rapidly. Passengers were finding it confusing to use the system as there was no map to illustrate all of the stations which were being built. Beck was a draughtsman skilled in technical drawing and he had knowledge of electrical circuits. He was determined to find a solution.

Beck's creativity was built on knowledge, skills and one critical insight. He imagined that passengers *would not worry about the distance between stations when underground*. Passengers would only be concerned with the direction of their journey.

Using this insight, Beck was able to include all of the underground stations on his map, even those at the edges of the city, due to distance not being a factor in his solution. It is an excellent example of how creativity can

lead to significant benefits to an organization and also the community. Beck's creativity in map and timetable design has often been copied but never been bettered.

Beck demonstrated many of the qualities of successful creativity:

- He had technical drawing skills so he could illustrate his ideas effectively, and of course he had deep knowledge of the rail network.
- It took many years to complete his final design. He was resilient and kept on producing versions of his map until the senior management of London Underground were happy with it. They rejected his initial designs.
- The map was initially printed in a small size so passengers could keep a copy of it. Today many passengers have the map on their smartphones, or use an app based on the map. The key learning here is that the finished product or service may need to be changed into different forms so that it adapts to customers' needs. In effect, creativity needs to be creative!

As an aside, there is an interesting story around Harry Beck's Underground map. His initial ideas were rejected by the London Underground. He worked overtime without additional pay as he was determined to prove them wrong. Beck was paid only a small sum of money on completion and when the design was used by other transport companies and governments, he was not paid a royalty fee.

Finally, after a documentary focusing on his work, Harry Beck was credited with the design of the London Underground map and his name was included on all future versions. London Underground had argued that Beck was an employee and deserved no special acknowledgment.

Beck died in 1978 a forgotten hero of enduring creativity.

### The role and impact of creativity for organizations

Given intensifying competition in local, national and global markets, the ability to be viewed as different or unique from one's competitors has become critical. We will see the implications of this for marketing in unit 4.

Being creative is important for economic sustainability, and it is not limited to product or service innovation. Other functions of business can be linked to creativity:

- Creativity in marketing by finding new ways to engage with and promote to existing and potential customers. The introduction of customer loyalty programmes and using new social media platforms such as TikTok are just two examples.
- Creativity in leadership and the management of human resources, especially given the impacts of Covid-19. How do you lead and manage virtually? How can you make every level of your organization more creative in its thinking when working remotely? One example of creative leadership is given with the Brazilian

company Semco in chapter 2.2. Semco created a new form of industrial democracy and management where every employee in the organization gets one vote in decision-making, even the CEO.

- Creativity in the use of operations and technology to communicate, produce and manage supply chains across global markets to reduce costs and/or improve product quality. More detail on communication is given in chapter 2.6 and operations management in unit 5.

### Creativity, leadership, and organizational culture

Academic research has revealed that before you can become creative in business activity, you need to have skills and knowledge of a particular product or process in its previous form. The ability to work in teams so that new ideas can be created collaboratively is also an important element in being creative.

Furthermore, the culture of the organization should be fashioned so that creativity can thrive. An inclusive culture or

democratic leadership style may be appropriate. Employees and managers, for example, will need to feel "safe" and confident that their ideas developed during the creative process will be acknowledged, accepted and discussed, rather than just being rejected for being too risky or expensive to implement.

For many years, Toyota has been acknowledged for the way it has broken down management levels and created teams

or project groups that have worked together creatively and saved the organization many billions of dollars. Mistakes are viewed as part of the creative process and are embraced.

Consequently, leadership styles adopted by managers and entrepreneurs are seen as critical in developing a "creative" mindset in their organizations.



## Introduction to the Business Management toolkit

One of the key aims of the Business Management course is to encourage you through the study of business management to become a change agent. The use of the Business Management toolkit is one way to help you achieve this.

The toolkit is a collection of tools and techniques that can be used to support your decision-making. The toolkit cannot provide you with perfect solutions, but it can guide you in

becoming more knowledgeable and analytical. These are two important attributes that increase your ability to make effective decisions. This skill lies at the centre of becoming a change agent.

The tools and techniques of the toolkit should be revised in the same way that you are learning the business management content in units 1–5 and the four concepts.

### The tools in the Business Management toolkit

HL and SL tools include:

- SWOT analysis
- Ansoff matrix
- STEEPLE analysis
- Boston Consulting Group (BCG) matrix
- business plans
- decision trees
- descriptive statistics\*
- circular business models.

*\*Descriptive statistics will include techniques that you learned in mathematics/statistics from your group 5 subject in your Diploma package. Hence, this study guide will assume you are already familiar with them and they merely need to be transferred to a business management context.*

Descriptive statistics includes:

- mean, median, mode, bar charts, pie charts, infographics
- quartiles (interquartile range)
- standard deviation.

HL-only tools include:

- critical path analysis
- Gantt chart
- Porter's generic strategies
- force field analysis
- simple linear regression
- contribution.

Simple linear regression includes:

- line of best fit
- scatter diagrams
- correlation/extrapolation.

Contribution includes:

- make or buy analysis
- contribution costing (linked to portfolio analysis and the BCG matrix)
- absorption costing – allocating the fixed overhead to create flexible costs/pricing for cost/profit allocation.

### Classification of the different types of tools in the toolkit

The tools in the toolkit can be broadly classified along the following lines:

- Situational
- Planning
- Decision-making

**Situational** tools can help you to identify the current situation which exists within an organization, and are usually applied at the start of the decision-making process. Examples include SWOT and STEEPLE analysis.

**Planning** tools can assist with implementing a project. These tools, such as critical path analysis and Gantt charts, can assist with the allocation of scarce resources. They can also help with project management so that deadlines are met and projects do not overrun, which may increase costs.

Some tools in the toolkit could easily be classified as both planning and situational. Force field analysis can be used as a *situational* tool to illustrate the current state of driving and restraining forces within a business. It can also act as a *planning* tool to indicate which forces should be targeted to either be strengthened (in the case of drivers) or weakened (in the case of restrainers) to reach a new equilibrium.

**Decision-making** tools can be used for short, medium and long-term purposes. For example, make or buy analysis can be used to see if an organization should make a product or component themselves or buy in from an outsourced supplier. This could be a short or medium-term decision to be made.

Longer-term strategic decision-making tools such as the Boston Consulting Group (BCG) matrix, Ansoff matrix and Porter's generic strategies, are decision-making tools which involve considerable research, resource allocation, monitoring and execution. The implications of these tools would be long term in nature and would have significant implications for a wide range of stakeholders.

Table 0.7 classifies the Business Management tools according to whether they are situational, planning or decision-making tools, and briefly describes how they can be used by organizations.

Tool	Classification	Role and purpose to support business decision-making
<b>SL/HL</b>		
SWOT analysis	Situational	Allows a business to identify possible internal strengths and weaknesses and possible external opportunities and threats. A SWOT analysis is usually carried out at the start of the decision-making process, and may signal that some form of change in operations may be occurring. Relevant to units 1, 2, 3 and 4.
Ansoff matrix	Decision-making	Allows a business to consider alternative growth options/strategies based on the nature of the product (current or new) and the market in which this product is being delivered (current and new). The Ansoff matrix could apply to units 1 and 4.
STEEPLE analysis	Situational	Allows greater consideration of the range of external factors impacting an organization. These external factors make up the external environment. External factors can impact both positively and negatively. Like a SWOT analysis, a STEEPLE analysis is usually carried out at the beginning of the decision-making process. STEEPLE analysis can apply to units 1, 2 and 4.
Boston Consulting Group (BCG) matrix	Decision-making	Allows a business to consider its future revenue streams based on a portfolio of products. The BCG matrix can be used to classify products with a view to either supporting or eliminating them based on current and future market potential in terms of sales revenue. The BCG matrix is relevant to units 3 and 4.
Business plan	All	Depending on the time frame and nature of the project being considered, a business plan will include situational, planning and decision-making tools. In chapter 1.1 we will look at a new creative way to simplify the business plan process by using the "lean canvas", especially for short-term decision-making. A business plan should include elements of human resource management, accounting and finance, marketing, and operations. Decision-making with all of these components is likely to be strategic. Business plans are relevant to unit 1.
Decision trees	Planning and decision-making	Allows a business to consider several different financial scenarios/options in one diagram. Then, given uncertainty in the external environment and possible cost and revenue streams, expected values are calculated. The decision-making aspect is used when a final decision is made based on these expected values. Relevant units include 1 and 5.
Descriptive statistics	Planning and decision-making	Descriptive statistics can have a multitude of uses for all elements of planning and decision-making. For example, monitoring the effects of changing price on sales revenue as a tactical decision, or looking at mean or modal defects to indicate quality issues in a production process. Relevant units include 2, 3, 4 and 5.
Circular business models	Situational	"Circular business model" is a new business term which encapsulates how businesses generate revenue streams through the use of environmentally sustainable business practices. It can be classed as a situational tool as it looks at the current input-output process of using recycled raw materials. Relevant units include 1 and 5.

<b>HL only</b>		
Force field analysis	Planning and situational	Helps with the dynamic nature of moving an organization from one equilibrium to another by highlighting driving and restraining forces which may limit or resist change. The tool provides an assessment of how to effect change. It should not be used as a decision-making tool to decide on the merits of one possible course of action over another. Relevant to unit 2.
Gantt chart	Planning and decision-making	A visually appealing chart which, along with critical path analysis, allows an organization to ensure that tasks are completed on time. The chart can also identify where spare capacity may be released to ensure that critical tasks are finished on time, thus not delaying the overall duration of the project under consideration. Relevant to units 4 and 5.
Hofstede's cultural dimensions	Situational	Analyses the culture that exists in a community or society. This culture has a direct influence on the values of the members of that community. These values will impact on the organization. The tool is a useful way for an organization to consider the appropriateness of its leadership and management styles, which will impact on motivation and demotivation and the organizational structure. Relevant to units 2, 4 and 5.
Porter's generic strategies	Situational and decision-making	Allows businesses to select a suitable cost focus or leadership strategy depending on the nature of the market the business operates in. The nature of the competitive advantage a firm already has is also considered when selecting an appropriate cost or leadership strategy. (Please note that Porter's five forces is not in the new Business Management syllabus.) Relevant units include 1 and 4.
Contribution: make or buy analysis	Decision-making	Faced with capacity constraints or disruptions to the supply chain, a business may decide to buy in components or finished products from a third party. Or it could decide to expand current capacity to make additional units. Contribution can be used as one decision-making tool in the short or medium term. Many organizations will then review the contribution decision after a 12 to 18-month period to see whether this decision should become more permanent and form a new strategic direction. Relevant to unit 5.
Contribution costing and absorption costing	Decision-making	Contribution costing and absorption costing are ways in which a multi-product business can use the allocation (or apportionment) of fixed costs between profit and/or cost centres to provide a fair allocation of fixed costs or the overhead. This allocation has implications for financial performance and can also give a multi-product firm some flexibility around pricing products. Relevant to units 3, 4 and 5.
Critical path analysis	All	Allows an organization to plan a sequence of interrelated events so that a specific project can be completed on time and on budget. This tool could be used in business decision-making in units 4 and 5.
Simple linear regression and sales forecasting	Planning	The idea behind simple linear regression is that it allows organizations to create and extrapolate future sales forecasts based on existing sales data from previous trading years. This tool has links to the product life cycle in unit 4. (Please note that for the Business Management course, with respect to sales forecasting, specific calculations of seasonal, average, cyclical or random variation are not required.)

**Table 0.7:** Classification of Business Management tools

## Additional explanation of strategic Business Management tools

This final part of the introduction collects together the Business Management tools which we were not able to cover in depth in the units that follow.

These tools could be used in several different sections of the course as highlighted by Table 0.7.

### SWOT analysis

An important tool in situational analysis and decision-making, the SWOT analysis has become a critical tool for organizations looking to review current objectives and trying to ascertain where future opportunities may lie. The case study below gives two examples adapted from online sources from 2016 and 2021, indicating that SWOTs can change over time.

### SWOT analysis of Starbucks



SWOT element	Description
Strengths	<ul style="list-style-type: none"> <li>Strong brand recognition and customer feedback</li> <li>Global organization and excellent supply chain management</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>Products not customized to local tastes</li> <li>High price relative to local competition</li> <li>High employee turnover</li> <li>Issues around the use of Fairtrade coffee</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>New potential territories to develop market share</li> <li>Strategic alliances with film studios</li> </ul>
Threats	<ul style="list-style-type: none"> <li>Oversaturation in US markets</li> <li>Trends in moving away from sugary drinks for lifestyle purposes</li> </ul>

**Table 0.8:** Starbucks SWOT analysis 2016

Source: Adapted from [www.youtube.com/watch?v=mR9eICQJLXA](https://www.youtube.com/watch?v=mR9eICQJLXA)

SWOT element	Description
Strengths	<ul style="list-style-type: none"> <li>Top 100 employer – improved working conditions</li> <li>Top 5 admired company</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>Product recall on some items which were deemed unsuitable</li> <li>High sugar content of some drinks</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>Continued product development</li> <li>Currently using Uber and Grubhub for delivery services – could develop their own?</li> </ul>
Threats	<ul style="list-style-type: none"> <li>Negative reactions on social media (In April 2018, two African-Americans were arrested at a Starbucks after being asked to leave because they had not bought anything; there was a backlash on social media and the CEO of Starbucks apologized personally)</li> <li>Rising global prices of coffee beans, especially from Vietnam</li> </ul>

**Table 0.9:** Starbucks SWOT analysis 2021

Source: Adapted from <https://brandongaille.com/starbucks-swot-analysis/> and <https://bstrategyhub.com/swot-analysis-of-starbucks-starbucks-swot/>

There are some important points to note from comparing and contrasting both SWOT analyses.

- A threat identified in 2016 became a weakness in 2021 – Starbucks have been criticized for the high sugar content of some of their drinks despite a growing awareness of how sugar contributes to poor health.
- Threats from social media have become more evident since 2016. This is interesting as before 2016 Starbucks had enjoyed some positive social media promotion, especially around their use of Fairtrade coffee, which demonstrates Starbucks' commitment to economic and social sustainability.
- Starbucks has shifted perspective since 2016 and made an effort to become a more attractive place to work. Labour turnover in 2016 was a weakness. In 2021, employee satisfaction was very positive, and Starbucks have been recognized for this turnaround. They have also introduced scholarships to support employees who wish to retrain.

The use of SWOT analysis must come with a few notes of caution.

- A SWOT analysis is a situational tool which, in common with a set of financial accounts, is only relevant on the day it is created. Organizations facing changing external factors may find that in a matter of weeks a strength might weaken, or a threat becomes bigger. This is clearly an issue at the time of writing given the Covid-19 pandemic.
- To reduce bias, some organizations ask third parties to carry out the SWOT analysis for them, and outsource the task of collecting and presenting the data. It is important to collect this data from a range of sources.

- A SWOT analysis can be targeted at a specific aspect or function of an organization. For example, an organization could prepare an HR or marketing SWOT analysis to focus on a particular area of concern. Or a SWOT analysis could be undertaken on operations to see if a new strategy of outsourcing parts of the production process should be considered.

### STEEPLE analysis

A STEEPLE analysis shares some common ideas with a SWOT analysis. They are both situational tools and with opportunities and threats, SWOT does consider the impact of external factors. STEEPLE goes deeper, as this example of Netflix illustrates, and it looks at a range of external factors impacting both positively and negatively on an organization.

STEEPLE factor	Linked to Netflix
Social	With lockdowns in many countries due to the Covid-19 pandemic, Netflix saw a significant increase in activity as families were told to stay indoors and work remotely. There has also been a growing trend in using streaming services for home entertainment.
Technological	With technology and internet improvements, streaming services are now more accessible and efficient, using less data. Netflix can increase their product range and in August 2021, announced that they were going to offer free gaming alongside their regular programming.
Economic	As Netflix is a global provider of streaming services, it is vulnerable to exchange rate fluctuations and the fortunes of overseas economies over which it has no control.
Environmental	Netflix has responded to climate change pressure groups by using wind power to offset its energy use for cloud storage.
Political	Some governments have blocked Netflix services. There are also different censorship and content restrictions between regions. This has irritated some stakeholders, especially consumers, and has led to some subscribers trying to "mask" the territory they are in so they can access all of the US content.
Legal	Piracy issues still plague online streaming services, as does the sharing of Netflix log-ins between users.
Ethical	Netflix employs an ethical code of conduct for its employees. It has been fined for showing inappropriate content and has stated that it wishes to be viewed as an ethical provider of streaming services.

**Table 0.10:** Netflix STEEPLE analysis

We should note that external factors will *not* be of equal impact. The Netflix STEEPLE analysis suggests that they have varying influence.

Covid-19 has had devastating impacts on many small- to medium-sized businesses, even those supported by government assistance. However, for Netflix and other streaming services, Covid-19 has proved to be a significant financial opportunity. In an RSA Animates video, "Is our attention for sale?", it is rather cheekily indicated that Netflix's biggest external threat is that customers need to sleep!

Organizations must regularly review and update their knowledge of the external environment and their STEEPLE analysis in the market in which they operate. Given rapid technological and social change in an era of hyper-competition, organizations that fail to monitor external factors such as changes in market trends or consumer behaviour may effectively disappear. Stakeholders of Blockbuster, Toys R Us and Tower records would probably agree with this point.

### Ansoff matrix

We use the Ansoff matrix to see how a business could identify several different strategies to pursue further growth, either within existing markets or, taking a riskier route, looking at potential future markets.

In the new *Business Management Guide* you are asked to explain and apply the matrix to a strategic decision.

	Existing products	New products
Existing markets	Market penetration	Product development
New markets	Market development	Diversification

**Table 0.11:** The Ansoff matrix

An important point to note when considering which element of the matrix to allocate to a particular course of action is that there are no definitive rules by which a growth strategy could be labelled a "product" or "market" development. Students are encouraged to "argue" their case for allocating a particular element of the Ansoff matrix and will be rewarded for the quality of their reasoning!

The four elements are briefly explained below.

- Market penetration: aiming to increase market share. Least risky of the four routes, but limited growth. Once the market reaches saturation another strategy is required.

- Market development: targeting existing products to new market segments, such as new geographical regions. Riskier than penetration.
- Product development: developing new products targeted to existing market segments. A good strategy if the company enjoys strong brand loyalty from its customers. A good example would be Sony and their success over the Blu-Ray DVD format and of course the PlayStation!
- Diversification: the riskiest strategy of the four. The company is stepping out of its comfort zone and perhaps moving away from its core competencies. Nokia, who moved from toilet paper to telecommunications, has been a notable success story (although as we will see, circumstances can change very quickly). The Virgin Group has also been successful with its diversification, although also criticized for having an unfocused portfolio: air travel, music, soft drinks, mobile networks and (in 2021) trials of the world's first commercially available flight into space via Virgin Galactic.

### Decision trees

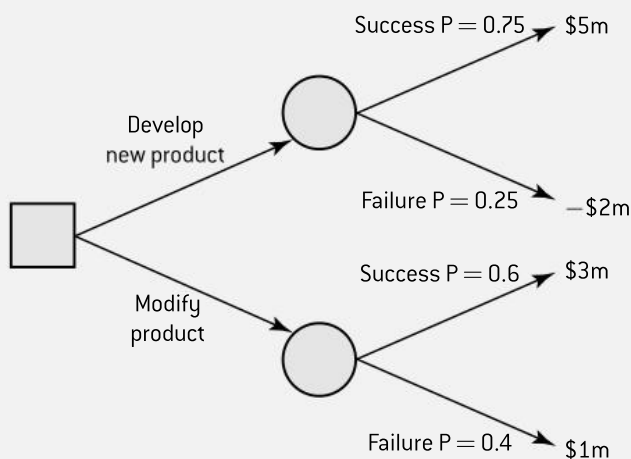


Figure 0.3: An example of a decision tree

A decision tree is a quantitative decision-making tool.

Decision trees are constructed as follows:

- Squares (decision nodes) are points where a choice has to be made between different courses of action, eg to develop a new product or advertise more widely.
- Circles (probability nodes) are points where there is a chance event which may lead to success or failure. P is the probability of success (how close is it to 1?) or failure (how close is it to 0?).
- The next step is to calculate the expected monetary values at each of the probability nodes.
- Using Figure 0.3, for the first node this would be  $(\$5 \text{ million} \times 0.75) + (-\$2 \text{ million} \times 0.25) = \$3.25 \text{ million}$ .
- And the second would be  $(\$3 \text{ million} \times 0.6) + (\$1 \text{ million} \times 0.4) = \$2.2 \text{ million}$ .
- Then the costs of each decision – either to develop a new product or modify a product – need to be considered and the higher of these two values will become the favoured outcome.

### The benefits of decision trees

A decision tree allows firms to:

- visually represent alternative courses of action (in our example, new product development or modification of a product)

- quantify the outcomes of each action in terms of revenue expected
- identify individual probabilities of success or failure
- view the costs of implementing each course of action
- decide on an appropriate course of action based on quantitative factors only.

### The problems with decision trees

The probabilities, which are integral in calculating the expected values, can sometimes seem to appear from nowhere. How were they calculated and on what basis? Some managers use experience or perhaps secondary data to calculate these probabilities, but how can we objectively measure the probability of success or failure?

External and non-financial factors, which could influence the final decision, are not included in the actual analysis when calculating the expected monetary values.

Finally, the decision tree does not consider the entrepreneur's attitude to risk and by assumption the level of intuitive management present in the organization. For example, Richard Branson was warned repeatedly that setting up an airline to compete with British Airways on the popular transatlantic route between the UK and the US was futile, especially given the low prices Virgin was charging and small predicted revenue streams. The decision-tree approach would most likely have suggested that Branson should not enter this difficult market. He did, and was successful.

These issues show that there are limitations to planning tools used in decision-making, and these limitations need to be taken into consideration by organizations.

### Porter's generic strategies (HL only)

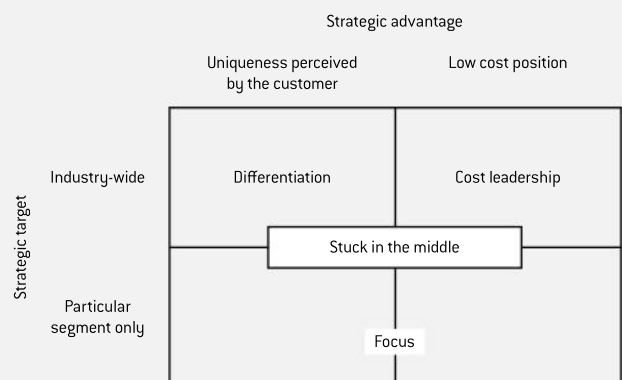


Figure 0.4: Porter's three generic strategies

Michael Porter's "generic strategies" provides a tool to help organizations think about a long-term strategic direction.

Before an organization uses this tool, it is critical to undertake a SWOT analysis and a STEEPLE analysis. Once this has been carried out and the organization decides to find a new strategic direction, then according to Porter they can decide to follow one of three pathways.

The first is **cost leadership** – where the intention is to be the price leader in the market by adopting lean production processes, or through extensive use of economies of scale. Examples of cost leadership include Amazon, AliExpress and Walmart, which try to offer their customers an extensive range of products at the lowest prices.

The second pathway is **differentiation** – where an organization wishes to be viewed as having a unique *position* in the marketplace through the quality of or innovative approach to its goods or services.

“Positioning” refers to how the organization and/or the products or services it offers are “perceived” by stakeholders. For some organizations, this positioning is successful enough that stakeholders immediately associate a particular quality with a particular company. The organization is then said to have a unique selling proposition (USP). Examples include La Pavoni espresso machines and Linn turntables. These products have remained in their current state for over 40 years and have not changed dramatically. The focus is on providing a quality product and not cost leadership.

Volvo has a USP in vehicle safety, and Toyota for reliability. Once established in the minds of stakeholders, a differentiation strategy can be sustainable.

These generic strategies of cost leadership and differentiation are usually applied to an organization operating in a mass market or larger market.

However, Porter classified a third strategy which applies to niche markets. A niche market is one where an organization focuses on providing products and services to a small, specific market segment of an overall larger market. This gave rise to the generic strategy of **focus**. The luxury sports utility vehicle (SUV) could be one example. An extreme version of focus, which we will consider in chapter 4.2, is the niche market of space travel.

Porter argues that the generic strategy needs to be clearly defined. Combining focus with cost leadership, for example, may lead to confusion on the part of customers. Organizations should avoid being “stuck in the middle” as indicated by Figure 0.4.

One example of being “stuck in the middle” is when an organization does not offer features that are unique enough to convince customers to buy its products (poor differentiation), and its prices are too high to compete effectively based on price (no cost leadership).

### Hofstede's cultural dimensions

This is a tool for analysing the impact of national culture on organizational culture.

In chapter 2.5, the discussion will be focused on organizational culture. This can be defined as the beliefs, norms and values which determine how the organization communicates, manages, and motivates stakeholders such as customers, employees and suppliers.

Hofstede's cultural dimensions is a framework to indicate how national cultures can influence organizations. Hofstede identified six different influences or dimensions by studying 100,000 employees working for IBM, who were spread over a range of countries. Hofstede tried to measure how such a wide range of national cultures could impact on culture within an organization by assigning some form of numerical value. The method of calculating this index is complex and is beyond the scope of this guide.

The six influences determined by national cultures are as follows.

#### **Individualism vs collectivism (IDV)**

In some national cultures, the individual contribution to an organization is valued more significantly than a group contribution. In contrast, a national culture where

families and communities are closely tied together will have a stronger collectivist culture and approach to decision-making.

This dimension links to the following Business Management topics: communication (2.6), leadership and management (2.3), and some aspects of non-financial motivation (2.4).

#### **Power distance index (PDI)**

This index measures how the national culture embraces control and centralized decision-making. A high PDI indicates that power is concentrated in the hands of the few; a lower PDI suggests that decision-making is likely to be made through agreement and spread throughout communities.

This dimension links to organizational structure (2.2).

#### **Masculinity vs femininity (MAS)**

A national culture which has high “masculinity” refers to one where decision-making is due to scientific management and the extensive use of quantitative data. Alternatively, a national culture where there is a high degree of consultation, empathy and intuition driving decision-making is said to be more “feminine”.

This dimension links to leadership and management, and scientific or intuitive decision-making (2.3).

#### **Uncertainty avoidance (UAI)**

National cultures which embrace risk-taking and enterprise as critical attributes in decision-making are likely to score highly in the UAI index. More conservative or risk-averse communities and societies would score lower.

This dimension links to the concept of creativity.

#### **Long-term orientation vs short-term orientation (LTO)**

Some national cultures may value short-term successes and achievements for an organization and its stakeholders over long-term goals of sustainability.

This dimension links to the concept of sustainability, and the topics of business objectives (1.3) and investment appraisal (3.8).

#### **Indulgence vs restraint (IND)**

This is a more difficult dimension to quantify. It tries to indicate the degree to which a national culture promotes a greater desire for individual gratification, in contrast to societies where control and “restraint” are the social norms. It can be characterized as a fun vs caution trade-off.

If you visit the website [www.hofstede-insights.com/product/compare-countries/](http://www.hofstede-insights.com/product/compare-countries/), and enter the name of your own country, Hofstede Insights will give you an indicative score of the six cultural dimensions for your country. These scores could promote some interesting class discussions.





# 1.1 What is a business?

## Guiding questions

- What do we understand about the term “business”?
- What are the four main sectors of business activity?
- What are the challenges and opportunities when starting a business?

## The nature of business (A01)

It is quite difficult to define a business given the rapid technological changes taking place and the spread of the World Wide Web. But the definition of a business could be as follows:

*An entity which tries to combine human, physical and financial resources into processing goods or services to respond to and satisfy customer needs.*

This need not be a *physical* business. With a laptop and a secure internet connection it is possible to create an online business with no additional human resources at very little cost.

We must also remember that despite the impact of multinational and global brands, most businesses in both the developed and developing world are classed as small, having fewer than 10 employees.

The traditional idea that a business must contain a production/operations division with marketing, finance and human resources departments is also being challenged. The rise of outsourcing and offshoring (see chapter 5.4) has led to many companies now having their production or distribution facilities (loosely termed the supply chain) located well away from their head office.

## IB Learner Profile

Risk-takers



A fundamental point, which is often missed by students, is that the creation of any business relies heavily on the ability of the entrepreneur to *calculate and manage risk*. We must not forget that the creation of a business involves considerable costs when combining human and financial resources.

Research successful and unsuccessful local and global entrepreneurs and investigate their attitudes to risk-taking. Consider both the entrepreneurs' successes and their failures, as both provide rich learning experiences. Try to avoid the more fashionable entrepreneurs such as Jeff Bezos and Elon Musk, and focus your research on local or lesser-known business entrepreneurs from a range of diverse backgrounds.



Whatever the size of organization, we typically see four main departments:

- **Production or operations management**, which is concerned with the actual manufacturing of the product (in the case of goods), or delivery and execution of a service.
- **Marketing**, which will have responsibility for developing customer interest and awareness as the good or service is launched into the marketplace.
- **Finance and accounts**, which effectively is designed to manage, monitor and report on the economic sustainability of a business.
- **Human resources**, which is responsible for ensuring that managers and employers are organized to allow a business to achieve its objectives and determine the appropriate culture for an organization. Human resource departments are also involved in recruitment, training and managing conflict.

These areas are interrelated, as in the following examples.

Operations management related to marketing and finance:

- A snack food manufacturing company has a very successful domestic product but limited finance to promote or distribute this snack into an international or global market.
- The marketing department of a fast-food company becomes very excited about the possibility of a zero saturated fat French fry, but the production department does not have the knowledge or financial resources to research and create this.

Human resources related to operations management:

- A shortage of skilled labour forces a computer company to relocate its main production facility to another country.
- A successful startup, which is growing quickly in its domestic market, is unable to recruit enough suitable sales staff to handle customer enquiries.

## Primary, secondary, tertiary and quaternary sectors (A02)

We can classify business activity into four sectors:

- The **primary sector** is concerned with extraction of natural resources such as agricultural products or fossil fuels.
- The **secondary sector** includes construction and manufacturing processes. For example, transforming raw materials extracted from the primary sector into finished products.

- The **tertiary sector** includes the providers of services and/or skills for business. An electrician or a delivery company would be part of the tertiary sector.
- The **quaternary sector** describes a knowledge-based part of the economy. This includes services such as generating and sharing information, consultation, education, research and development, information

technology, financial planning and other knowledge-based services.

Given the rate of technological change in the developed world, the quaternary sector of the economy is expected to become the most important for generating new business opportunities for growth.

## Entrepreneurship (AO2)

Entrepreneurship should be viewed as a dynamic activity that centres around business skills such as resilience, creativity and risk-taking.

Entrepreneurs have the courage to turn potential business ideas into going concerns, leading to the creation of new products and services. Entrepreneurship can be present in all sectors of the economy, such as construction (primary) or finance (tertiary). It is not just limited to the quaternary sector.

It is the entrepreneur who identifies an opportunity in the marketplace and has the courage and desire to turn this

opportunity into a business. Entrepreneurship has grown by 15% since the start of the Covid-19 pandemic according to OECD figures.

An entrepreneur should be willing to take full accountability for their actions whether they are successful or result in failure. This accountability is called liability and for entrepreneurs who become sole traders, this liability is unlimited. If a business start-up gets into financial difficulties, an entrepreneur's own personal assets, such as a house or valuable assets, can be used to pay back any debts owing. More details on sole trader organizations are given on page 23.

## Challenges and opportunities for starting up a business (AO2)

Many individuals have considered setting up their own business despite the inevitable challenges. Some of the reasons people might want to do this are:


- to become artistically and financially independent and follow a business passion, or to exploit a new market or add new value to an existing one
- to transform a hobby or interest into an economically sustainable business
- to exercise a degree of control over their future, especially if they have been made redundant by a large corporation
- due to the fact that it is easy to set up a new business in the country where they live.

However, there are several challenges, including:

- Lack of start-up capital. A start-up is unlikely to be fully financed at the beginning of its operations and will likely see significant amounts of cash leaving the business days or months before cash flows in.
- The individual or start-up may have knowledge and entrepreneurial enthusiasm for the product or service, but may lack the ability to prepare and monitor financial accounts, organize suitable promotional activities, or delegate responsibilities. Multitasking can be difficult for a one-person sole trader.
- Incorrect pricing in the early life of the product or service can lead to lower than forecasted sales and impact the size of cash inflows.
- The time it takes to create clear, accurate and unbiased market research to guide pricing and promotion of a new product or service can be overwhelming, but new start-ups may not be able to afford the independent objective market research provided by specialist research agencies.
- There may be competition and brand loyalty from existing businesses. It can be difficult for new businesses to achieve sales and win customers when

they are competing against local or national established businesses. Online businesses based in other countries may also provide fresh challenges, and there could be competition from larger multinational corporations (see chapter 1.6).

### IB Learner Profile

Balanced 

Remember that the issues facing all new start-ups will depend on whether they are operating in the developed or the developing world. Some of the challenges and opportunities will be identical, but some will be completely different depending on the business context.

### What is a business plan?

All business start-ups need a business plan to guide objectives, organize resources and attract funding in the first instance. The type of plan presented will depend on the nature of the business, the market it is trying to enter and the potential scale of operations.

A business model is often contained within a business plan. It determines how the business is going to generate sales revenue and become a going concern through economic sustainability. The business model will normally investigate potential customers and identify market needs that are not being fulfilled.

### Coffee Republic

Without any previous business start-up experience, Bobby and Sahar Hashemi decided to set up a coffee bar in London called Coffee Republic. They have described their "journey" in their book *Anyone Can Do It* (2003). Their business plan, which was delivered to their

bank and prospective investors, ran to over 20 pages. They began with a loan of around \$200,000.

They identified several elements that a business plan should have:

- The aims of the business.
- Details of existing and potential competition.
- Amount of funding required with a timeline illustrating how the funding will be used.
- Finance needed under different scenarios if the external factors change.
- Timelines for implementation and a commitment to review aims if forecasts are not met.
- A comprehensive marketing plan with sales forecasts.
- A projected profit and loss account and cash flow forecast.

For a start-up such as Coffee Republic, in order to secure start-up capital from a lender there is no doubt that a 20-page business plan highlighting the business model was required. But for smaller businesses less-detailed business plans can be sufficient.



### Creativity

The lean canvas is a new creative way of looking at business plans. One of the most popular versions is that presented by Business Model You. It is a one-page model for entrepreneurs who wish to explore the challenges and opportunities of starting a business. It asks questions such as "Who will help you?" (key partners), "What do you need?" (key resources), and "How do you interact?" (customer relationships).

### Revision checklist

- Creating a business requires combining human and financial resources, which involves a risk undertaken by the individual or entrepreneur.
- There are four main sectors with which we can classify business activity: primary, secondary, tertiary and quaternary.
- Entrepreneurs will want to exploit potential opportunities and receive profits for their risk-taking, but there will be challenges including competition from existing organizations.



## 1.2 Types of business entities

### Guiding questions

- What is the difference between the private and public sectors?
- What are the main types of business entity in the new Business Management course?
- Which type of business entity is the most appropriate for an organization?
- What is a social enterprise and why is it important to study, especially at higher level?
- What is the difference between a social enterprise and a traditional business entity?
- What are the roles of cooperatives and non-governmental organizations (NGOs)?

### Distinction between the private and public sectors (A02)

The following quote from Russell-Walling (2007) summarizes the main difference between the private and public sectors.

*"The private sector focuses solely on profit maximization and the public sector tries to provide a service to consumers whatever the cost."*

While this is true in many countries, increasingly many public sector corporations – which we define as being principally controlled, financed and operated by the government – have to behave like private sector companies. Public sector organizations are expected to:

- provide greater levels of customer satisfaction and demonstrate private sector type behaviour, such as

improving levels of efficiency, managerial innovation, and flexibility

- be more accountable and transparent in order to receive public funding, and (in some industries) to return a surplus back to the government.

In conclusion, we can argue that the distinction between the private and public sectors has become blurred. For example, evidence from Asia indicates that the Chinese and Singaporean public sectors are important drivers of creativity and innovation in those nations.

## The main features of organizations (A03)

Type of business	Ownership and transparency	Finance	Examples	Control/decision-making
Sole trader	One owner. There is a limited need for published accounts except those for tax purposes.	Past savings, government grants and loan schemes. Retained profits after trading begins.	Service-based firms such as home help or computer repairs.	There is usually one person in overall control.
Partnership	Up to 20 partners depending on the country of operation. There is a limited need for published accountability.	Savings, loans, capital from new partners. Retained profits.	Lawyers, medical practices.	The partnership agreement specifies terms for control/decision-making. Sleeping partners have limited liability.
Privately held company/ Private limited company	Depends on the country of operation. In some countries businesses must send financial statements to a registrar of companies.	Contributing capital from partners. New partners could be introduced through a partnership agreement.	Family-run businesses with a desire to avoid unlimited liability. Specific examples: Lego, Illy, Ferrari.	Control/decision-making is according to the agreement signed. For family-run businesses, authority is usually handed down through family members.
Publicly held company/ Publicly traded company	This is unlimited if shares are advertised on local or global exchanges. Periodic reporting with absolute transparency is required.	Wide access to funds if shares are sold on various exchanges. Success depends on the sentiment of the financial markets.	Larger corporations with successful transparent financial histories. Specific examples: Sony, Walmart.	Shareholders will vote at an annual general meeting (AGM) to decide on the board of directors and the dividend to be paid or retained.

Table 1.2.1: Key features of different types of private sector business

### **Which type of organization is the most appropriate?**

This is a difficult question to answer. Lego, for example, has successfully remained a private company since its creation in 1932, with the Kristiansen family firmly in control.

Richard Branson, founder of the Virgin Group who bought back the organization in 1989 after a successful flotation in 1987, famously remarked he felt that as the founder of the company, he knew better than shareholders how to invest profits and make decisions. The Virgin group has been held as a private company ever since. This control aspect has meant that Branson has been able to sell off parts of his company including one of his most successful business ventures – Virgin Atlantic – to finance other growth and diversification options.

In 2021, after a number of unsuccessful attempts, Branson completed one of the first commercial space flights under the brand of Virgin Galactic (see chapter 4.2).

### **Should a private organization become a publicly traded company?**

There is an interesting cultural element to the question about which type of organization is most appropriate. The European business model includes businesses such as Lego, Illy and Ferrari, which have not become publicly traded companies. They have preferred to remain in private family ownership and not go public. In the United States there is seemingly a never-ending supply of business start-ups who wish to become publicly traded (or to use the current jargon, “to IPO”, i.e. make an initial public offering to the financial markets so that new investors can buy shares in the company).

In 2013, Twitter and other internet-based start-ups began a trend in IPOs. Despite having very low revenues and no profit, Twitter has been valued as a “sound investment” by the financial markets. Even the Facebook initial public offering of 2013 was met with both excitement and scepticism, as many stakeholders thought the company was overvalued.

A more recent example is Allbirds. Allbirds is a producer of environmentally friendly footwear. Actor Kristen Stewart, ex-president Barack Obama and Google entrepreneur Larry Page are customers. Allbirds has grown very quickly and is a B Corporation with a strong commitment to the triple bottom line (people, planet, profit). In 2021, they raised additional finance to fund expansion and had an IPO, effectively becoming a publicly traded company. However, accounts for 2020 indicate that Allbirds posted a net loss of \$25 million even though sales revenue had grown by 25%!

These examples highlight that even if an organization is making a loss or is seen as overvalued, it may still decide to use an IPO to attract additional finance. Many US businesses see this as the route to increased growth and opportunities. However, often the questions of whether the IPO will be successful and whether potential investors will buy the new shares are often overlooked. Many people will remember the dotcom boom of the late 1990s when numerous investors lost billions of dollars investing in internet-based companies that had a powerful mission but no accounting fundamentals.

Whatever the merits or demerits of being solely owned or in a partnership or in private hands, some of the considerations when making the decision are as follows:

- The degree to which the owner wishes to retain overall control.

- The degree to which the business wishes to be transparent about its financial position. Publicly traded businesses must be very open and honest about their future profit, sales forecasts and growth strategies. They must also declare directors' salaries and remuneration packages. Privately owned organizations only need to inform the tax authorities in their respective country of origin about the true state of their financial affairs.
- The extent to which the firm wishes to compete in international or global markets. However, with globalization and the internet, many smaller firms are able to trade beyond their country of origin.
- The speed and degree of flexibility in decision-making required by the owners. The fewer owners there are, the quicker the decision-making process can be.
- The objectives of the firm in terms of growth, profit, vision and mission. (See chapter 1.3 for a full discussion of business objectives.)

## Main features of for-profit social enterprises (A03)

*This section is an important one for several reasons:*

- *It contains information about a new type of business entity which may be unfamiliar.*
- *It has links to concepts such as ethics and sustainability and provides an excellent opportunity to apply these concepts to the internal assessment for SL/HL.*
- *Social enterprise also provides the business context for the newly created Paper 3 (for HL only). We will refer to this in more detail in unit 6.*



A social enterprise is a business entity that many people may not be familiar with. It is an organization whose aim is to have a positive impact on its stakeholders; that is the basis of its mission statement and the driver for its operations. Profit is important to a social enterprise but it should be used to maximize the positive and social impact of its operations.

Figure 1.2.1 illustrates how a social enterprise differs from traditional for-profit enterprises and crucially charities, which may also try to do good in the community.

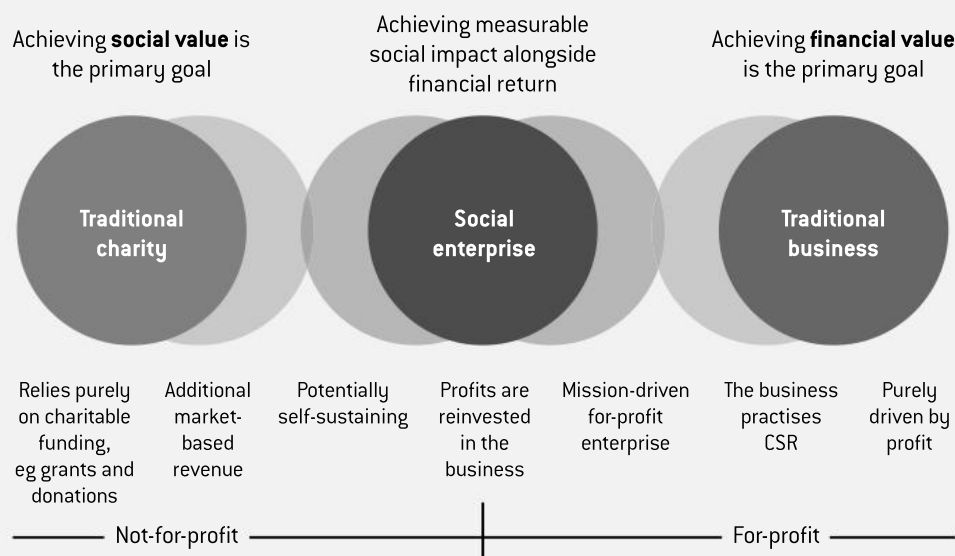


Figure 1.2.1: A continuum of the differences between charities, social enterprises and traditional businesses

- Social enterprises can be both not-for-profit and for-profit organizations.
- Unlike charities, social enterprises are funded by trading activities for at least 75% of their income rather than from donations, allowances and government grants.
- For social enterprises, the impact on stakeholders drives their mission statement, and any surpluses (profits) are used to ensure that the impact is maximized. The growth of the impact is the most critical aspect/objective of a social enterprise.

### Examples of social enterprises

Given that impact is so critical, social enterprises differ enormously according to the priorities of the region or country in which they operate. Here are some examples.



**Akina**

Ākina ([www.akina.org.nz](http://www.akina.org.nz)) advises and guides social entrepreneurs on how they can become more sustainable. They are organized and driven by a strong set of Maori or indigenous cultural values. These include "uptake" (reason for being – purpose or business objectives) and "kaitiakitanga" (guardianship of resources, strong links to environmental sustainability). These values are critical in the development of Ākina's business model and drive their mission and, consequently, their impact.



## Will&Able

Will&Able ([www.willandable.co.nz](http://www.willandable.co.nz)) seeks to make an impact through number 8 and number 10 of the UN's sustainable development goals (SDGs). Its aim and mission is to raise awareness of the power and potential of individuals with disabilities by treating them as employees first, to give them confidence, life skills and an employment opportunity.

In New Zealand the employment rate for individuals with disabilities is only 22% compared to 70% for those who are non-disabled. Will&Able aims to educate employers and employees who are non-disabled regarding the opportunities of supporting someone who has disabilities.

## Who Gives a Cr\*p

The name of this creative toilet paper company is clearly designed to get attention! Its mission is to provide funds to support individuals who do not have access to a safe, "dignified" toilet – in other words, a basic human right.

It has donated nearly A\$6 million to provide clean, safe toileting facilities, and most importantly they have a B Corp certification. This allows organizations to measure their impact on a range of stakeholders from an independent accredited source, thus enhancing credibility and transparency.

From these examples, we can see that for a social enterprise the objective of the organization is to maximize the impact on its stakeholders through its mission. Transparency and sustainability are key concepts. Also we can note that many corporations who are B Corp certified proudly use this as a way to demonstrate commitment. The idea of social enterprise clearly links to the intent of the IB mission and the aims of the Business Management course.

## IB Learner Profile

Inquirers ?

As an IB inquirer you are encouraged to visit websites of the Social Enterprise World Forum (SEWF) and the Enactus World Cup. Given the demands of the new business research project for both SL and HL, a social enterprise would make an excellent choice for an organization to investigate (see chapter 6.3).

Other global examples of social enterprises include:

- R2R – a social enterprise based in the Philippines which encourages female entrepreneurs to develop their own business in the recyclable fashion industry.
- Solar Sister – a social enterprise based in Africa which supports female entrepreneurs wishing to become innovative and sustainable in the development of technology based on clean and green energy.
- Tiny Miracles – a social enterprise based in India that helps to lift entrepreneurs out of poverty by supporting new design ideas.



## Indosole

Indosole ([www.indosole.com](http://www.indosole.com)) started out as a joint venture between entrepreneurs in Indonesia (Bali) and San Francisco (United States) to create footwear that is accessible and sustainable, given that its main resource is recycled tires. The following is taken from their website. This example amplifies many of the aspects that constitute a social enterprise.

### The Indosole Mission

*To inspire people to live a more fulfilled and conscious life with every step. Indosole strive to have the cleanest and most responsible manufacturing processes possible. We are a B Corporation Certified Business which ensures we have clear guidelines to support this mission.*

*Sustainability does not need to be boring. We think of environmentalism as fun. We want to live a beautiful and fun life with good health and good friends. A clean and diverse environment allows for human health and happiness, for us, our friends, family, all of mankind and the animal kingdom.*

*We hold transparency and honesty to the highest – within our supply chain, workers' rights and wellbeing, partnerships and decision-making. We limit toxicity. We innovate. We research, learn, grow, think, learn, wear.*

Source: [www.indosole.com.au](http://www.indosole.com.au)



## UN Sustainable Development Goals

The 17 SDGs are far-reaching and include ending poverty (goal 1), improving gender equality (goal 5), and combating climate change (goal 13). Not all social enterprises will be able to satisfy all 17 of the goals, but they provide an accepted and meaningful framework

to measure progress. Connecting with the SDGs gives the social enterprise a potential competitive edge over traditional organizations.

For more information, you are encouraged to visit the UN Sustainable Development Goals website ([www.un.org/sustainabledevelopment/sustainable-development-goals/](http://www.un.org/sustainabledevelopment/sustainable-development-goals/)).

## Public sector companies

Public sector companies are generally owned by the government, but some engage in private-public partnerships. They are funded mainly from government

spending through collective taxation that is paid by voters. Ultimately, public sector companies are accountable to voters. The public sector is still seen by some as being bureaucratic and inefficient.

Examples of public sector companies include health services and hospitals in many countries, education, utilities, transport, and large infrastructure projects.

Public sector and private sector partnerships can combine government funding with private sector entrepreneurial thinking. Some social enterprises have begun in this way.

### Cooperatives

A cooperative is an organization where the ownership and decision-making are usually undertaken by registered members. FC Barcelona – a famous Spanish football team – is effectively a cooperative as the owners are the 144,000 official members. Cooperatives try to use the term “voluntary members” rather than “partners”, and “membership” rather than “partnership”.

Cooperatives are for-profit businesses, but usually as part of their mission and values there is some aim that is driven by a collective purpose which should impact positively on the community. Profits are sometimes referred to as “surpluses” by cooperatives. Cooperatives operate in 96 countries and have a combined total sales revenue of over \$2 trillion.

A good example of the cooperative movement is the Ethiopian coffee industry, where many cooperatives support

local farmers who find it difficult to sell green coffee beans on their own. Collectively, farmers can secure higher prices and better trading conditions, especially if they belong to the Fairtrade movement.

Many cooperatives in Ethiopia have decided that in addition to supporting farmers they will also ensure that the local community benefits through shared projects such as providing educational facilities or improved water supplies.

The Oromia Coffee Farmers’ Cooperative Union in Ethiopia is one of the most recognisable cooperative brands. This is an example of a worker cooperative. Recreational Equipment Inc. (REI) based in the US is an example of a consumer cooperative. REI was created to serve the interests of its customers, with additional rewards given to its members. REI also has a strong focus on environmental sustainability. This quotation, taken from its website in 2021, gives an excellent insight into REI’s mission:

*“The best thing about being a co-op member is knowing that I’m part of a community who love, appreciate and fight for the outdoors. Perks to discounts and exclusive gear is a triple plus.”*

Source: [www.rei.com/membership/join](http://www.rei.com/membership/join)

## Non-profit social enterprises (A03)


### Non-governmental organizations

NGOs are typically associated with charities and other not-for-profit organizations. They are driven by ethical goals, in the same way that social enterprises are. NGOs are often independent of government control, although some do receive additional sources of government funding and the number of NGOs with some significant governmental input has been increasing. However, NGOs rely on donations for the bulk of their funding.

There are many notable examples of NGOs who carry out essential work for communities in both the developing and developed world. This work includes direct help in socially responsible projects, but NGOs also provide research and guidance to for-profit organizations as well as acting as political lobby groups.

Examples of NGOs include Oxfam, World Vision, and Amnesty International.

### IB Learner Profile

Knowledgeable 

Research an NGO of your choice and discover how the organization is financed and structured, as well as its mission and vision.

You should be mindful that there is a very wide spectrum of debate about what constitutes an NGO, and the extent of their effectiveness. For these reasons, an NGO would make an excellent business context for the SL/HL business research project. You would be able to apply the concepts of ethics and/or sustainability.



### Question for reflection

Given the social and ethical impact of cooperatives, how would business management change if all businesses became cooperatives?

### Revision checklist

- Some of the main business entities to consider include sole traders, partnerships, and privately and publicly held companies.
- There are strong reasons why an organization may wish to remain as a sole trader or in private hands despite the financial opportunities of an IPO or going public.
- A social enterprise is a business entity which attempts to maximize the economic and social impact of its operations in an ethical, environmental and socially sustainable manner through its mission. Profit is an important factor for a social enterprise to consider and is ultimately used to maintain and ensure the success of the mission and its impact on stakeholders.

- Cooperatives can be both consumer and producer focused. They also try to maximize the financial and non-financial benefits to their members.
- NGOs or charities have similar ethical aims to social enterprises and cooperatives but are typically financed from donations and/or government support.
- The most appropriate form of ownership for an organization will depend upon a number of factors, including:
  - The objectives of the organization.
  - The degree to which the owners wish to retain control over decision-making and the degree of flexibility required.
  - The degree to which the business wishes to be transparent about its financial operations (this does not imply anything sinister).
  - The extent to which the organization wishes to compete in international markets.

## 1.3 Business objectives

### Guiding questions

- What are the roles of a vision and mission statement?
- What are the most common business objectives?
- What is the difference between strategic and tactical objectives?
- What is the role and importance of corporate social responsibility (CSR)?

## Vision and mission statements (A02)

There is some confusion about the difference between mission and vision statements.

A **mission statement** is a way of defining briefly and succinctly the *reason* or *purpose* for the business's existence. Some examples may help to clarify this point:

- Alibaba's mission is to make it easy to do business anywhere.
- Facebook's mission is "to give people the power to share and make the world more open and connected".
- Tesla's mission is to accelerate the world's transition to sustainable energy.

These mission statements are designed to give the impression that the organizations are greater than being just an online shopping website, a social media platform or an electronic vehicle company.

A **vision statement** defines how the company sees itself evolving in the future. Some writers have called this a "strategic aim".

Because vision statements are forward-looking and cannot accurately predict the future, they are often intentionally vague.

Given the existence of external factors, such as the global pandemic that spread around the world in 2020, it is impossible to predict change and how an organization will look in 12 to 18 months let alone in 5 years, which is a common time frame for a strategic aim.

Some examples of vision statements in 2021 are:

- Starbucks: "Treat people like family, and they will be loyal and give their all."
- Ikea: "To create a better life for everyday people."
- Oxfam: "A just world without poverty."

### The importance of using mission and vision statements

Mission and vision statements can be used to help clarify in the minds of stakeholders the purpose and future motives of the organization. The stakeholders include customers, employees, investors, and suppliers (both current and potential), and the purpose and motives of the organization will be an important consideration for them. (Stakeholders are discussed in chapter 1.4.)

A vision statement can reassure shareholders that the business is forward-looking and willing to create and pursue new opportunities.

A vision could be perceived as unobtainable in the short term, but stakeholders (especially investors) may feel that the company is striving to do the best that it can within its market. A vision statement may also be useful for a private limited company that is looking to launch a share issue through an IPO.

However, the mission and vision statements must be credible and realistic in the minds of stakeholders. They need to be SMART (specific, measurable, achievable, relevant and time-specific). One of the main criticisms of companies' mission and vision statements is that they can be too vague or too imprecise. An example of this is Enron. The management of Enron made many remarkable claims about their vision and purpose. They even tried to convince their shareholders that they could control and sell weather. They also had a vision that one day they would become the biggest company in the world, despite mounting losses and unethical behaviour. It is sad that Enron were able to manipulate their investors and employees for so long before finally declaring bankruptcy in 2001.

## Common business objectives including growth, profit, protecting shareholder value and ethical objectives (A02)

### Typical business objectives

Typical business objectives will be influenced by the age of the firm and the prevailing external factors.

It should be noted that given the challenges faced by an entrepreneur in setting up a business (as outlined in chapter 1.1), a key theme running through these objectives is the idea that business start-ups should aim in their first two years to become economically sustainable before they can consider making significant profits.

Typical business objectives include:

- Profit maximization and the protection of shareholder value.
- Survival/breakeven, also referred to as economic sustainability.
- Cost minimization.
- Growth (usually in terms of increasing market share in the short term or the scale of operations in the long run).



**Ethical objectives** include a deliberate attempt by the company to take a position that is viewed as morally correct and appropriate in the eyes of stakeholders. The following questions provide examples of some of the ethical issues faced by an organization when making decisions.

- Should a multinational firm operate in a country that imposes harsh working conditions on its citizens and encourages the use of child labour? Yet by being in that country, living standards for the majority of the population could improve.
- Should a pharmaceutical company that plans to produce an important vaccine in an area with a high prevalence of malaria charge high prices to consumers who live outside the infected areas, to allow low prices for consumers who live within?
- Should tobacco or alcohol producers be allowed to sponsor sporting events where young children may be in the crowd? What if the event gives young children the opportunity to participate in a range of new sports?

Think of your own examples of ethical objectives by questioning an action or decision made by a business that you know. Consider both the positive and negative impacts of the decision on customers and other stakeholders.

### Importance of profit motives for creativity and protecting shareholder value

In economic terms, profit is considered as the reward for risk-taking. If the entrepreneur has decided to combine human and non-human resources and land to create a business, then earning profit should be seen as an incentive and finally as a reward. Without the profit motive, very few new businesses would be created. Social enterprises are driven by the profit motive so that they can increase the positive impact on the community that they serve. It is perhaps the size and magnitude of some company profits which raises concern.

Protecting shareholder value is more contentious. Shareholders as owners are very important stakeholders for an organization. If profits are increasing and customer satisfaction is strong, then profit-driven shareholders will be satisfied.

But what if revenues and profits fall? To protect shareholder value, senior directors may have to introduce cost-cutting measures leading to layering or re-organization (see chapter 2.2) to boost profits the following year. What will happen to motivation for both owners and employees?

In his book *Capitalism and Freedom*, Milton Friedman famously remarked that there is really only one objective:

*"There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud."*

## Strategies and tactical objectives (A03)

It is useful to classify business objectives according to whether they can be perceived as strategic or tactical. Consider first an established organization.

- A **strategy** can be defined as a longer-term plan with an aim for the business, driven by the vision of the owner.
- A **tactic** or operational objective is much more short term in nature and is usually defined as a tool or mechanism designed to help achieve the overall strategic objective and support the overall vision. It is a stepping-stone, hopefully on the way to growth and success.

However, we can view an aim or an objective slightly differently from the perspective of a new start-up beginning its trading cycle.

- A tactical objective might be survival of the first year of trading to increase the chance of a vision being realized (the going concern concept).

- Or a tactical move to reduce costs and waste may allow a future goal of profit maximization or growth to take place.

Generally, tactical objectives are designed to support the overall strategic direction of an organization.



### Should an organization pursue an ethical objective?

There is considerable stakeholder pressure to "do the right thing" in business after several high-profile and damaging corporate scandals, such as Enron and the Volkswagen emissions scandals, and of course the fallout from the 2008 global financial crisis, with many financial institutions guilty of mismanagement and fraud.

Linked to this point is the need for the company to differentiate itself from the competition by building a

credible ethical stance. An example could be a coffee company using the Fairtrade mark, showing that it is dedicated to improving living standards for coffee growers in the developing world. An ethical objective could be the basis for a new vision to develop a new strategy.

Growing transparency through social media and the rise of blogging has also increased the pressure on businesses to "do the right thing". However, pursuing an ethical objective can be difficult. If we consider opportunity costs, then an ethical objective may conflict with the profit motive. Shareholders may not be happy to forgo future profits if the business is not allowed to compete in some markets or geographical regions because of ethical concerns.

If the ethical stance is leaning towards environmental sustainability, the organization may have to spend significant capital to implement new technology to meet environmental standards on production processes or to try to meet the UN

SDGs. An ethical objective in this case will increase costs and impact on profitability.

The ethical objective will need to be credible and transparent in the eyes of stakeholders for the firm to build a competitive position. This will take time. There is also the critical point that if all firms in an industry follow an ethical strategic objective, then the competitive advantage enjoyed by one firm will be reduced and its impact will be limited.

Finally, in a deteriorating economic environment, an ethical stance may mean redundancy for some workers if contracts are not won. Or projects could be refused on ethical grounds given the demands of a B Corp Certification. This could be an unpopular move, affecting a range of internal and external stakeholders. The issue really reduces to the question of: ethics or jobs?

This should lead to some interesting discussions.

## Corporate social responsibility (A03)

CSR has been defined as:

*"the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community at large."*

Source: Russell-Walling (2007)

The Global Reporting Initiative, which provides a framework for companies to report on their CSR commitments, has 32 different performance indicators ranging from customer privacy and anti-competitive behaviour to the use of child labour.

Look back at Figure 1.2.1, which highlights the differences between a social enterprise and a traditional business that practises CSR in the community. We can see that for a social enterprise, CSR is the most important driver of business activity, whereas for a traditional business it may be a much smaller element.



### The challenges and opportunities of adopting CSR

Here are two examples of organizations that have changed their CSR practices following criticism.

#### Nike

Nike has adapted well following a UK-led campaign that accused it of employing child labour with very low wages and poor conditions in developing countries. It has responded proactively with a clear CSR strategy including the appointment of a director of sustainable development.

However, perceptions take a long time to change. Warren Buffet, one of the world's most successful investors, said: "It takes 20 years to build a reputation and 5 minutes to ruin it."

#### McDonald's

Stung by criticism after the release of the film *Super-Size Me*, McDonald's has responded positively by taking certain sweet fizzy drinks off the menu, and introducing low-fat and low-sugar options, including fruit, for its "Happy Meals" targeted at children.



Both examples highlight the key opportunity of adopting CSR. It can lead to an increase in customers' brand awareness and loyalty, and recognition that the organization is adopting an ethical approach.

Furthermore, adopting a CSR approach may lead to support from NGOs and reduce the amount of pressure put on the organization through social media. Demonstrating CSR will also attract ethical investors and potentially make it easier to recruit employees.

However, there are drawbacks to adopting CSR, as noted by Russell-Walling. Firstly, no one has yet produced convincing research that proves the beneficial impact of CSR on a company's profits.

Another important point is that the costs of compliance and contributing to CSR projects may use up valuable time and resources. This could force organizations to increase prices for the end consumer to recover those expenses.

### Conclusion

The role and nature of CSR is still a "work in progress" for many global businesses.

A review of organizations' websites will indicate that CSR is taken very seriously and often given prominence, with terms such as "global citizenship" and "sustainability" featuring prominently in their mission and vision statements. This was a particular feature on websites during the Covid-19 pandemic.

In the coffee industry, Starbucks has been a leader in trying to promote sustainability in its operations. Other coffee roasters are following their lead.

However, media reports concerning, for example, the supply chain responsibilities of successful tech companies such as Apple and Samsung have shown that much still needs to be done to ensure that words are backed up by action. The concerns raised by the Foxconn media investigation (a Chinese supplier for Apple and other computer companies) are a very good illustration that CSR is still a complex issue.

## Revision checklist

- Organizations have vision and mission statements to guide business objectives.
- There has been some criticism that vision statements in particular can be vague and may only serve as a marketing exercise for stakeholders to view an organization in a positive light.
- There are several business objectives to consider, including growth, profit, protecting shareholder value and survival.
- Strategic objectives are essentially long-term goals for the organization to achieve. Tactical objectives are set to help achieve strategic objectives and are much shorter in duration.
- Increasingly organizations are setting ethical objectives to demonstrate to stakeholders their commitment to acting in a responsible manner.
- Many organizations now demonstrate a commitment to CSR. There is continuing discussion as to CSR's role and importance.

## 1.4 Stakeholders

### Guiding questions

- What is a stakeholder?
- How can the interests of stakeholders conflict?

### What is a stakeholder? (AO2)

A stakeholder is a person, group or system that affects or can be affected by an organization's operations.

- A **direct interest** is where the stakeholder has a close relationship with the organization, such as an employee or supplier.
- An **indirect interest** occurs where the relationship is weaker, such as a competitor who operates in a related market or a government department.

### Internal and external stakeholders (AO2)

Internal stakeholders include:

- Full and part-time employees (including those on fixed term contracts).
- Shareholders who have purchased shares in the organization.
- Managers who implement organizational objectives.
- The CEO and board of directors, appointed by the shareholders.

External stakeholders include but are not limited to:

- Suppliers and customers – local, national or global.
- Special interest or pressure groups, including NGOs and professional lobby groups.
- Local, national or global competitors.
- Local and national government.

All of the above could have a direct or indirect interest in an organization for a variety of reasons.

Stakeholder	Examples of interest in company
Owners/shareholders	Profit growth, vision, liquidity, efficiency, market power
Government	Taxation (direct/indirect), compliance with legislation such as health and safety
Senior management	Financial performance, customer perception, profit and sales targets
Non-managerial staff	Pay, conditions, job security, future prospects for promotion
Employees	Financial performance, profits and future economic sustainability
Customers	Value, service, quality, ethical and social responsibility
Creditors	Liquidity, gearing, cash flow, solvency
Local community	Social responsibility, jobs, environmental concerns

Table 1.4.1: The interests of different stakeholders

## Conflict between stakeholders (AO2)

Given that different stakeholders have different interests, conflict is likely. It is very difficult for any company to satisfy all of these direct and indirect interests at the same time. For example, some stakeholders will be very happy with a company reporting record profitability, while others could

be disappointed. As we saw in the last chapter, pursuing an ethical objective will be viewed positively by some stakeholders and negatively by others.

Table 1.4.2 provides some examples of potential conflicts. There are many others.

Stakeholders	Potential conflict
Shareholders and customers	Shareholders prefer to see retail prices rising for an organization, as this will lead to higher revenues and profit margins. Customers want to see value and would rather prices stay constant or even reduce.
CEO, managers and employees	Managers who have been tasked with increasing production (which will make them popular with the CEO) may be in conflict with employees who might not see the benefits of increasing their productivity, especially if there is no incentive to do so (eg higher pay).
CEO and employees	Similarly, the CEO may introduce several changes to work schedules or bring in new technology, which may be unpopular and lead to resistance to change.
CEO and customers	The CEO may discontinue a product as part of a strategic review, leaving some customers frustrated that they cannot purchase the good or service any more.

Table 1.4.2: Potential conflicts between stakeholders

### FC Barcelona

High-profile sporting clubs often provide excellent examples of how stakeholders' interests can conflict. The following situation occurred at one of Europe's elite football (soccer) teams, Barcelona.

In 2019, Barcelona was one of the richest football clubs in the world. Over the course of two years they suffered significant financial problems which led to them having significant debts. The stakeholder conflicts were considerable.

Poor financial management, especially around their salary structure, meant that Barcelona was rewarding some players with unsustainable salaries. Lionel Messi, one of the world's greatest football players, was earning nearly €100 million per year between 2017 and 2021. Other players demanded to be paid bonuses as it was argued that one player (ie Messi) does not make a team. As a result, some world-class players left due to contract disputes. There was clearly conflict within the team.

Other conflicts included:

- Poor player and team selection by a management team that had effectively lost control. There was confusion over how to recruit young talented players. Previously, Barcelona had trained some of their own

future stars and had a thriving youth academy, which meant they did not need to buy expensive players. Barcelona's academy had failed to find new talent and the club was forced to pay high wages to attract new players.

- There was ineffective senior management, a lack of trust in the CEO and a high level of labour turnover of senior managers (coaches). The CEO from 2014 to 2020 employed five different coaches, despite having no football or coaching experience himself.
- Barcelona supporters were accustomed to success, and they started to get frustrated. In 2020, for the first time in 12 years, Barcelona did not win a trophy. The CEO was removed.

In August 2021, Barcelona's most valuable player – Leo Messi – was sold to another club despite his offer to reduce his wage demands by 50%. He openly admitted to the media that he did not want to leave. Other promising players left as their finances continued to deteriorate.

The struggles are ongoing and the situation in 2021 was still deteriorating. With the team not winning, the supporters have criticized the manager and the players. The club is facing its worst crisis in over 50 years.



### Revision checklist

- There are a range of internal and external stakeholders who have a direct or indirect interest in the operations of an organization.
- Inevitably, these interests will clash, and an organization will have to manage this conflict between stakeholders.

It is not possible to eliminate conflict, but organizations can try to reduce it.

- The examples of high-profile sports teams such as Barcelona indicate that stakeholder conflict can continue for many years. Even if the team is successful on the pitch, there are likely to be conflicts off it.

# 1.5 Growth and evolution

## Guiding questions

- What are internal and external economies and diseconomies of scale?
- What is the difference between internal and external growth?
- Why do some organizations grow, and what is the most appropriate way for a business to grow externally?
- Why do some organizations remain small?

## Economies of scale (A02)



*This chapter has direct links to all previous chapters in this unit, which are linked by the concept of change.*

As the scale of operation changes, organizations can benefit from reductions in long-run unit costs of production. These cost savings are referred to as economies of scale. They can be obtained internally as the individual firm grows, or externally if the whole industry expands.

Several large firms such as telecommunications companies or, until recently, car manufacturers have been seemingly able to experience almost unlimited economies of scale. Small firms, with their limited initial start-up capital and small market share, cannot hope to match these cost advantages.

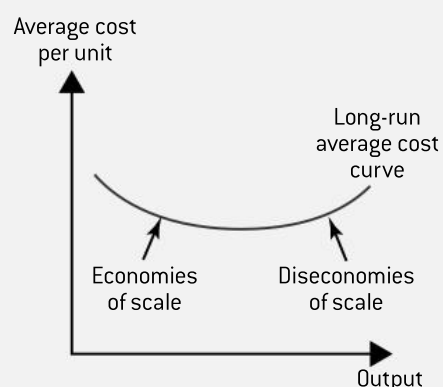


Figure 1.5.1: The long-run average cost curve

Type of economy of scale	Internal (I) or external (E)	Example
Financial	I	Finance costs are reduced because of increased collateral and lenders' confidence.
Purchasing	I	Raw materials can be sourced more cheaply if bought in bulk.
Risk-bearing	I	Large companies can risk entering new markets and finance prototypes of products which may or may not be successful.
Marketing	I	Advertising using media with very large customer reach (eg television) lowers unit costs dramatically.
Research and development	E	As an industry grows, firms can share research facilities, reducing the costs of new product development.
Pool of available labour grows as industry expands	E	As an industry grows, local labour migrates to other areas and people gain skills through work experience and/or attending training colleges.
Creativity and collaboration	E	As innovation and technology in a region grow, firms located there benefit from new creative ideas and thinking. For example, Silicon Valley has developed a community of like-minded entrepreneurs who often work collaboratively. These technological advances can lead to improvements and cost savings across the whole industry.

Table 1.5.1: Economies of scale

## Diseconomies of scale (AO2)

Many larger firms have experienced the reverse of an economy of scale. Long-run unit costs *increase*, giving rise to the phenomena known as diseconomies of scale. You can see this in Figure 1.5.1, in the part of the diagram where costs are rising.

Diseconomies can exist for several reasons.

Larger and growing organizations can become harder to control and manage. In order for the growth to continue, additional layers of management may be required or spans of control for managers may grow (see chapter 2.2). Consequently, operational and/or quality control problems may arise, increasing long-run unit or average costs.

Effective communication (see chapter 2.6) becomes increasingly more difficult with longer chains of command and wider spans of control. Employees may become confused and isolated. This can lead to demotivation and possibly errors and quality concerns, which increase unit costs in both the short and long run.

Large multinational businesses may struggle to control and coordinate their supply chain process, which may stretch across several geographic regions and time zones. (The supply chain process is a topic for HL only and is explained in further detail in chapter 5.6).

## The difference between internal and external growth (AO2)

### Internal growth

An organization can decide to grow internally – referred to as organic growth – by trying to capture a bigger slice of total market share by selling more of its existing products.

One advantage of internal growth is that organizations usually keep control of the growth process. This is an attractive aspect for some private limited companies and family-run businesses.

### External growth

An organization can also try to grow externally, which is often referred to as external growth. Methods of external growth include:

- Joint ventures
- Strategic alliances
- Mergers and acquisitions
- Takeovers
- Franchising

## Reasons some organizations grow, and external growth methods (AO3)

### Reasons why some organizations grow



Common sense and the concept of economic sustainability would suggest that all organizations should try to grow and develop. Given the rapid social and technological changes outlined on pages 9–10, there are several reasons why growth and evolution are important.

- Growth allows for a much larger organization with greater financial ability, which can withstand unanticipated changes in the external environment more easily than a smaller firm. The Covid-19 pandemic has shown how larger organizations can absorb external shocks more easily with their greater financial reserves.
- Greater risks can be taken if a firm grows, yielding potentially much higher rewards. These are risk-bearing economies of scale. These risks may yield new creative products. Smaller businesses may struggle to finance these activities.
- Increased growth and profitability can not only provide security, but also entice additional investors and capital. In effect, success gives rise to the possibility of more success.
- However, questions are being asked about the virtue of being a large organization. Issues of management control, communication challenges and entrepreneurial overconfidence are now being voiced by some of the biggest and most successful industry leaders.

### External growth methods

#### Joint ventures and strategic alliances

A joint venture is an agreement between two (or more) firms to enter a project to share risks, capital, and expertise

in order for both firms to benefit. Not surprisingly, joint ventures usually occur between firms in the same industry. Strategic alliances are effectively the same as joint ventures, but they are a little less formal in structure. There is no transfer of ownership.

A good example of a joint venture or strategic alliance is an organization that wants to enter an untried foreign market. They may well form a joint venture with a firm already situated in that country to take advantage of their local knowledge of the market or labour opportunities. There could be considerable cost and time savings as a result of forming a joint venture with a firm that is already established in the markets or region. Also, costly mistakes could be avoided. See chapter 4.6 for a more detailed discussion of the challenges and opportunities of entering an international market.

#### Mergers and acquisitions and takeovers

Some textbooks imply that mergers and acquisitions (M&As) and takeovers are the same thing. However, M&As normally imply some mutual agreement between the two organizations to join together. A takeover can take place even if one firm does not wish to be taken over by another. In this sense, the takeover is said to be “hostile”. One of the most famous hostile takeovers was carried out by Nestlé when they purchased Rowntree despite the protests of the Rowntree management.

There are three main types of M&A or takeover:

- **Horizontal merger:** when a business decides to acquire the intellectual property (products or successful brands) of a rival company operating in the *same market* and industry. The main reason for such a merger

is to obtain instant additional market share (which is subject to government approval in many countries) and exploit future economies of scale.

- **Vertical merger:** when a business decides to acquire another business operating at a different point in the supply chain. This allows the business to control additional parts of the production process, either forwards (towards the customer), or backwards (towards the supplier) to monitor and secure raw material supplies.
- **Conglomerate:** when a business acquires a new business in an unrelated market or industry. This growth method eliminates the need for costly research and development or spending vast sums of money on developing a new brand or product. But it is risky, especially if inexperienced management teams have to work together in new markets. The Time Warner and America Online (AOL) merger is an excellent example of how *not* to combine, leading to one of the biggest corporate losses of the 21st century.

Business research indicates that M&As and takeovers have not always been as successful as expected.

Shareholder value has not always increased. Culture clashes and diseconomies of scale have been experienced. Hubris (overconfidence) on the part of CEOs and senior management creating the merger has been observed in several high-profile mergers, with disastrous effects for internal and external stakeholders.

## Franchising

A franchise is created when the owner of a business idea (the franchisor) decides to offer the opportunity to a smaller business (the franchisee) to purchase its intellectual property.

It is tempting to focus purely on one of the most successful franchising companies, McDonald's. The film *The Founder* demonstrates how Ray Kroc took the creative ideas of the McDonald's brothers and changed it into the multinational "powerhouse" that it is today, with franchises in over 100 countries.

## IB Learner Profile

Inquirers ?

The McDonald's franchise model is not typical, and it would be wrong to assume that all franchises work in the same way. It would be a good learning opportunity for you to investigate a different franchise model that operates in your own country. This could also provide you with a suitable business context for the SL/HL business research project.

The franchising strategy can prove to be rewarding for both the company selling the idea or intellectual property (the franchisor), and the entrepreneur who wants to raise capital to obtain the intellectual property rights in delivering the good or service (the franchisee). Table 1.5.2 highlights some of the benefits.

Benefits to the franchisor	Benefits to the franchisee
Ability to increase brand awareness of a successful product over larger geographical areas at minimal cost.	Ability to run a new business with an established brand name, thus reducing the need for initial start-up costs such as advertising and market research.
After initial payment to secure the franchise, the franchisor can receive royalties with no risk.	The franchisee will receive training, equipment and expertise from the franchisor.
The new franchisee will be motivated to perform at a high standard to keep the franchise and because they have ownership. The franchisor gains a stakeholder committed to their business model.	If the franchise agreement includes supplying the franchisee with raw materials and ingredients (as in the case of McDonald's), then significant economies of scale could be experienced.
Ultimately, the franchise model will promote quicker growth for the company than by growing organically.	The franchisee can use a potential global advantage in terms of large-scale advertising.

Table 1.5.2: Selected characteristics of a franchise model

There are challenges for both the franchisor and the franchisee when using the franchise model to grow.

Firstly, the challenges relate to the type of franchise agreement that has been signed between the franchisor and the franchisee. Some agreements are relatively flexible, for example allowing for products to be created to meet local tastes (as in the case of McDonald's). This can boost growth opportunities for some franchisees. However, other franchise agreements allow for very little entrepreneurial initiative on the part of the franchisee, especially around product variation, pricing and promotion.

The Starbucks franchise model has been criticized as it has allowed some franchises to open very close to others. This process is known as **clustering**.

Clustering has created the phenomena of "cannibalization". This is where a business opens up franchises very close to each other to drive out competition, even though each new franchise takes away market share from the others. In some

cases, this has forced franchisees to close due to competition from their own brand.

There are a few other disadvantages to the franchise growth model:

- Franchising can lead to a standardization of vision, service, and product developments, which some entrepreneurs may come to regret as they may feel that their creativity is being restricted. (Of course, the counter-argument is that this very standardization led to the success of the franchise in the first place.)
- A poorly performing franchise in one area or community can impact on the reputation of others locally. This point could also be extended to the problems of trying to establish a consistent, reliable global brand. Keeping a consistency of purpose and brand can be difficult.

For a sole trader, the final assessment of whether to become a franchisee may boil down to this: the initial fees that have to be paid to obtain an individual franchise license are significant, but there are fewer risks associated with running a franchise than starting a business of their own. However, within most franchises entrepreneurial innovation will be limited, although the chances of financial success are higher.



### Question for reflection

Has the franchise growth model increased the chances for economic sustainability at the expense of creativity?

## Reasons why organizations remain small (A03)

Despite the arguments presented above, many organizations prefer to remain small and seek to maintain their own economic sustainability without the need to pursue expansion.

There are several possible reasons for this.

First, we need to define what a small firm is. The legal definition of "small" often varies across different countries and industries. In the US, a small business is one which employs fewer than 100 employees; in the European Union, fewer than 50 employees; and in Australia, fewer than 20. In New Zealand, two thirds of all organizations have zero employees, and hence New Zealand is a nation of sole trader enterprises.

The existence of diseconomies of scale is possibly the most powerful argument for remaining small. Also, potential market size, the availability of finance, and motivation on the part of the small business owner are key drivers to remaining small.

In his 2006 book *The Long Tail: Why the future of business is selling less of more*, Chris Anderson argues that the World Wide Web and e-commerce has created a "long tail" of unmet demand, with small retailers or producers satisfying smaller niche markets that larger organizations may not be interested in.

Several private limited organizations, such as Lavazza and Storyville (in the coffee market) and the car manufacturer Ferrari, have decided to remain focused on a few key

markets and have ignored potential growth opportunities. The reasons for staying small seem to stem mainly from the need to keep control and retain the original vision of the company, free from outside (or non-family) interests and interference, which might occur if additional capital or shareholders were sought to finance a new growth strategy.

Profits are still an important driver for taking risks in these companies, but a key factor determining the size of the organization is the original vision of the founding members. It is hard to argue with the success of family companies that have had this continuity of ownership, such as Lego and Ferrari, and have maintained their considerable brand loyalty.

Finally, we must also remember that some firms have decided to remain small because they can take advantage of the benefits of globalization and outsource elements of their operations. Improved telecommunications and new mobile methods to communicate have made this possible and cost-effective. Small organizations could, for example, subcontract production to other suppliers in lower-cost countries or outsource customer service functions while keeping control of their intellectual property creation and strategic direction.

The size of an organization is closely tied to the objectives, mission, and vision of the founding owner. At one time all large businesses were in fact small businesses, and research shows that small businesses are vital to develop the creative capacity within an economy.

### Revision checklist

- This chapter has focused on the reasons why organizations choose to grow, either internally or externally.
- The focus has been on the role of internal and external economies of scale, which allow larger organizations to take advantage of decreasing long-run unit costs of production. Growth in this manner can provide larger organizations with significant competitive advantages.
- In addition to organic (internal) growth, there are also external or inorganic growth strategies for organizations to consider such as franchising, the use of joint ventures and strategic alliances, and mergers and acquisitions.
- Given the existence of diseconomies of scale and niche markets, some organizations choose to remain small. Another important reason for staying small is to maintain control over decision-making. This is particularly true of private limited companies such as Lego, Illy and Ferrari, which have remained within the control of the family for many years.



## 1.6 Multinational companies

### Guiding question

- How can we evaluate the impact of multinational corporations (MNCs) on the host countries?

### Multinational corporations

An MNC is an organization that has operations, and owns and controls resources, outside its country of origin. An organization is not considered to be an MNC if it merely sells products abroad. MNCs are known to outsource many parts of their production process to organizations in other countries.

Many stakeholders welcome the arrival to their country of large multinational retail organizations such as Costco, Ikea and Walmart – especially potential employees, local suppliers and consumers. Equally, however, MNC activity has been criticized for replacing jobs and forcing smaller local businesses into bankruptcy.

#### Ikea, Subway and Apple

**Ikea** is a private limited company that was operating 378 stores in 30 countries as of March 2021. Its annual sales in 2021 were over €41 billion.

Ikea has used a combination of franchising and independently owned organizations for its growth since its creation in 1943. We will return to the Ikea model in chapter 5.1 when we look at its supply chain and the use of circular business models.

**Subway's** growth as the most successful global franchise operation was fuelled by a desire to expand carefully into global markets. In the space of 24 years, the number of Subway outlets grew from 5,000 to over 41,000. Subway now operates in 105 countries. In 1983, it only operated in 1.

**Apple's** success as a global brand has been fuelled by its willingness to outsource the production of its products to China despite the inevitable language, cultural and communication issues that may arise.



### The impact of multinational companies on the host country (A03)

Benefit to the host country	Discussion
Creation of new jobs and employment opportunities	Jobs created may be lower down in the hierarchy, with limited senior management positions for local workers.
Revenue-raising opportunities for the host government	Some MNCs will be able to repatriate funds offshore due to the increasing spread of tax-free havens
Importation of new technology, skills, and management techniques	This is a strong benefit, especially in Asia, which has become the largest outsourcing market. In particular, MNCs often outsource manufacturing to China and software to India.
Increase in choice of goods and services available for host country citizens	Will local consumers be able to afford these goods and services bound for western markets? Unfair competition for local producers may increase unemployment in some industries.

Table 1.6.1: The impact of MNCs on the host country

### IB Learner Profile

Inquirers, knowledgeable and principled



Table 1.6.1 discusses the theoretical benefits and costs of MNC activity on the host country. It is interesting to note that research on the impact on local communities of an MNC such as Ikea is hard to find.

One PhD study from 2018 found that Ikea did have a positive impact overall on a local community in Sweden, but the impact was dependent on the size of the local retailers and the local market.

#### The examples of Ireland and Singapore

You are encouraged to investigate the experiences of the Irish economy, which was transformed by actively encouraging MNC activity. The consequences of this have been both positive and negative.

Then look at Singapore's spectacular rise as an economic force, which was driven by a need to work with and learn from MNCs in areas where the



country did not have any expertise. This included pharmaceuticals, banking and financial services, and niche innovative technology. The growth of the economy and the creation of related businesses by local Singaporeans have been impressive. MNC activity has had a direct and lasting impact on the economy.



More recently, several investigations have found that some MNCs have successfully and legally avoided paying tax in the country in which they operate, and then reported revenues in countries with more favourable tax laws.

In 2021, Uber lost a court case where the organization claimed that their drivers who offer delivery or ride-share journeys were not employees, and thus the company did not have to pay medical or sick leave benefits. The decision may have implications for those workers who are employed in the gig economy or those with zero hours contracts.

Journals and newspapers such as *The Economist* have credited MNC activity as being the most important driving force in creating wealth in the economy. However, the impact and influence of MNCs has been challenged by pressure groups and other external stakeholders. It is up to you to decide from your own perspective which is the more persuasive view.

### Revision checklist

- Theoretically the impact of MNC activity on a host country tends to be positive rather than negative. The impacts include employment opportunities, new technology and capital investment into the host country.
- Local competitors operating in the host country may struggle with MNC activity. For example, local wages may be forced upwards to compete with the employment opportunities offered by the MNC.
- MNC activity is again under the spotlight given the ethical issues concerning the amount of tax on profits that MNCs pay in the host country. MNCs are able to employ legal tax avoidance schemes and can shift revenues and profits around the financial world to reduce their tax liabilities.

# 2.1

## Introduction to human resource management

### Guiding questions

- What is the role of human resource management in an organization?
- What are the internal and external factors that influence the way that an organization plans and coordinates its use of human resources?
- What are the reasons for resistance to change in the workplace?
- What strategies can be used to reduce the impact of change and resistance to change?

### What is the role of human resource management? (A02)

Human resource (HR) management is the process by which an organization plans and utilizes its workforce. Human resources are vital for an organization to operate effectively. Finance, marketing, operations and the entrepreneurial functions cannot be productive unless there are human resources.

HR management must also consider the future workforce needs of the organization. For this reason, HR management is said to be dynamic and constantly changing. The change concept is very important to your understanding in this unit.

### Internal and external factors that influence human resource planning (A02)



In the concepts section on pages 9–10, we highlighted the fact that organizations face an increasing number of pressures forced on them by *change*. We will consider several of these.

#### External factors

##### Demographic change

With slowing birth rates in the developed world, the increased aging of the working population, the trend towards migration of workers, and the new “24/7 economy” (especially in the retail and service sectors), organizations have had to rethink their HR management.

Demographic changes in the developed world currently impacting on HR management include the following:

- The tertiary sector (and soon the quaternary sector) will represent the biggest employer and the biggest contribution to overall output.
- Male participation in full-time work has reduced relative to female participation.
- The number of hours worked by full-time employees has fallen by a third, but the number of workers participating in the workforce has risen by a third (a good indicator of the growing importance of part-time work and the growth of the gig economy).
- Domestic birth rates have fallen, with an aging or “greying” population in many countries. Many older workers are now retiring from full-time work much later.
- The importance of immigration to cover both short-term and long-term skill shortages is increasing. HR management for some organizations has now become a global operation.

##### Labour mobility and immigration

The global market for goods and services has become more competitive, with online retailing and social media marketing able to reach new markets. The same is true for the global

labour market which, driven by increased migration and globalization, has led to increased labour mobility.

The Covid-19 pandemic may have put a break on this trend in labour mobility. However, we should note the following:

- Increased online recruitment of workers from a range of countries due to skill shortages, especially in technologically rich industries.
- The increasing use of overseas employment agencies and immigration recruitment consultants to find key highly skilled workers. The employment agency identifies the key worker, interviews and selects the employee, and then supports them in the process of satisfying the legal immigration requirements of working in that country.
- The growth of social media, which has been used to advertise vacancies in larger multinational corporations.

#### Internal factors

##### Flexi-time

Employers have been faced with rising labour costs, seasonal and fluctuating demand for goods and services, and the increasing use of mobile and internet technology such as Google Meet, Microsoft Teams and Zoom. They have realized that the traditional 9 to 5 working day needs to change and be modified. HR management has had to adapt.

Organizations have responded by:

- Replacing permanent positions with contract or temporary workers if there is insufficient demand at certain periods in the working week, month, or financial year. It should be noted that there have been some legal challenges by employees and trade unions regarding this restructuring practice.
- Reacting to closed borders brought on by the Covid-19 pandemic by recruiting more workers locally and changing working conditions so that the organization is Covid compliant. For example, the increasing use of “click and collect” operations (customers order online and then pick up from the retail store using a contactless method).

Click and collect has been encouraged by the need for contactless delivery.

- Extending opening hours in the retail sector, including weekend shopping, leading to job-sharing and the creation of additional part-time opportunities. This has been driven by the societal trend towards 24/7 on-demand services, especially with e-commerce and online retailing.
- Providing childcare services allowing both working parents to participate in the workforce. Some governments, such as in the UK and New Zealand, are actively promoting early childhood education and offering vouchers to parents who want to return back to the workplace after having children. Many organizations now offer creche facilities for the children of their employees.



### Gig economy

You may have already experienced the gig economy as a temporary employee. Before the Covid-19 pandemic, organizations (especially in the fast-moving consumer goods (FMCG) retail industries) were beginning to investigate a new type of working contract to respond to changes in consumer behaviour and purchasing trends. One such response was the creation of the zero-hours contract.

The zero-hours contract was created to offer employees flexibility over the number of hours they work and who they work for. It specified that employees would not be offered a

specific number of hours per week but could be called in at short notice, for example if the retail store was experiencing a surge in sales.

The zero-hours contract was justified based on the idea that employees could now work for a range of employers and broaden their work experiences. Employees could then develop a portfolio of skills and keep themselves "relevant" in the changing economic environment.

The term "gig economy" began appearing in the media to reflect this new mix of employment opportunities for a growing group of part-time employees.

Some critics have argued that the gig economy treats an employee like a hired session musician: available for hire at a moment's notice to fill an employer's need before moving on to the next session or "gig". Job security or minimum hours are not guaranteed. There are links here to the motivation of employees, which we will explore in chapter 2.4.

The gig economy has become a controversial issue. There is evidence that this insecure work can allow the employee some degree of choice and flexibility. Some writers have argued that the gig economy transfers the uncertainty and risk of irregular working hours from the employer to the employee. Under this new model, an employee could work 40 hours for an organization one week and then only 8 hours the following week. The gig economy has been challenged by several pressure groups.

The term "zero hours" has been modified to "minimum hours" in many countries, but it remains a contentious issue.

## Reasons for resistance to change in the workplace (AO2)



The concept of change drives the teaching and learning of human resource management in this unit.

One very important business tool which we can use to illustrate the process of change is Lewin's force field analysis, which is an HL-only tool, but SL students are encouraged to study this given that change is a concept for the Business Management course.

### Force field analysis (HL only)

This planning tool is based on the way in which an organization is regarded as comprising competing forces (see Figure 2.1.1). One type of force, called driving forces, can push it in one direction to achieve a goal and these are met with resistance by other forces not wishing to move, called restraining forces:

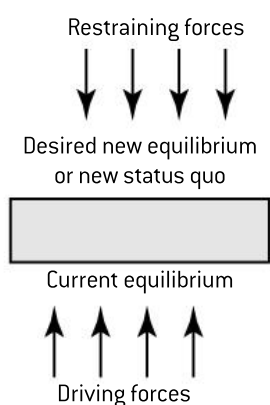


Figure 2.1.1: Lewin's force field analysis

- Driving forces try to establish a new equilibrium or status quo.
- Restraining forces try to restrict a new equilibrium being achieved.

In order to effect change, the driving forces need to be able to move the organization to a new status quo and reduce the power or influence of the restraining forces. This is easier said than done. A number of operational tactics will be needed to achieve successful implementation.

Clear, effective communication plays a crucial part in the change and planning process.

We will now look at a typical example of a strategic change within an organization and use force field analysis to help us understand the competing forces.

### The change

Our example features an organization looking to reduce unit costs of production to become more competitive, and reduce errors and defects. The organization's leaders decide to introduce new technology in the workplace to boost productivity and improve quality.

### The process

The board of directors instruct a senior management team to investigate additional drivers to move the company to a new equilibrium, while recognizing that restraining forces will exist. The senior management team is to rank the magnitude of the forces, with 1 being weak and 5 being strong.

### Drivers:

- Customers looking to receive higher value at lower prices: 4
- Speed of production: 2
- Productivity increases: 3
- Control of maintenance costs: 1

### Restrainers:

- Loss of overtime for line staff: 3
- Fear of new technology: 3
- Disruption due to time for implementation: 1
- Cost of transfer of technology: 3
- Environmental impact: 1

### Moving to a new equilibrium

A number of the restrainers affect the workers directly. Staff may become uncooperative if change is forced upon them, so a key tactic in the change strategy is to try to weaken the restrainers rather than force the drivers. The following are examples of how this might be done:

- By training staff, fear of technology could be reduced.
- The board of directors could convince staff that the changes are necessary to ensure survival and security for the majority of employees.
- Staff could be encouraged by the prospect of upskilling.
- An increase in productivity could lead to wage increases (as long as the competitive objective in the new strategy is not undermined).
- The negative environmental impact of change could be mitigated by agreeing to plant more trees.



### Reasons for resistance to change

There will always be resistance when a new strategic direction is proposed by an organization. This will mostly stem from fear caused by misinformation and misunderstanding about exactly what the changes may mean and how long they will continue.

There can be several stakeholder responses to change that arise due to uncertainty and fear:

- When will the changes take place?
- Who will be affected and why?
- How will we know when the changes have been completed?
- My job is important to the success of this organization so why do I need to change? (Self-interest response)
- Why do we need to change? We seem to be doing fine as it is. (Low tolerance response)
- The need for change is the fault of other departments, not ours. They should be blamed. (Self-interest response)

We can summarize and broaden this resistance to change by considering the positions of other stakeholders, as shown in Table 2.1.1.

Stakeholder	Reason for resistance
Line workers	Fear of new working practices, posing a threat to job security and established work habits
Customers	Fear of losing a product that they like
Suppliers	Fear of losing a critical position in the supply chain, which could lead to job losses and lost revenue
Management	Fear of having to implement change and deal with adverse reactions and conflict from employees

Table 2.1.1: Reasons for resistance to change

## HR strategies to reduce the impact of and resistance to change (AO3)

We have already looked at the process of reducing the impact of change by utilizing Lewin's force field analysis model. According to this model, to effect change, the driving forces (reasons for change to occur) need to be able to move the organization to a new status quo (equilibrium) and reduce the power or influence of the restraining forces (resistors to change).

This is easier said than done. Several senior management tactics will need to be introduced to reduce the impact of and resistance to change.

Dearden and Foster (1992) argue:

*"The management team charged with implementing change must have authority to implement it which is understood by those affected by change."*

Organizations may wish to appoint a temporary change management team who are *externally recruited*. They will have specialist knowledge in how to effect change.

Other management tactics include the following:

- The board of directors (through the CEO) must communicate why change is necessary and extol clearly the virtues of this change for the whole organization.
- The change process, including any possible issues arising, must be clearly communicated to all stakeholders early, including (as accurately as possible) timelines for implementation.
- The change process will also have to work within the formal and informal communication networks which exist within an organization. Informal networks may be difficult to manage in the change process. (The effectiveness of business communication and the role of formal and informal communication is explained in more detail in chapter 2.6.)
- Early successful financial and non-financial outcomes of the change process must be clearly communicated

and celebrated. This should build confidence among stakeholders and may weaken the restraining forces.

- A constant review of the goals and objectives of the strategy change must be carried out, especially if the change process continues over an extended period.

### Revision checklist

- The concept of change runs heavily through this chapter and unit, and it is important to apply this concept to your understanding. We can also add the concept of creativity as a response to the impact of the Covid-19 pandemic.
- The Covid-19 pandemic has given rise to a whole new language around change and creativity in organizations. New terms such "pivot", "agile", "adaptability" and "VUCA" now increasingly drive HR management.
- HR management has had to respond quickly. This has created conflict and tension, and there is now a renewed focus on well-being in the workplace. The role of HR management has had to grow and "pivot" too.
- Flexible, part-time and remote working are important drivers in HR management. The gig economy is a contentious issue.
- Organizations must consider how they communicate and manage change. Resistance to change from stakeholders can be considerable.
- Confrontational approaches to effect change should be seen as the last resort in the change management process. Communication and consultation are now seen as more appropriate strategies. The force field analysis tool can help organizations to manage change.

## 2.2 Organizational structure

### Guiding questions

- How are organizations structured?
- Which structure is the most appropriate?

### Different types of organizational structures – terminology (AO2)

This chapter has a large amount of business content and terminology. You are advised to check your understanding regularly and carefully.

#### Delegation

Delegation is the process of entrusting a subordinate to perform a task for which the manager or superior retains overall responsibility. A subordinate is an employee who must report to, and is answerable to, a manager.

#### Span of control

Span of control refers to the number of subordinates under the control of a supervisor. In your Business Management class, the span of control is the number of students directly supervised by the teacher. Large spans of control will require strong inclusive leadership and clear communication.

#### Levels of hierarchy

Levels of hierarchy refer to the number of levels of formal authority from the top to the bottom of an organization. To a large extent, the choice of a particular span of control will dictate the number of levels. This interaction of span of control and levels of hierarchy gives the following two hierarchical structures:

- Tall – small span of control, many levels of hierarchy.
- Flat – larger span of control, fewer levels of hierarchy.

#### Chain of command

The chain of command is usually depicted on an organizational chart as a vertical line of authority enabling decision-making or responsibility to be passed down through the layers of hierarchy. The chain of command also establishes the formal communication channels between managers and subordinates.

#### Bureaucracy (in a business context)

Bureaucracy refers to the administrative system of an organization, which relies on a set of rules and procedures, a separation of functions and a hierarchical structure in implementing controls.

A bureaucratic system is one that will thrive in a culture of set procedures and regulations with clear lines of responsibility (see chapter 2.5 on organizational culture and Apollo).

#### Centralization

Centralization is where the formal power (authority) and responsibility of those higher up in the hierarchy influences both tactical and strategic decision-making. Centralized organizations allow for little if any discussion or involvement with subordinates and/or managers. Centralization has been termed as "top-down" management and is popular in government-run (public sector) organizations.

## Decentralization

Not surprisingly, decentralization is defined as the opposite of centralization. Lower-level decision-making and the empowering of staff to bring new ideas to management has led to the business management term “bottom-up”.

Centralization can be perceived as being part of an autocratic, paternalistic leadership (see chapter 2.3) or club culture, with decentralization being linked to Athenian or Dionysian cultures (see chapter 2.5).

## Delaying

As the term would suggest, delaying is a process designed to remove the number of levels of hierarchy in an organization, to streamline chains of command and improve and increase communication. The objective of delaying could be to shift an organization from a tall to flat hierarchy.

Another reason for delaying could be that an organization wishes to reduce the number of layers as a cost-reduction exercise that is part of a new strategic plan.

## Matrix structure

A matrix structure is one in which employees are grouped together in temporary or flexible work/project teams across a range of departments to solve a specific task. In some matrix structures, lines of responsibility are blurred and employees report to multiple managers. The matrix is used when a problem has occurred and the organization needs to organize and use its resources quickly to find a solution.

## IB Learner Profile

Inquirers ?

### Organizational charts

Before you continue to look at organizational charts and structures, which include many of the terms and definitions above, try to draw an organizational chart of your school or college. Avoid names and personalities and focus on roles.

Ask a classmate to do the same, and ask a stakeholder who may have a strong association with the school to do the same too, for example a parent or guardian. Then compare your results.

Possible questions arising from this inquiry include the following.

- How easy or difficult was it for you as a stakeholder in your school or college to draw the organizational chart for your school?
- Do you study in a small or large school?
- Is your chart similar to those of your classmate and parent/guardian in terms of levels of hierarchy and span of control?

- If you show your chart to a stakeholder who was at the school a few years ago (such as a teacher or former student), do you think they will find there have been significant changes in structure? Has the hierarchy become flatter or taller?
- If the school has grown, have spans of control become wider?
- Should an IB World School be centralized or decentralized in its decision-making? What would be the consequences of making the IB World School more decentralized?
- In the spirit of creativity and Harry Beck's solution to the problem of drawing the London Underground map (see page 12), how could you design a creative organizational structure for your school? What might some of the challenges be?

These questions should generate some interesting discussion and deepen your knowledge and understanding of organizational terminology.



## Organizational charts (A02, A04)

Here are some standard diagrams, with a brief explanation, to illustrate how organizational charts can be drawn.

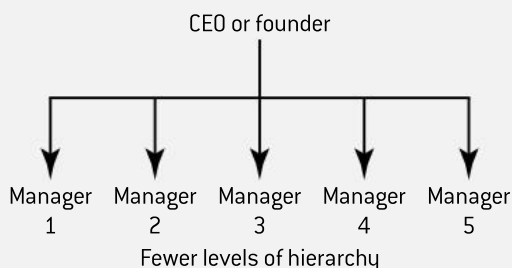


Figure 2.2.1: Flat or horizontal hierarchical structure

By delaying, the organization is attempting to reduce the “gap” between the senior management at the “top” of the organization and the subordinates at the “bottom”. Flat hierarchies tend to widen spans of control and are most effective in small to medium-sized enterprises (SMEs).

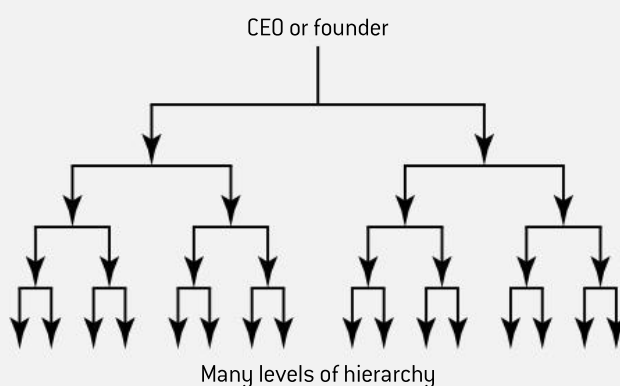


Figure 2.2.2: Tall or vertical hierarchical structure



Figure 2.2.2 shows the opposite structure to the flat or horizontal organizational chart in Figure 2.2.1. Levels of hierarchy increase and chains of command lengthen. Large or multinational corporations may feel that a tall structure provides clarity and clear lines of responsibility. They will hope that this can reduce the possibilities of diseconomies of scale.

Typical structures for businesses organized by function, geography and product are shown in Figures 2.2.3, 2.2.4 and 2.2.5.

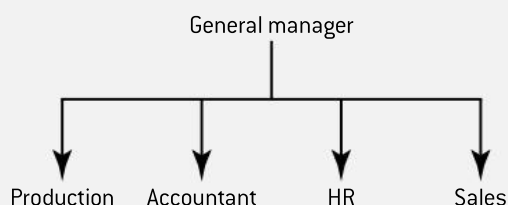


Figure 2.2.3: Typical structure for a business organized by function



Figure 2.2.4: Typical structure for a business organized by geography



Figure 2.2.5: Typical structure for a business organized by product centre

Table 2.2.1 analyses the different methods of structuring an organization.

Structure	Benefits	Issues or problems
By function	Clear lines of communication and responsibility are established. This structure encourages specialization, leading to economies of scale.	This type of structure may encourage departments to view themselves as isolated and set their own goals and objectives. It relies heavily on the success of the general manager to communicate and manage effectively.
By geography	This structure gives autonomy to local managers to allow more accurate local decision-making. Being closer to local markets means a firm can gain updated research such as customer feedback.	Given geographical location or time differences, there is potential loss of control of overall objectives. (With the onset of communication technologies this may not be such a big issue). The business may have to set local goals and aims.
By product	Expertise in specific products and markets is gained. There is rapid decision-making and objective ways of measuring the performance of individual centres. Greater flexibility exists for growth and expansion. Additional centres can be added without affecting the operations of the other centres. This is good if a takeover or acquisition has been made.	There is conflict and competition between individual centres. There is some duplication of functions such as accounting, marketing and HR management. The allocation of overhead is crucial in influencing the pricing strategies of individual centres.

Table 2.2.1: Methods of structuring an organization

## Appropriateness of structures when external factors change (A03)



We noted in chapter 2.1 that change has had a significant impact on organizations in terms of human resource management.

Several external factors, including social and technological change, have meant that organizations have had to regularly think about their current and future human resource needs. Increasingly, the same can be said for their organizational structures.

If an organization undertakes a STEEPLE or SWOT analysis (see pages 16–17) on their organization and external factors have changed, then it is likely that the organization's objectives will have to change too. Possibly the market has

become too competitive, or the STEEPLE analysis reveals that the organization is not viewed as being creative or innovative enough compared to its rivals.

Whatever the result and implications of the STEEPLE or SWOT analyses, we should assume that the structure of the business will also have to be changed.

Several factors could drive this need to restructure, including, though not limited to, the following:

- The size of the current and potential market, and the extent to which competition is growing.
- The leadership style adopted by the organization may not be agile enough, limiting creativity and flexibility.

- Organizational objectives need to change as the organization would like to enter international markets.
- Shareholders and other influential stakeholders are demanding a new strategic direction to boost shareholder value.
- The organization may have grown too quickly and moved away from its original mission and vision. Restructuring gives the business new clarity and transparency and this may make it easier to manage given rapid growth, so that the possibility of diseconomies of scale are reduced.

## Examples of a restructure when external factors have changed

### Google

In 2015, faced with a slowing share price and various media reports that the organization was losing its creativity and innovation, Google decided to restructure into Alphabet. (We will be able to see the impact of this change in chapter 3.3 when we look at revenue streams.)

Stakeholders, especially shareholders, were supportive. The Google organization had grown too quickly and needed to restructure itself to allow greater focus and control.

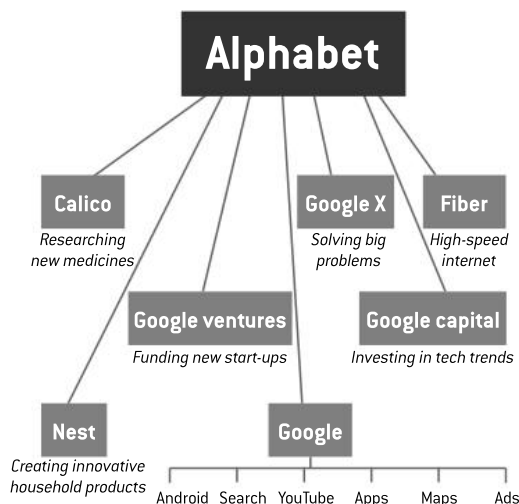


Figure 2.2.6: The restructuring of Google into Alphabet



### Semco

One of the most famous examples of restructuring occurred in Brazil in 1980. A 21-year-old student – Ricardo Semler – who had no experience in business leadership, took over his father's business which was failing. On his first day leading Semco, Ricardo Semler sacked 60% of his middle managers and created a new type of organizational structure. In essence, Semler changed the organizational structure in a way that had not been seen before. Some writers called this a new form of industrial democracy.

These are some of the more noteworthy changes:

- Employees were no longer allowed receptionists, secretaries or personal assistants.

- Employees were able to set their own salaries and working hours.
- Employees could choose (and evaluate) their managers.

The restructuring was not without issue, as Semler details in his excellent book *Maverick*. There was resistance, especially as Semler was the son of the previous CEO. However, the changes were necessary. Semco had become complacent and inefficient, and lacked creativity in its manufacturing markets. In 1982, Semco's sales revenue was \$4 million. By 2003, Semco's revenue was over \$200 million. Semler again changed the structure of the organization in 2010 to meet the changing market and created a kind of cooperative partnership.

If we return to our question about the appropriate size of an organization given a change in the STEEPLE factors, we can see from the two examples above that a common theme was the desire to change given that competition, innovation and current management practices were not sufficient in moving both companies forward. Dearden and Foster (1992) summarize this neatly:

*"The most appropriate organizational structure is one that allows an organization to meet its objectives."*

## IB Learner Profile

Inquirers ?

### HCL Technologies as an example of creative organizational structure

The pyramid shape has dominated a great deal of organizational thinking. We have seen on pages 42–43 that many organizational charts are based on this structure. The pyramid signifies levels of hierarchy, tight spans of control, centralization at the top of the management structure, and authority.

One organization – HCL Technologies – has challenged the prevailing thoughts on organizational structure by creating the inverted pyramid and reverse accountability. Employees and consumers are at the top of the pyramid and the CEO is at the bottom.



You are encouraged to research this creative approach to organizational structure.



### Question for reflection

What are the implications for management of an inverted pyramid structure?

## Changes in organizational structures (A03)

HL

### Project teams as a basis for organizational structure

The idea behind the project team or matrix structure is that traditional functional and department boundaries are ignored when a project team is selected to work on one "problem" for which the members' individual qualities are ideally suited. Dearden and Foster (1992) argue that IBM used this technique when developing the original personal computer. The argument follows that specialist project teams are best suited to solve problems across departments and avoid one department dominating the outcome.

Of course, project teams are by their nature temporary. Once the problem under discussion has been solved, the team is usually broken up and individuals return to their functional roles or departments. Organizing and monitoring the project teams' work will take extra time and use scarce resources.

The Japanese, in their creation of quality circles and *kaizen*, have used the matrix system enthusiastically (although in Japanese management the matrix is viewed as being very much a long-term commitment and not just for one-off projects). They regard project teams as being a powerful motivating force in terms of encouraging teamwork and breaking down barriers that may exist between departments working in the more traditional structures.

However, it should be noted that an important aspect of the matrix system which needs to be addressed at the beginning

of the project is that with individuals joining from different departments, clear lines of authority should be established to indicate who is in charge overall.

### Handy's shamrock organization

Charles Handy has become well regarded in the business world for his work on organizational culture and management. He is particularly well known for his vivid use of engaging metaphors and examples (see his books *Gods of Management* and *The Empty Raincoat*).

One of Handy's contributions to workforce planning was his insight into the roles of workers required in the new demographic and social changes outlined in chapter 2.1.

Handy identified the need to have a flexible workforce to allow firms to adjust faster to changing external environments. He identified core, contract and peripheral workers and developed the idea of the "shamrock" organization.

- **Core** workers are full-time employees with trusted experience, and are limited in number.
- **Contract** workers are employed on a short-term basis for a specific task. Examples of these tasks are the recruitment of senior managers or the installation of a new data management system.
- **Peripheral** workers are flexible workers employed on a part-time basis for reasons such as seasonal shifts in operations.

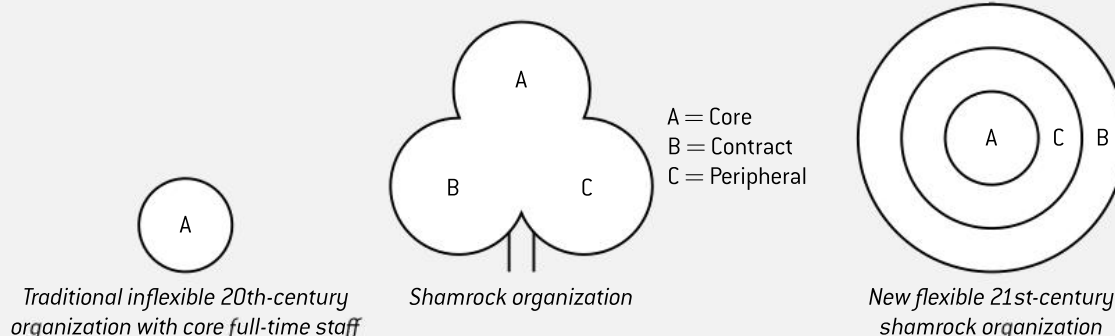


Figure 2.2.7: Traditional organization and the shamrock organization

The implications of Handy's work are considerable. Given the significant changes in working patterns and external social and demographic changes outlined in chapter 2.1, fewer full-time workers are necessary. Organizations will need

to be more agile and flexible in the 21st century to cope with considerable change. In some industries this has led to job insecurity and demotivation, with some commentators arguing that some employees are being exploited.

## Revision checklist

- Organizational structure is important as it provides a way for employees, managers and senior leaders to identify formal relationships, accountability and communication channels.
- Without a clearly defined structure, organizations would struggle to achieve objectives and resources would be wasted. Diseconomies of scale are the likely outcome.
- There are several different ways to structure an organization by function, geographic region or product. These are more traditional organizational structures.
- Organizations are looking at ways to be more agile and flexible in their structures. Handy's shamrock organization is one possible variant that departs from more traditional structures to allow organizations to respond to the demographic changes outlined in chapter 2.1.

## 2.3 Leadership and management

### Guiding questions

- What is the difference between scientific and intuitive management? (HL only)
- What is the difference between management and leadership?
- What is the most appropriate leadership style for an organization?

## Scientific and intuitive thinking/management (A02)

HL


**Scientific thinking** is a management process where decisions are made based on data collection, the use of tools and techniques, and quantitative analysis.

Planning, situational and decision-making tools that use quantitative data are the foundation of scientific management. Organizations rely heavily on the accuracy and quality of the data provided to help them solve problems. The collection of quantitative data by an independent organization increases confidence by ensuring a degree of objectivity.

**Intuitive thinking** or management relies on experience, prior knowledge and instinct. If scientific management is based on quantitative data, then intuitive management relies on knowledge, opinions and *qualitative* information. Qualitative data is expressed subjectively and is difficult sometimes to put into figures. Focus groups (see chapter 4.4), for example, can be used to research "feelings" or "thoughts" on different brands that an organization produces, which can be hard to quantify but are still important to the success of the brands.

The scientific approach to decision-making has been challenged. Several entrepreneurs and decision-makers, such as Richard Branson, argue that intuition, experience and simple "gut feeling" are equally as or sometimes more important in deciding on an appropriate course of action. Steve Jobs famously never looked at balance sheets or other financial documents as CEO of Apple. (This aspect of decision-making, ie not considering the financial implications, led to him being removed from Apple in 1985 before returning in 1996.)

### IB Learner Profile

Knowledgeable 

#### Differences between scientific and intuitive management – Moneyball

The 2011 film *Moneyball* is an excellent resource even for those not familiar with baseball. It is based on a book by Michael Lewis about why some baseball teams perform better than others, and uses a process called "sabermetrics", developed by the non-baseball player Bill James.

Based on a true story, the film highlights the attempts by the CEO of the Oakland Athletics baseball team (Billy Beane) to run the baseball club using scientific thinking – such as statistics on player performance – rather than the conventional intuitive approaches (such as gut feeling, experience and wisdom) used by the existing baseball coaches.

The reason for Beane's change was that the Oakland Athletics had consistently underperformed and had a budget for players which was significantly lower than the top baseball sides. He felt that the intuitive approach was not working and that a data-driven leadership style was required to bring success on a smaller budget than most other major league baseball teams.



Beane decided that a new approach was required to find players who were undervalued by the baseball community. Hence they would be cheaper than established stars and could be melded into a team.

It would have been interesting to carry out a force field analysis of the effort to shift the Oakland Athletics to a more scientific baseball club under the direction of Bill James – a statistician who never played the game. There was huge conflict among stakeholders such as the existing Oakland coaches and supporters, as initially the change to scientific management failed to bring the desired results.

Beane continued to follow the scientific method. He even sold successful players where the data suggested that they were overvalued, and replaced them with older players who had been overlooked and were undervalued. The Oakland Athletics results began to improve and then they set a record for the number of consecutive wins – a record that had not been broken for 100 years. Beane was vindicated in his adoption of the scientific approach and his work and the work of Bill James was adopted by many other baseball teams. It was a significant change in the thinking around player and sports management.

## Management and leadership (A02)

There is some confusion about the difference between leadership and management. A succinct quote from Russell Walling (2007) tries to highlight the difference: "Leaders do the right thing; managers do things right."

Linking back to our previous discussions on objectives and strategic decision-making in chapter 1.3, we could argue that effective leadership requires the setting of clear aims and strategic goals, while the role of an effective manager is to ensure that objectives are met.

Successful leadership within organizations is often applauded and revered. Steve Jobs, Richard Branson, Arianna Huffington and Larry Page are often seen as being inspirational and successful entrepreneurs/leaders. But how much do we really know about their management skills?

### The key functions of management in an organization

Management in an organization can be separated into two roles: administrative and operational.

The administrative role coordinates the functions of finance, marketing and production by planning and defining procedures. The procedures and objectives of the organization have been decided by the board and the senior executives.

The operational role for management refers to the implementation of these plans, aims and objectives.

Gabriel (1998) identifies five key functions for a manager:

- Planning a suitable course of action given the overall vision of the CEO.
- Organizing the human and material resources to achieve this vision.
- HR planning, including recruitment and selection of key workers for specific tasks to achieve tactical objectives.
- Motivating others to achieve goals once a plan of action has been put in place.
- Controlling, monitoring and maintaining performance to ensure that the vision is achievable.

## Leadership styles (A03)

In this section we will discuss the following five leadership styles: autocratic, democratic, laissez-faire, paternalistic and situational.

Leadership style	Description	Discussion
Autocratic	The decision-making process is determined solely by the leader or chief authority figure. There is little or no consultation. Examples are the armed forces or other organizations with tall hierarchies.	It can be demotivating for some workers not to have an input into the process. Autocratic leaders can be effective in crisis situations.
Democratic	The decision on what is to be done and how it is to be carried out is taken after group discussion and consultation. Examples can be found in media industries, especially advertising and public relations.	Increased motivation and productivity may result from some key skilled workers. Decision by committee can be time-consuming and expensive. It may not be an effective way of making decisions in a crisis situation.
Laissez-faire	Effectively there is no leadership. Groups are unsupported and left to decide for themselves. Handy has argued that many universities operate under laissez-faire conditions.	Given no formal leadership, new employees may find the workplace environment confusing as they will lack knowledge of workplace conventions. Setting overall organization objectives may be difficult without formal leadership.

Paternalistic	The leader of the organization acts in a "fatherly manner" towards employees, in the same manner as if he were a parent or mentor. This is typical of family businesses (see also club culture in chapter 2.5 and note that, although this style is called "paternalistic", the role of parent or mentor may also be taken by female leaders).	The leader will demand loyalty in return for their influence. This could lead to resentment from some employees, especially if they see themselves as "outsiders" to the family. These cultures may be too inward looking and paternalism may be seen as rewarding bloodlines rather than ability.
Situational (based on the work of Blanchard, Hersey and Fielder)	The leader can change their leadership style according to the situation.  This leadership style may be influenced by the characteristics of the organization, the nature of the task itself, or the "group atmosphere" that exists. Fiedler attached a great deal of importance to this last point. The leader is followed and obeyed not because of rank or power but due to positive group emotions such as loyalty, liking, trust and respect.	The situational theory of leadership suggests that no single leadership style is best. Instead, it depends on which type of leadership and strategies are appropriate to the task. According to this theory, the most effective leaders are those that are able to adapt their style to the situation facing the organization and consider the type of task, the nature of the group, and other factors that might contribute to getting the task completed.

Table 2.3.1: Different leadership models

### Which leadership style is the most appropriate?

One of the most respected management thinkers of the twentieth century, Peter Drucker, once famously said that:

*"The foundation of effective leadership is thinking through the organization's mission, defining it and establishing it, clearly and visibly."*

Source: Drucker (1993)

We can use Drucker's quote to briefly discuss the effectiveness of the different leadership styles.

- **Paternalism**, if present in small family businesses, may lead to jealousy and favouritism among some siblings. The Netflix show *Succession* highlights this point and family rivalry superbly.
- **Laissez-faire** leadership needs to ensure that the mission is clearly articulated and understood by all workers. Clear communication is vital. How would you judge the effectiveness of a leadership style which gives no formal leadership at all?

- Many business students assume that **democratic** leadership is always the most appropriate, and the "ethical" method of decision-making. However, too many people in the decision-making process and too much discussion may lead to delays in the implementation of a new strategic direction.
- Although unpopular and unfashionable in today's business environment, an **autocratic** leadership style may be closest to Drucker's intention. Famous leaders such as Jeff Bezos, Martha Stewart and Steve Jobs have successfully adopted this style.
- Some argue that as **situational** leadership is reactionary to the task to be completed, it is not really a leadership style at all. Hence, Drucker's quote may not be useful to measure the success of situational leadership.

We should not forget that leadership styles are evolving. We saw this in chapter 2.2 with Semco's approach to management and HCL's creation of the inverted organizational pyramid. The impact of the Covid-19 pandemic and more remote working is likely to lead to more changes and modifications to leadership styles.

### Revision checklist

- There is a significant difference between leadership and management. In short, the former is concerned with setting goals for an organization while the latter is concerned with ensuring that these goals are met.
- There is a continuing debate around the "best" way to manage. Scientific management and decision-making focuses on the use of quantitative data and tools.
- Intuitive management relies on experience and "gut feeling". (HL only)
- There are a range of leadership styles. There is no one correct way to lead an organization, and in practice a mixture of different leadership styles will be used. The size of the organization may have a strong influence on the mix of styles chosen.

**Guiding questions**

- What are the important motivation theories?
- What is labour turnover? (HL only)
- How can we appraise the performance of employees and managers? (HL only)
- What are the main methods of recruitment, and should organizations recruit internally or externally? (HL only)
- What are the main types of financial and non-financial rewards?
- What types of training can be offered by an organization?

**Motivation theories (AO3)**

This activity encourages you to watch two YouTube videos on motivation theory.

**Clip 1: Frederick Herzberg "Jumping for the Jelly Beans"**

In the early 1970s, Frederick Herzberg gave a presentation called "Jumping for the Jelly Beans" to a group of British businessmen, which can be watched in two segments on YouTube. In it he explains his own two-factor theory of motivation.

*"Do you want to do something for me? That is motivation. Do you need a bribe or a threat? That is hygiene."*

**Clip 2: Daniel Pink "The Surprising Truth About What Motivates Us"**

According to Daniel Pink, three key motivators for an activity that requires some degree of complexity are:

- mastery – getting better at the activity
- purpose – the reason for doing the activity
- autonomy – being left alone to get on with doing the activity.

Watch this excellent YouTube video, which has been animated by RSA Animate.

**Questions for reflection**

- What are the key similarities – if any – between the ideas on motivation of Herzberg and Pink?
- According to the two YouTube videos, how important is financial reward as a motivator?
- When considering motivation theory, are there significant cultural influences on the types of motivational reward needed?

In this chapter we will look at the following motivation theories:

- Taylor – scientific management or "economic man" approach
- Maslow – hierarchy of needs
- Herzberg – two-factor theory of motivation
- McClelland – acquired needs theory (HL only)
- Deci and Ryan – self-determination theory (HL only)
- Adams – equity and expectancy theory (HL only)

**Taylor – scientific management**

Students often overlook the work of Frederick Winslow Taylor. It is assumed that his contribution to business motivation theory was simply that "money motivates workers". This is a highly simplistic view. Taylor's contribution to business management was revolutionary. He is credited with creating the first real study of business and consequently the first business management "textbook".

Peter Drucker has argued that Taylor deserves a place alongside Darwin, Freud and Newton as critical contributors to the making of the modern world.

Taylor's motivational theory is based on his work *The Principles of Scientific Management*, published in 1915.

For many this was the first business "textbook". The central idea is that a unit of work carried out by a factor of production should be measured, and a performance standard should be created which is "fair and acceptable".

The performance measurement should be carried out once the worker has been trained and shown the demands of the unit of work. Taylor continues by saying that those workers who achieve the performance standard should be paid a living wage; those who exceed the standard should be paid more. Exceeding the standard should guarantee a bonus if sustained. Workers should be supervised to achieve a target rate of production.

Taylor's scientific management principles were put quickly into practice in the early part of the twentieth century and several industrialists began to make huge profits, especially Henry Ford, whose "Model T" car soon became the symbol of this new management style.

Many students have viewed Taylor as the enemy of the worker and the theorist who said that people will only work for money. Few realize that his underlying philosophy was that he wanted scientific management to lead to greater productivity, improved outcomes for all employees and a higher standard of living.

## Maslow – hierarchy of needs

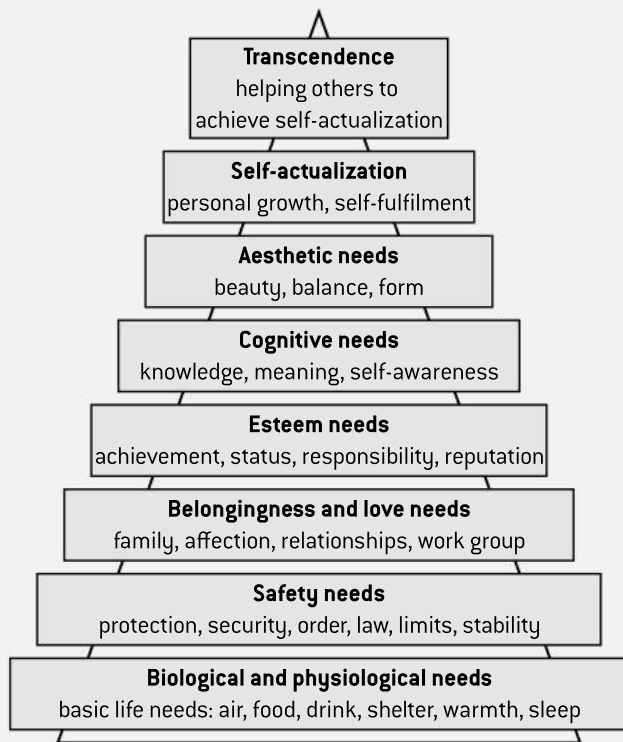


Figure 2.4.1: Maslow's hierarchy of needs (updated eight-stage model)

## Herzberg – two-factor theory of motivation

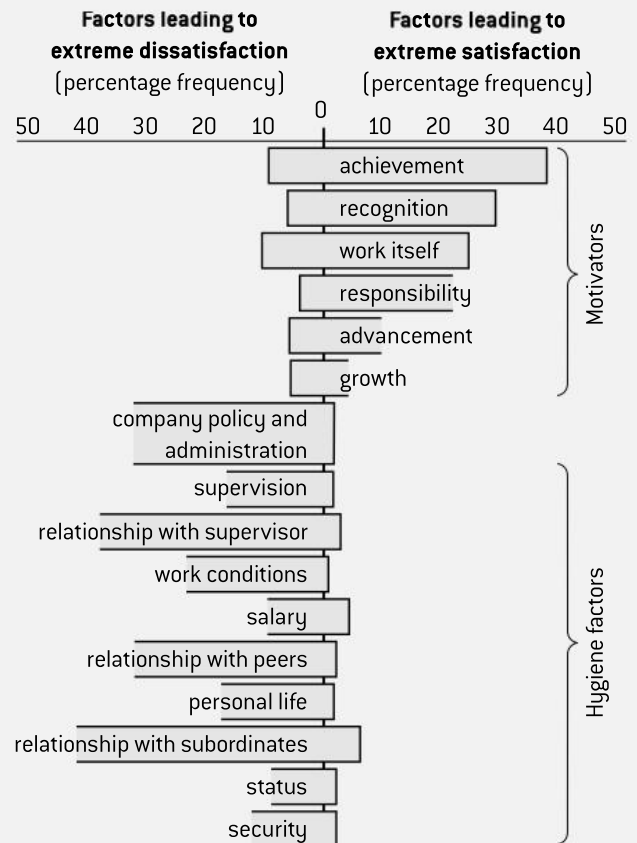


Figure 2.4.2: Herzberg's motivators and hygiene factors

HL

## McClelland – acquired needs theory

McClelland has made several contributions to management and motivation theory. In common with Maslow's hierarchy of needs and Herzberg's two-factor theory, McClelland's motivation theory assumes that motivation is driven by:

- **Achievement**, where an individual seeks to carry out tasks which challenge them and provide them with an opportunity to grow and acquire more skills. This links to Herzberg's motivators.
- **Affiliation**, where the motivating factor is developing social relationships and harmony within the organization. This is similar to the love and belonging need of Maslow.
- **Power**, where motivation is derived from competition, problem-solving and thus earning the respect of others in the organization, leading to greater influence.

## Deci and Ryan – self-determination theory

In common with Daniel Pink's studies (see the activity on page 49), Deci and Ryan believe there are three critical factors in motivation which are intrinsic to the individual. They are:


- **Autonomy** – the ability to be self-directed is a strong motivator for experienced entrepreneurs.
- **Competence** – acquiring new skills and abilities brings greater confidence.
- **Relatedness** – in common with McClelland's "affiliation" need, and Maslow's love and belonging need. Being connected to an organization in a positive way is a very strong driver in motivation theory. Its absence can easily lead to demotivation.

## Adams – equity and expectancy theory

The key element in John Adams' equity theory is that motivation is a function of a worker perceiving that the reward they are receiving for their efforts fully reflects their contribution to the organization. If the worker feels that their contribution is being recognized, then motivation to stay will be high. However, if the reverse is perceived then demotivation is likely.

Workers' contributions cannot always be measured objectively, but firms who use equity theory have discovered that, for example, giving a worker time off for compassionate reasons or allowing flexible working for part-time workers can create an environment of "fairness", which can be very motivating. Ricardo Semler's leadership style, which was highlighted in chapter 2.2, is particularly relevant at this point. It introduced a new era of industrial democracy and worker participation as a feature of organizational fairness.

## IB Learner Profile

Thinkers and balanced 



## Questions for reflection

What are the implications for equity theory of awarding senior managers large bonuses in loss-making organizations – is this fair?

In some large organizations a CEO may earn up to 200 times the average salary of a subordinate who is employed at a lower level of the hierarchy. Is this ethical?

## Application of motivation theory

We shall now try to apply the motivational theories outlined above to different situations. Below are examples of workers' actions analysed in light of the theories.

- *A worker wants to learn new skills to gain promotion.*  
Maslow's self-esteem needs are to be satisfied with a desire to grow professionally, as advocated by Herzberg.
- *A manager is requested by the board of directors to achieve higher sales targets. Higher bonuses will be paid if the targets are met.*  
The board of directors is using scientific management to encourage middle managers to be more profitable. There may also be some link to expectancy theory here if the managers believe these targets to be more than achievable.
- *Workers in a call centre are threatening to walk out over poor conditions and long hours.*  
Hygiene factors may be absent, which will not allow the motivators to function. Also, Maslow's security needs are not being met.
- *To boost productivity, an organization increases the number of supervisors, allowing little room for individual responsibility and professional growth.*  
All motivation theories could be applied here, but McClelland's power aspect (lack of influence) and Deci and Ryan's autonomy factor (increased supervision) come strongly into play, likely leading to demotivation.

### Is Taylorism misunderstood?

Given the arguments put forward by followers of Herzberg, McClelland, and Deci and Ryan surrounding motivation, it is tempting to suggest that Taylor's approach to scientific management has no place in a modern economy. Supervision, monitoring and control, and payment by results seem inconsistent with acquired needs, affiliation and achievement advocated by new models of motivation. They may also be difficult to achieve in a world where flexible and remote working has become more accepted.

However, there is nothing "wrong" with adopting Taylorism. In some workplace situations it may be totally appropriate to adopt more autocratic and bureaucratic forms of leadership to enhance worker motivation and improve productivity (see crisis management and contingency planning in chapter 5.7).

Moreover, as we shall see in supply chain management and in our discussion of outsourcing, Chinese suppliers working for Apple and other high-tech corporations adopt Tayloristic management processes, and there are no shortages of workers who wish to take advantage of these job opportunities and earn a living wage.

Also, as we shall see in chapter 3.9, only close attention to monitoring costs through budgets and variances can help with carrying out strategic planning. This idea is also discussed in chapter 5.9 on information systems, where digital Taylorism is now being suggested as a means of using data to manage and monitor employees. Taylorism is most certainly alive and well and should not be discounted as old fashioned.

### The importance of "hygiene" to motivational thinking

Herzberg's hygiene factors are not motivators themselves, but it would be wrong of employers to neglect them. If appropriate hygiene factors such as a "liveable" market wage or supportive working conditions are not in place, then the worker may become dissatisfied. Hygiene's presence allows the motivators to work. (One commentator critiquing hygiene remarked that Herzberg did not care for money. In sheer desperation, Herzberg had to raise his fees to speak at business presentations. As Herzberg himself says in his "Jumping for the Jelly Beans" presentation, "I wallow in hygiene.")

### Conclusion

We should not forget that the above theorists (apart from Pink) did most of their research on American or Western companies, and the samples used in their investigations were small. Maslow's sample size consisted only of managers. We must also remember that there may be specific non-Western cultural factors that may impact on worker motivation.

Finally, not all motivation theories can be applied to all forms of employment. For example, struggling artists or musicians (or teachers!) may sacrifice some of Maslow's lower-order needs, such as physiological needs or security (by refusing to take a higher paying job), in order to have the time and space to attempt to achieve self-actualization through their passion.

## Labour turnover (A02, A04)

HL

In most organizations, the pool of available human resources should be regarded as a flow concept, ever changing and responding to the aims and objectives of the organization. Human resource management is a dynamic process.

The days when employees could expect to have a job for life with one company are now effectively over. Some commentators are arguing that a young worker may have four to five changes in career by the time they are 40. We have also explained the growth and significance of flexi-time working and the gig economy (see chapter 2.1).

Labour turnover can be defined as the rate at which employees leave an organization and it is usually expressed

as a percentage per annum. For example, a labour turnover of 10% per annum would infer that 10% of an organization's employees leave each year.

Employees leave organizations for a number of personal and professional reasons. Economists would argue that employees moving into more productive jobs or seeking new opportunities is a positive move for the economy. Labour turnover is inevitable and necessary.

However, if too many employees leave an organization then stakeholders such as customers, investors and employees in rival organizations will start to take greater interest. If the labour turnover rate is higher than the industry average,

it could be a symptom of difficult working conditions, a poorly managed organizational culture or outright management failure. Moreover, a CEO of a large organization should be concerned if key managers or recently trained employees are leaving to take up opportunities elsewhere.

A low rate of labour turnover could signal a stable labour force. A lower than average industry rate has certain merit. Consistency and certainty in an ever-changing business landscape could be considered a positive aspect by some stakeholders such as shareholders or current and potential investors.

However, if we look from the perspective of younger workers who have been newly recruited into an organization, a low rate of labour turnover may act as a signal that the opportunities for advancement and growth in terms of increased responsibility are few. This could be demotivating.

Unfortunately, newly recruited workers may only discover this aspect of an organization after they have joined. It is unlikely that a business would reveal its labour turnover rates during an interview, although this could be a good interview question if the opportunity for questions arises.

## Appraisal (A02)

HL

If demotivation is growing in an organization and labour turnover is increasing, then appraisal could be used to find a solution.

Many workers fear appraisal as they assume it is merely a way of judging performance at work – and assume the views expressed will be negative. This is a narrow view. If appraisal is carried out effectively, it can become a very motivating process for both the employee and the employer, and can improve work relations and reduce demotivation.

When appraisal is carried out efficiently it will have the following positive consequences:

- The employer can restate the company's objectives and vision, leading to improved communication.
- The employer can praise high-performing workers and reaffirm their role in the future of the organization, thus aiding the retention of key workers.
- In an appraisal meeting, the employee may get a chance to voice concerns about the organization's direction, giving them an opportunity to channel frustration. Management will then hear about "grass-roots" problems quickly and be able to pre-empt future conflict.

Many companies leave the appraisal process to the end of the financial year. Some companies take a more flexible approach and encourage employees to discuss issues with managers more regularly. How appraisal is carried out will depend a great deal on the culture of the organization. Methods that could be used include the following.

### Formative

Formative appraisal occurs when an employee is being monitored to see if they have acquired a particular skill as a job is proceeding. We could argue that a formative appraisal is like a weekly check-up involving your manager just to see how operations are working.

In a classroom environment, your teacher may check your understanding of a topic by asking you some questions or by giving a case study in that week. Formative appraisal should occur throughout the working year at regular intervals and will form part of the summative process explained below.

### Summative

Summative appraisal normally occurs at the end of a trading period or year. For newly recruited workers, summative assessment could occur in the first six weeks. For an experienced worker, a summative appraisal could take place at the end of the working year.

In summative appraisal, a formal interview is usually held with an opportunity for both employee and employer to put forward their views and present evidence to justify a particular point. This evidence could include previous formative appraisals. It is the intention that the summative appraisal process will lead to an agreed new goal being set on the part of the employee so that performance and personal growth at work can be enhanced.

### 360-degree feedback and self-appraisal

Some of the evidence used to help with the summative appraisal process may include 360-degree feedback surveys and self-appraisal questionnaires. At HCL Technologies (first mentioned on page 44), 360-degree feedback surveys are taken to mean that an individual receives feedback from all those workers (including managers) who are "near" to them.

Effectively, at HCL any employee can give feedback on any other employee or manager. This process is so transparent that each worker can see the feedback they have given and the feedback they have received. All comments are posted online. More reserved cultures may feel uncomfortable with this level of transparency and it may not feel appropriate in all situations.

Self-appraisal is usually carried out by an employee on their own via a series of questions. It is viewed by a manager before the final summative review takes place. A personal SWOT analysis could be one method of carrying out a self-appraisal.

Self-appraisal is a powerful method, but again there are significant cultural implications for some groups of introducing such a scheme. There is also the question of whether workers are able to objectively analyse their own performance.

## Methods of recruitment (A02)

HL

The process of recruitment in human resource management has become increasingly important and complex in the new competitive global environment. Moreover, recruitment methods are changing. Traditionally, an employer would carry out a job analysis to see what new work was required. A job

description would be created and advertised in job centres or the local media.

Many employers now encourage potential applicants to send in their curriculum vitae (CV) or résumé with a covering letter

even if a job does not exist, so they can be added to the organization's potential human resource database. Or if the organization is suitably impressed by their skills on paper, they may consider creating a role for them.

The internet, social media and other communication technologies have made the process of advertising jobs much easier, with the result that many large businesses recruit globally rather than locally, especially for highly technical job opportunities.



Psychological profiling and psychometric testing of potential candidates who have been identified from the job search is sometimes undertaken. Employers are also increasingly checking social media sites as a way of judging a potential employee's character. (This action has significant ethical implications.)

Interview processes are being developed which may stretch over several days rather than hours. Some of these interviews may be carried out over the internet in the case of overseas appointments.

## Internal versus external recruitment (A03)

HL

One effect of the demographic changes noted in chapter 2.1 is that many businesses now recruit or search for new workers almost constantly. Globalization has increased the opportunities for organizations to be able to recruit workers from all parts of the world.

If there are labour shortages locally, specialized global recruitment agencies can locate highly skilled workers who are in short supply. This service can be expensive and time-consuming, and is subject to immigration conditions being satisfied, but essential workers can be located and brought into the organization to add value.

Organizations are now having to recruit both internally and externally to meet human resource management needs.

Internal recruitment occurs when an organization recruits employees into management positions, for example, from its existing workforce. External recruitment is when the organization looks to fill vacancies with people outside the business.

Internal recruitment has the advantage that it is usually quicker and less expensive to organize. Internal recruits will be known to the organization and there can be a record of appraisals and reports which can help to easily evaluate their performance. External candidates will have to go through a similar evaluation process, but much less will be known about them.

Internal recruitment will potentially save on induction and training costs, as the existing employees will already be familiar with the organizational culture in which they work. They will also be aware of the formal and informal groups. External recruits will have to learn the norms and values of their new organization and be given time to do so.

Internal recruitment can be a strong motivating force for existing employees as they can see opportunities for Herzberg's job enrichment, and this may reduce labour turnover which means that essential workers are retained. Although if an existing worker is promoted, a replacement may be needed and so the recruitment process may have to continue.

External recruitment may bring risk, but it can introduce new creative ideas and fresh thinking. Complacency within the organization may be reduced. Private limited companies that have been managed by the same family for many generations, for example, may benefit from recruiting "outsiders" with new ideas into managerial positions.

As we saw in chapter 2.1, external recruitment of a change management expert can allow an organization to successfully reduce resistance to change. Change management experts may be more objective in the change management process as they are not influenced by the organization's informal network.

## Types of financial and non-financial rewards (A02)

Figure 2.4.3 shows the different financial rewards employees might receive. Table 2.4.1 discusses common non-financial rewards.

Method of non-financial motivation	Explanation
Job rotation	This is a system used in organizations where a production process is broken down into smaller parts and workers are trained to complete all tasks but are rotated to reduce boredom (especially if the tasks are repetitive in nature) and increase productivity. This also provides automatic cover for absent workers through illness, but training must be extensive.
Purpose/the opportunity to make a difference	The individual is given a sense of purpose beyond simply making money. This motivating factor is typically found in non-profit organizations, which usually exist to meet a social or environmental need. (See also the YouTube video of Daniel Pink's "The Surprising Truth About What Motivates Us", mentioned on page 49.)
Job enrichment	This is sometimes referred to as "vertical loading", where an employee is offered more challenging work with increased levels of responsibility to motivate them.
Job enlargement	This is sometimes referred to as "horizontal loading", where an employee is challenged by performing more tasks at the same level of responsibility. The argument is that the variety of tasks stops boredom and creates improved satisfaction as the employee is able to participate in the whole production process.
Empowerment	The individual is given more control over their daily work routine with minimal supervision. This creates a sense of trust in the organization, which can be motivating for some and can lead to productivity increases.
Teamwork	This motivating factor can take many forms depending on the nature of the team, the task and the reward offered. Motivational research has found strong increases in productivity for those who work consistently in teams rather than individually.

Table 2.4.1 Non-financial rewards

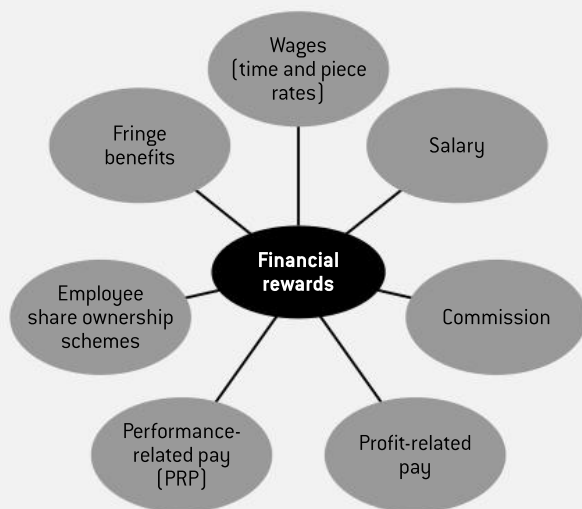


Figure 2.4.3: Financial rewards

Let us discuss some of the non-financial rewards mentioned in Table 2.4.1 in more detail.

### Job enrichment

McGregor and Herzberg have been two key figures in the development of this school of thought on motivation. The "Jelly Beans" YouTube video referred to earlier has several examples from Herzberg himself on the virtues of job enrichment. We can group these into two areas:

- Job enrichment encourages the personal or psychological growth of the individual. (As Herzberg says, "The more someone can do the more they can be motivated to do.")
- Meaningful work and self-checking of this work via the job enrichment programme provides the opportunity for the individual to be responsible and have a degree of autonomy, which will lead to motivation. Herzberg argues that you must not make somebody a "responsible idiot". They must perceive that they are contributing "meaningful work" to the organization's overall effort.

### Problems of the job enrichment method

Herzberg notes that training is a key element in the process, and this will cost money and take time to result in increased productivity for the organization.

Management will need to ensure that "meaningful" work is available and possible for the worker to complete. Herzberg argues that the two key functions of motivation are ability (enhanced through training) and the opportunity for the individual to put into practice what they have learned. Otherwise, demotivation will occur.

### Criticisms of job enlargement and empowerment

Some writers have argued that job enlargement is really just employers offering employees "more of the same" and it is not really an opportunity to develop talents. Others have gone further to suggest that job enlargement is merely a ploy by the organization to boost productivity by asking fewer employees to do more.

For empowerment, the argument is extended. Empowerment is viewed as a simple way to cut costs and remove management layers (delaying) as part of a strategic cost-cutting exercise.

Without sufficient training, some workers may be unable or unwilling to be responsible for their daily routine, preferring instead to work in areas with clear lines of communication and responsibility. We have noted previously that in many organizations, the spirit of Taylorism is alive and well. Taylorism is thriving in Chinese manufacturing despite the long working days and repetitive work.

### Teamwork

The motivational impact of employees working in teams has very strong support from several motivational theorists. One of the most powerful is the "Hawthorne effect" observed in the 1930s by Elton Mayo, which led to the creation of the human relations school of motivation. Motivation here is driven by the need for acceptance and consideration for other individuals, and economies of scale by sharing workloads, ideas and responsibilities.

Strong evidence from companies such as Nissan, Volvo, Toyota and other Japanese manufacturers is that teamwork should be introduced into the workplace wherever possible.

## Training (A02)

Training is usually categorized into three areas: induction training, on-the-job training and off-the-job training.

There are benefits and drawbacks to all three, as summarized in Table 2.4.2. (The disadvantages of off-the-job training look very similar to the advantages of on-the-job training.)

Type of training	Benefits to employer	Benefits to employee	Issues/problems
Induction	Allows the employer to set expectations of the new employee right at the beginning of the employment period.	Clear guidelines as to culture, role and expectations. Allows the employee time to settle.	Can be costly and diverts managers away from important tasks.
On the job	Cost is lower than off-the-job training. The training is specific to the needs of the firm.	Minimal disruption to the working day. Skills learned can be readily put into practice.	Lack of outside training may narrow the experiences of the employee. Can be too inward looking. Not a good way to train in fast-moving technological industries.

Off the job	Allows firms to access external specialists who can provide the latest expert knowledge to support job enrichment.	Being away from the workplace for a day may allow for a new perspective and sharing of best practice. The firm creates external networks.	Can be costly, and skills learned may take time to be put into practice. Too much off-the-job training may lead to resentment by employees who have to cover absences.
-------------	--	---	--

Table 2.4.2 Advantages and disadvantages of three types of training

### Revision checklist

- There are several competing motivational theories which aim to explain how an organization should try to motivate its employees. The common core of theories for SL/HL includes Taylorism, Maslow's hierarchy of needs and Herzberg's two-factor theory. Digital Taylorism is now being used by some organizations and is explored in more detail in chapter 5.9.
- Recent additions to these classical motivation theories include McClelland's acquired needs and Deci and Ryan's self-determination theory. They emphasize that motivation can be improved by allowing greater employee autonomy at work. (HL only)
- Organizations are constantly looking to recruit workers locally, nationally, and even globally given changing trends in labour mobility (see chapter 2.1). Changes in technology and the rise of social media has presented both opportunities and challenges for external recruitment. (HL only)
- Increasingly, organizations are using non-financial rewards to improve motivation and reduce demotivation at work. This trend is supported by motivational theory but also by a desire to retain the most effective employees by giving them greater autonomy, and opportunities to be more creative and innovative.
- Organizations see training as a critical aspect of human resource management, both on the job and off the job, to support the ongoing professional development of employees to be more creative and innovative. Training links directly with Herzberg's motivational theory, especially job enrichment.

## 2.5 Organizational (corporate) culture (HL only)

### Guiding questions

- What is organizational culture?
- What are the different types of organizational culture?
- How can we resolve cultural clashes when organizations grow and merge, and when leadership styles change?

### Organizational culture (A01)

HL

The culture of an organization is defined as the attitudes, beliefs, experiences, norms and values which determine working relationships between internal stakeholders and ways of interacting with external stakeholders.

### IB Learner Profile

Inquirers ?

#### What is it like to work at Pixar?

The following extract is taken from the *Daily Telegraph* (a UK newspaper). Read the article and ask yourself what it would be like to work at this organization. This article also provides a good link to some of the leadership and motivation issues raised in this unit, and will help in your application of business content such as *labour turnover, financial and non-financial rewards, teamwork, and empowerment*.

*Deep, deep inside the vast buildings that house Pixar Animation Studios lies a dark secret. It's heavily disguised – a small room hidden among the*

*furry life-size statues of Sulley from Monsters Inc. But inside is something that runs so contrary to the Pixar philosophy that employees will only talk about it off the record, and with a furtive glance over their shoulder. It's a bar. A real bar.*

*This, sadly, does not form part of the official tour of Pixar's headquarters – a series of low-rise, modern hangars in Emeryville, California, across the bay from San Francisco. Which is a shame, as it's a rare example of a human vice in an otherwise eerily perfect working environment. One that, at times, feels either like a youth club or a well-funded cult.*



For example, we've already enjoyed the free, 24-hour staff Cereal Bar, boasting 14 kinds of breakfast cereal from Frosties to Lucky Charms, and an endless supply of milk. There is a Pizza Room, offering free slices for those working late. There is even a "Breathing Room" – although we're assured this is for yogic meditation, rather than the only location where basic respiration is permitted.

Somehow it seems like the best and, simultaneously, the worst place to work on earth.

However, Pixar must be doing something right. Because at the other end of the atrium, in a glass cabinet, sits the proof. Twenty-six Academy Awards, five Golden Globes and three Grammys. Not bad considering that, in 1991, Pixar was a high-end computer hardware company with just 42 employees, teetering on the brink of bankruptcy.

Maintaining their unprecedented 15-year rise, bookended by *Toy Story* and *Toy Story 3*, has not been easy. They're no longer the maverick outsider, nimbly taunting the big studios with their indie credibility; since being bought by Disney for \$7.4 billion in 2006, Pixar is now most definitely the mainstream.

What is this magical formula that keeps enthusiasm and inspiration bubbling throughout the four years it takes to make a Pixar movie? Why does almost nobody from the 1,200 staff ever leave?

Certainly, the headquarters itself must be responsible for much of the attraction. Indeed, it's a mark of Pixar's status that even cynical film hacks are moved to childish wonder at the prospect of a visit to the site (with one comparing it to winning Willy Wonka's golden ticket). And for films fans, it's like a theme park. Pixar characters are everywhere.

When Steve Jobs took over the company in the late Eighties, during his hiatus from Apple, the design of the building itself became a personal fascination. Working with architects Jobs gave them a simple brief: to design headquarters that "promoted encounters and unplanned collaborations".

Thus, the atrium of what's now posthumously called the Steve Jobs Building is the centre of all things Pixar – housing focal points like the cafe, foosball tables, and a fitness centre.

This kind of design was revolutionary. In the late 1990s, film studios were still housing their employees in drab office blocks. But here, on the banks of the San Francisco Bay, was a workplace offering its staff use of an Olympic-sized swimming pool, volleyball court,

jogging trail, football field and basketball court. As well as an organic vegetable garden used by Pixar's chefs, flower cutting gardens and even a wildflower meadow.

Inside, too, there was freedom. There are no set working times – instead, the offices are open 24 hours a day for those who prefer to work in the small hours.

It was a model that Apple, Google and hundreds of Silicon Valley start-ups would later copy – one where a job became a lifestyle. Keep employees happy with free sustenance and diversions in a youth club atmosphere, the theory goes, and they'll never feel any need to leave. It is this free atmosphere that many employees attribute to Pixar's success.

It's perhaps no wonder, then, that the interview process to become part of this Pixar family is harsh. With an estimated 45,000 applications received for each new position, only a chosen few make it. One successful employee comments about the recruitment process. "They want to get as many people to see you as possible – just to make sure everyone is comfortable with your personality, how you hold yourself, if you fit in."

Once through that process, however, employees are given almost total free rein. The Pixar in-house theory is simple: mistakes are an inevitable part of the creative process, so it's far better if you pile in and start making them quickly. John Lasseter, chief creative officer at Pixar, confirms this: "Every Pixar film was, at one time or another, the worst motion picture ever made," he once said. "People don't believe that, but it's true. But we don't give up on the films."

Another senior executive agrees. "It's a mentality," he says. "You're responsible for your mistakes, but there's no blame culture. As a freelancer in London, I knew that if I'd made a critical error, I'd be out of a job. Here, they'd say you must learn from it, and strive to do better. It's the most grown-up place I've ever worked in that regard. It's all about ownership."

Source: Adapted from an article by Chris Bell, "Monster's University: What's it Like to Work at Pixar?", *Daily Telegraph*, 10 July 2013

### Questions arising from the article

- How would you describe the organizational culture at Pixar?
- If Pixar's organizational culture is so successful, why don't more organizations adopt it?
- Explain how Pixar's culture motivates its workforce.
- What does success look like in the Pixar culture?

## Types of organizational culture (A02)

HL

It would appear difficult to accurately categorize Pixar's organizational culture. Some business management textbooks use terms such as "open", "free", "contemporary" or "inclusive".

In the absence of any recognized classification of different cultures, for the rest of this study guide we will use Charles Handy's suggested framework from his highly influential book *Gods of Management* (1978).

Table 2.5.1 is adapted from *Gods of Management*, where Handy assigned a classical figure to each of four possible cultures present in an organization.

First, we must note that:

- There is no single culture within an individual or organization. We cannot really say that a culture is all "Zeus" or all "Athenian". Handy argues that businesses and stakeholders are combinations of all four cultures. What is important in an organization is the dominant or most prevalent culture.
- All organizational cultures have strengths and weaknesses. No culture or mixture of cultures is inherently "bad" or "wrong".



	<b>Zeus</b>	<b>Apollo</b>	<b>Athena</b>	<b>Dionysus</b>
<b>Culture</b>	Club or power	Role	Task or problem-solving	Existential or based on individualism
<b>Example of organization</b>	Family business	State services, local government	Media companies	Universities
<b>Example of Individual in this culture</b>	Richard Branson – seems to be the epitome of Zeus	Accountant or immigration officer	Advertising executive (prefers to work in matrix structures)	Groundsman in a school, ICT specialist, teacher, nurse
<b>Leadership style appropriate to culture</b>	Paternalistic	Autocratic, bureaucratic	Laissez-faire/flexible	Anti-management (does not wish to be managed)
<b>Ways of describing typical individual in this culture</b>	Charismatic, impulsive, hardworking, aggressive, optimistic	Gets on with the job, thoughtful, reliable, rational	Sociable, responsive, extrovert, anxious to solve problems	Rigid, introverted, reserved, loyal
<b>Ways of motivating</b>	Power and influence. Money acts as an enabler to take more risks. Values networks and connections. Likes to be able to influence others.	Clear career path offered. Promotion based on work ethic. Visible signs of recognition, eg a corner office and company car.	Training giving in new skills, with the opportunity to use these new skills in a dynamic problem-solving environment.	Allowed to get on with their job with minimal interference. Professional respect from colleagues because of talent.
<b>Issues/problems</b>	Hates to be constrained by rules and regulations.	Can be too inflexible. Hates change. Perceived as rather dull but can be excellent in a crisis.	Can be indecisive in crises. Irritated by certainty and stability.	Can be viewed as selfish. The organization is viewed as helping the individual, and not the other way around.

Table 2.5.1 Handy's four categories of organizational culture

## Culture clashes when organizations change (A03)

HL

From Table 2.5.1, we can predict that there will be cultural clashes between individuals within an organization:

- Zeus characters may become irritated with the insistence of Apollos on sticking to the rules. Zeus cultures would dislike being constrained in this manner and crave flexibility and influence. Apollos favour stability. Zeus characters thrive on power, as McClelland argues in his acquired needs theory of motivation.
- Athenians need to be challenged or may become bored. Can the organization provide enough problem-solving opportunities to motivate Athenians to stay?
- Dionysians may be perceived as difficult to manage but can be vital to the smooth running of an organization. Some have argued that the only way to manage and motivate Dionysians is to adopt a laissez-faire leadership style.
- Apollos appear to be dull and inflexible but may curb the excesses of the Zeus and Athenian cultures. Apollos' pragmatic and practical approach can be essential as an organization grows. Particularly with mergers, managerial excess can be a real issue. Apollo and bureaucratic cultures may ensure an element of control.



### **How do cultural clashes occur as an organization grows or merges, or when leadership changes?**

In any organization, the critical issue is to manage cultural differences between stakeholders so that some equilibrium can be achieved. A force field analysis might be useful to identify the relative strengths of the competing driving and restraining forces (see chapter 2.1). However, clashes will remain, and when organizations merge cultural clashes can be significant.

We saw in chapters 2.2 and 2.3 that when an organization restructures and grows, leadership styles may have to change. This will lead to cultural clashes. When Ricardo Semler took over Semco, his new, untried creative approach to organizational structure and management was not initially embraced by existing managers. When Billy Beane introduced scientific management principles into the Oakland Athletics, the head coach responsible for recruiting new players resigned and was publicly critical of Beane and the process. The Oakland Athletics supporters joined in the debate. There was also significant resistance from other coaching staff that their more intuitive management methods were being overlooked. This was not only a clash of leadership styles, but it was also a clash of competing cultures.

The manner in which an organization tries to give employees freedom to work on their own is one important way to minimize cultural clashes.

As we saw earlier in this chapter, Pixar's organizational culture clearly influences its animators, designers and leaders. Google's culture has also played a strong role in giving individuals the opportunities to be creative and take risks. It could be suggested that the cultures at Google and Apple influenced the ability of both organizations to grow and be innovative.

Google encourages its employees to use 20% of their allocated work time to research and develop any idea or innovation that motivates them. The only requirement is that these ideas must be fed back and shared with senior management. Many of Google's most innovative ideas, for software especially, have come from this creative organizational culture.

However, when an organization grows it can be easy to overlook the fact that although growth brings economies of scale or increased market share, problems will emerge. For example, it can be difficult to control or maintain the culture or original vision of the organization.

Apple is a good example of this, which started as a "passion" project for Steve Jobs and Steve Wozniak, employing just three people. They wanted to create an organization and culture which would challenge the traditional business models of other computer companies. Apple wanted to create a new way of thinking.

Apple rapidly grew into a large, more sustainable business, and additional departments, managers and investors were required. Some of these stakeholders were enthused by Steve Jobs' vision. But other senior managers were worried that Jobs was spending funds erratically on trying to create new products. They questioned his intuitive approach to decision-making and eventually Jobs was sacked in 1985.

After Jobs left, Apple lost its way in his absence, and market share fell dramatically. When Jobs was reappointed in 1996, he insisted on reverting to the original culture and vision. And the rest is history. Apple have been valued as one of the first trillion-dollar organizations based on shareholder value.

This example reveals that as an organization grows, it can be very difficult to keep the original culture in place, and stakeholder conflict and cultural clashes are inevitable.

### Revision checklist

- Organizational culture is a critical component in the success of an organization, especially around creativity and innovation, and the motivation of employees and managers. Culture sets the "tone" of an organization, and influences how employees interact and communicate with internal and external stakeholders.
- Charles Handy was one of the first business commentators to recognize that there are different cultural types within an organization, giving rise to his classifications of Zeus, Apollo, Athena and Dionysus.
- Handy indicated that there was no single culture present in an individual and that we are a combination of all types. What is important to recognize is the dominant culture present in an individual.
- When organizations grow or merge, or when leadership styles change, some cultural clashes or imbalances are inevitable. How organizations manage these imbalances will have a significant impact on an organization's growth strategy and success, especially if this growth is through external methods.

## 2.6 Communication

### Guiding questions

- What is the difference between formal and informal communication in an organization?
- What are the main barriers to effective communication?

### Formal and informal methods of communication (A03)

Method of communication	Example	Discussion
Oral	A manager asking a subordinate to work overtime at the weekend	The manager is able to gauge instant reaction and feedback through verbal and non-verbal means, but it can be time-consuming if undertaken repeatedly.

Written	A memo or report is displayed on a notice board	If clearly seen it can reach a large number of people. A hard copy can be kept for future reference in case of confusion or disputes. However, it can be hard to gain any feedback or reaction to sensitive issues unless further communication is arranged. Can also be viewed as impersonal if used repeatedly.
Visual	A warning notice or signpost indicating danger or a direction to be followed	Research has shown that this is the most cost-effective way to communicate. Visually appealing signs will have lasting impact.
Non-verbal	Body language/facial expressions (communicating without speaking)	Not an effective way to communicate as body language is open to individual interpretation and thus may cause confusion or offence. There are a number of cultural issues here (see below).
Formal	Communication using established channels of communication as shown by the organizational chart	Formal communication is a necessary part of all organizations. A good deal of this is handled electronically so that it can be recorded and acted upon if necessary. This would include emails and internal memos. A memo is a brief piece of communication which normally does not expect a reply unless asked for. This is called one-way communication. Social media communication authorized and organized by the senior management could also be termed one-way unless a reply is expected. A good deal of formal communication begins at the top of the hierarchy and is one-way. Some employees may find this frustrating.
Informal	The "grapevine" or the "rumour mill". Channels of communication established by the employees themselves, perhaps without full management knowledge.	Informal communication is a two-way communication process which can be carried out electronically but is likely to be undertaken face to face within the organization. Informal communication is difficult for senior management to control. Information circulates around the organization quickly, and messages may become distorted or exaggerated, leading to inaccuracies and possible conflict.

Table 2.6.1: Different methods of communication

## IB Learner Profile

Open-minded 

### Cultural issues and informal communication

*The Economist* highlights a number of business etiquette conventions from around the world which amplify the need for a clear understanding of cultural sensitivities and informal communication.

Examples include:

- The importance of "saving face" in Asia cannot be underestimated. Embarrassment and loss of face can


lead to confusion and impact considerably on business planning.

- Tactile displays of emotion (hugs) and kissing on both cheeks are quite acceptable among businessmen in Saudi Arabia and the Gulf.
- Indians and Singaporeans dislike saying no. Body language will often provide more clues than what is actually said.
- Falling asleep in meetings is not uncommon in Japan. Silences – pauses in communication – are also an important part of business etiquette.

You may wish to think about your own "cultural" etiquette conventions and those of your peers if studying in an international school.

## Barriers to communication (AO2)

### IB Learner Profile

Communicators 


We have already noted the impact of cultural differences on the success or failure of non-verbal communication. We can also identify some other sources of communication breakdown. Effective communication between sender and receiver is reduced due to the following:

- **Jargon** – these industry terms or "buzzwords" may confuse the receiver.
- **Noise** – this is anything that interferes with the communication and reduces its chance of success, such as trying to communicate in a noisy crowd, or the sender using vague, imprecise language.
- **Emotional impact** – a number of companies send managers on training courses to guide them in the process of passing on sensitive information, such as

redundancy or dismissal. This needs to be handled carefully: successfully passing on sensitive news requires empathy as well as clear communication.

- **Hierarchical barriers** – subordinates may be unwilling to speak openly to managers about key issues for fear of generating ill-feeling or at worst being dismissed. This problem may be exacerbated in tall hierarchies, where subordinates on the lowest levels may have no opportunity to engage regularly with senior managers and may feel intimidated. Again there are cultural issues at work. In Japan, such discussions between workers and senior managers are welcomed or even encouraged, especially in a total quality culture. In other parts of Asia, it may be regarded as inappropriate to openly discuss issues with a senior member of staff.

## IB Learner Profile

Balanced 

### Effectiveness of communication with new technologies

New technologies (such as smartphones and video conferencing) have implications for communication for organizations and their stakeholders.

- Some concerns have been expressed about the amount of communication which ICT generates within organizations, which can impact on the well-being of employees.
- Linked to this point is the fact that there is growing concern about the increase of organizational spamming

(junk mail) and phishing (tempting receivers of emails to reply to messages of dubious origin).

- Mobile phone communication is not reliable and secure in all parts of the world. A number of countries have yet to fully upgrade their ICT systems to be able to offer full "roaming" capabilities. In some countries there is also a lack of wireless coverage at an affordable price, even in central business districts. Both of these elements can lead to considerable frustration for senior managers who need to communicate while on the move.
- Video conferencing tools such as Zoom, Skype, Google Meet and Microsoft Teams have provided organizations with an invaluable way to save time and reduce expenses, especially travel costs, during the Covid-19 pandemic. This has been particularly true for multinational corporations that are scattered over many geographical regions. However, *The Economist* and other media publications have argued that for online meetings to become the norm, a change in organizational culture and leadership will be necessary.
- ICT provides a crucial link between organizations and customers. One way this has been achieved is by introducing loyalty programmes in marketing, for example where customers are invited to communicate feedback on new products or promotional campaigns.
- Pressure groups have used ICT to try to raise awareness of ethical and corporate social responsibility issues, either by indirect action through social networking sites such as WhatsApp and Facebook, or through direct action by communicating with the organization themselves.

## Revision checklist

- Formal and informal methods of communication have an important influence on an organization's culture, leadership, and motivation.
- Formal methods refer to accepted and recognized channels of communication within an organization. Informal methods are more difficult to manage and monitor, and can sometimes lead to confusion.
- External communication with outside stakeholders for an organization is normally managed by senior executives, and has been greatly enhanced using ICT and social media.
- We must note that there are significant cultural issues around the effectiveness of communication. Barriers to communication remain, especially the use of industry jargon and buzzwords (which may be used to deliberately confuse the receiver of a message).
- The Covid-19 pandemic has increased levels of contactless communication, but some face-to-face communication is still an integral part of important business decision-making in many cultures.



## 2.7 Industrial/employee relations (HL only)

### Guiding questions

- What are the main sources of conflict within the workplace between employees and employers?
- What are the approaches to conflict taken by employees and employers?
- How do organizations resolve conflict between employees and employers?

## Sources of conflict in the workplace (A02)

HL



Conflict within a large, dynamic organization is inevitable. We have noted that some organizations, such as Semco, have tried to introduce greater democracy and empowerment into the workplace to reduce tensions. Disagreements concerning pay levels, job responsibilities, working conditions and appraisal outcomes can still lead to a difficult working environment. Changes in the external environment beyond the organization's control can also lead to conflict, as the Covid-19 pandemic has clearly shown.

With the growth of social media, some disaffected employees have taken to the internet to voice their concerns. Codes of conduct have had to be written to ensure that employees do not bring the organization into "disrepute" by posting inappropriate or harmful content on social media.

In 2021, two famous American actors launched lawsuits against two film studios for a breach of contract. The film studios had offered their films to streaming platforms. The actors responded by stating that this action denied them profits from the sales of cinema tickets. Even though the actors were paid considerable salaries to appear in these two films, this action was a significant source of conflict and will have implications for how film studios negotiate with their most famous assets in the future.

The overriding conclusion is that conflict within an organization is inevitable. All types of business entities will experience conflict at some point – even charities and social enterprises whose mission is to have a positive impact on the lives of the stakeholders who generously give freely of their time to support good causes.

## Approaches to conflict (A03)

HL

### Employees

We can identify several methods or approaches to conflict that a trade union or similar organization, which has been elected to act as a representative on behalf of the employees, may use to indicate dissatisfaction.

### *Negotiation or collective bargaining*

The trade union or employee representative begins a period of negotiation or bargaining with the employer, usually face to face. While this happens, the production process continues. To minimize conflict, this approach is increasingly being used, though it is dependent on the abilities of the employee and employer to communicate.

### *Go slow*

Employees are instructed by their representatives to work at reduced speeds without jeopardizing the production process. Productivity in the workplace may suffer.

### *Work-to-rule*

Employees are instructed to work deliberately to the letter of their contract and to withdraw "goodwill". Goodwill in this context refers to the unpaid additional duties workers willingly take on although they are not normally included in their formal job description and they do not get paid for them. For example, an ambulance driver could reluctantly withdraw goodwill by refusing to drive an emergency patient to hospital if their contract states they should have already finished work for the day.

### *Overtime ban*

Many organizations, particularly in the public sector, rely on employees working overtime or working unsocial hours. This could include nurses, teachers and doctors. Some employees who work in the primary private sector, such as mining or the extraction of raw materials, use overtime bans to register disapproval. The introduction of an overtime ban could have a considerable impact on these sectors and services.

### *Strike action*

For a trade union, this threat is usually used as a last resort. If negotiations have broken down and there is a clearly an impasse, or an unbridgeable gap between the two sides, a strike or prolonged stoppage may be called by the employees' representatives. The production process stops.

In many countries, a strike can only be sanctioned after a ballot of members has taken place. Otherwise, the strike may be deemed unlawful. This is important for two reasons:

- If the strike is unlawful, workers may not be entitled to receive "strike pay" (if any has been agreed), which is intended to support them while they are not working.
- An unlawful strike may reduce stakeholder support for the strike action and lead to a loss of public sympathy for the cause. This may weaken the position of the employee representatives once the negotiations resume.

### *Employers*

During industrial disputes, employers are also not limited to negotiation. There are several methods or approaches open to them to achieve their own objectives. However, these methods could be considered aggressive and likely to inflame employees and their representatives, especially if there is no end to negotiations in sight. In some countries, some of the following practices are unlawful.

### *Threat of redundancies*

Some firms may announce that redundancies are inevitable if the trade union presses ahead with its industrial action. This may weaken the union's industrial action, even if the threat is not as great as the company claims.

### *Changes of contract*

Given a downturn in an economy, an employer may announce that changes of contract are required to keep the organization in business. In chapter 2.1 we noted the introduction of "zero-hours contracts" and the gig economy in FMCG and other industries.

### Lockout



Faced with mounting tension, a business may lock workers out of the workplace. This is a difficult, dangerous and potentially unethical tactic. The publicity surrounding a lockout may create poor public relations and sympathy may shift from the employer to the employees, especially if some workers need to work and earn a wage. A lockout would seem to be a drastic solution if it led to financial hardship for some families.

### Closure of the workplace

A closure would be a last resort option, as this would not only impact on the employees but on the employer as well. Effectively, the organization could cease to exist, affecting the livelihoods of stakeholders and increasing unemployment. This course of action should only take place if all other means of settling the dispute have been exhausted.

## Approaches to conflict resolution (A03)

HL

Given the inherent tensions that may exist between the employees and employer during an industrial dispute, numerous conflicts have been resolved instead by a third or outside party in a process of **conciliation** and then **arbitration**. Conciliation brings the employee and employer together under the direction of a third party or arbiter. The arbiter acts as a referee, listening to both sides and trying to see the issues from both the employees' and employer's perspectives.

Once the conciliation process concludes, the decision of the arbiter is final. This is called the arbitration outcome, and both sides must abide by it. However, the process of deciding the outcome can take time, and small businesses in particular may find it costly to implement.

Other employers have tried to use tactics such as **no-strike agreements** or **single-union agreements**. Whether employers can use these tactics will depend on the legal framework operating in the country where the conflict has taken place.

- An employer may offer a union a deal where if employees agree not to strike, the employer may allow some sort of concession in the bargaining process, such as allowing a dispute to go to conciliation and then arbitration by a third party. This could lead to a much quicker resolution than if a strike took place.

- Single-union agreements allow the employer to avoid negotiating with two or more unions, which could delay the final resolution and lead to competition between the unions for the best deal. Time, lost production and goodwill could all be saved through bargaining with only one union.

In all of these approaches to conflict resolution, the intent is to try to reduce tensions and avoid escalating the disagreements, to avoid a financially damaging strike.

There are other ways of resolving conflict. For example, workers for Walmart are treated as "associates" and not employees, and through employee participation programmes they are encouraged to participate in a form of industrial democracy, giving workers collective rights over the resolution of key issues. This model has been employed with enthusiasm in Japan, which has the lowest recorded number of strikes, measured by working days lost (where reliable statistics exist), and has led to significant improvements in morale and productivity.

### Conclusion

With changes in legislation making strikes more difficult, and the need for employees and employers to work together, a new era of workplace relations may be upon us. The recent social, economic and technological challenges noted earlier in this book have aided this new era of conciliation.

### Revision checklist

- Conflict will exist in all organizations and is an inevitable result of employee/employer interactions.
- The key to conflict resolution is to find the most mutually agreeable method while incurring the least amount of financial cost and disruption to the operations of the organization.
- Increasingly organizations wish to resolve conflict early and quickly through negotiation and conciliation. Strike action is considered the least favoured and aggressive option in many countries for resolving conflict, given the financial and opportunity costs involved.
- Arbitration and the use of an independent, objective third party are becoming more popular and pragmatic methods of conflict resolution.



## 3.1 Introduction to finance

### Guiding questions

- What is the role of finance for an organization?
- What is the difference between capital expenditure and revenue expenditure?

### Role of finance for businesses (A02)

Finance is at the centre of business management. Without finance, organizations cannot be economically sustainable. Wages would not be paid, materials would not be processed, risks would not be taken. Organizations producing goods and services would cease to exist. This unit tries to bring together the important elements of the sources of finance, financial accounting, cash flow, investment appraisal and the role of budgets.

As a result of social and technological change, new sources of finance have been established. It is entirely possible that a business could receive finance without ever meeting the lender in person. For example, the internet and World Wide Web has given rise to a new external source of finance called "crowdfunding".

There has also been a welcome transfer of funding opportunities from the developed and mostly prosperous world to developing countries. It is now possible for even very small business start-ups in the developing world to obtain ethical capital through microfinance providers such as Grameen Bank, Kiva and other ethical providers.

This growing interest in ethical sources of finance has been a welcome development. Aspiring entrepreneurs from around the globe can now use their laptops to seek additional funds through programmes run by social enterprises.

### Capital expenditure

Capital expenditure for a business involves the purchase of resources that the organization intends to keep for longer than one year, and which help with current and future productive capacity. Capital expenditure includes the purchase of buildings, machinery, equipment and vehicles. An accounting definition of capital expenditure is the purchase of fixed assets. Capital expenditure can also include one-off costs that will benefit the business over several time periods. These can include legal costs and spending on intellectual property (see chapter 5.8).

### Revenue expenditure

In contrast to capital expenditure, revenue expenditure is much more short term. Fixed assets will need maintaining and repairing, and these costs are counted as revenue expenditure items. Secondly, fixed assets themselves are unproductive without resources such as labour, materials, electrical power and other supplies. These items fall under the broad category of working capital.

Clearly a balance between capital and revenue expenditure needs to be struck. Too much capital relative to revenue expenditure and the organization will not be able to satisfy customer needs. Goods and services will not be produced in sufficient quantities without resources. Too much revenue expenditure relative to capital and organizations may face the issue of overtrading and, in the long run, diseconomies of scale. The organization will run out of productive capacity.

### Revision checklist

- Finance is a critical part of business management and impacts on all other functions of the business, including human resources, marketing, and operations.
- Organizations engage in capital expenditure (which is the purchase of fixed assets) and revenue expenditure (which finances working capital and allows those fixed assets to generate productive opportunities).



## Sources of finance

### Guiding questions

- What are appropriate sources of internal and external finance?
- What is meant by short- and long-term finance?
- Which types of finance are the most appropriate for a given situation?

### Internal and external sources of finance (AO2)

Source of finance	Description	Analysis
<b>Internal</b>		
Personal funds (sometimes referred to as owner's equity for sole traders)	The initial contribution to capital to a business from the entrepreneur. These funds can be sourced from past savings, inheritances or even redundancy payments.	These funds will be critical to start a business and provide finance for initial revenue expenditure and some capital items. There is no interest to pay on using these funds but of course there is an opportunity cost.
Retained profits	A firm uses retained earnings to finance projects.	There will be no interest to pay and no dilution of ownership. The action may be viewed positively or negatively by stakeholders depending on their objectives.
Sale of fixed assets	A firm disposes of "old assets" for cash.	Selling assets reduces productive capacity and weakens balance sheets and shareholder value, so it may be unpopular.
<b>External</b>		
Leasing	A new method where firms may sell an asset but then lease or hire it back to use without the responsibility of ownership. An initial lump sum is received to finance other projects.	There are a number of complex sale and lease-back schemes. They are used mostly for large fixed assets or, increasingly, ICT systems. In lease schemes, firms may be able to update assets periodically to avoid obsolescence. This has become a feature of new outsourced ICT schemes.
Sale of shares	A publicly traded company may issue further shares to existing shareholders or to new shareholders to raise funds.	Significant sums can be raised in the capital markets but there may be dilution of ownership. In order for the share issue to be successful, a clear growth objective or strategic plan will need to be given to encourage shareholders. Shares might not be purchased if the perception is that the funds are only going to be used to pay off existing debts.
Trade credit	Offering trade credit means allowing customers to receive goods and services without full upfront payment	Trade credit needs to be monitored carefully by an organization. The normal trade credit period is 30, 60 or even 90 days. Some organizations allow for discounts for prompt payment before the time limit is up.
Overdrafts and loans	A firm borrows additional funds; these can come from a multitude of different financial institutions. Overdrafts are very short term, while loans vary in duration (from around 1 to 30 years) depending on the reason for borrowing funds.	Overdrafts must be authorized in advance or can be a very expensive way to finance. Interest will have to be paid but there will be no dilution in ownership. Interest rates can fluctuate and have an impact on interest payments and cash flow.


Business angels	Sometimes referred to as providers of informal investment, business angels are usually affluent individuals who seek out potential investments and provide start-up capital in return for some ownership or equity stake in the new business.	Venture capitalists are usually represented by groups and are arguably more aggressive in their dealings with providing finance. Venture capitalists may demand a greater say in decision-making. A business angel is generally more hands-off.  Increasingly we are seeing business angels being attracted to financing more socially responsible or ethical business models.
Microfinance providers 	The work of Muhammad Yunus and the Grameen Bank, who were pioneers in trying to help struggling entrepreneurs in developing countries finance some of their start-up capital, has led to an increase in "microfinance" providers.  The rapid pace of technological change has allowed microfinance providers such as Kiva to offer finance for entrepreneurs around the world, but especially in developing countries.  Microfinance providers are not charities. Research indicates that 99% of loans given to start-ups are paid back. This repaid capital is given to other entrepreneurs so that the source of finance becomes sustainable.	Some commentators have voiced concern about microfinance. They have argued that although the principle of microfinance is ethical and laudable, by taking a microfinance loan some entrepreneurs in developing countries may put themselves and their community into a debt trap which they are unable to escape.
Crowdfunding	Crowdfunding is a source of finance that is reliant on the growing online community. Individuals can submit a project idea online, a target level of funding, and then wait for contributions.  Kickstarter is probably the most well-known crowdfunding site with over 200,000 projects supported. For some Kickstarter projects, those who contribute are offered discounts on final products or services once the project becomes realized.  Some social enterprises have used crowdfunding to launch their innovative product or service as more traditional sources of finance, such as financial institutions, have been reluctant to lend to them.	Crowdfunding is a quick and inexpensive way to raise finance.  The funding is given through an interested community, so quick feedback and guidance might be available at little or no cost. Given the link to the internet and social media, donors can track progress and share the intentions of the start-up with their networks.  However, there is a formal and strict selection process and some projects do not meet the requirements of the crowdfunding platform. There is the real risk that little or no funding will be received.  If the start-up has not protected their idea through a patent or copyright, then with crowdfunding it is possible that an idea or concept could be stolen.

Table 3.2.1: Internal and external sources of finance

## Appropriateness of short or long-term sources of finance (AO3)

For our purposes we can define the timescales involved for finance as:

- Short term: to meet immediate finance needs and those for up to six months, mostly for working capital and revenue expenditure.
- Long term: finance required for a longer-term strategic plan to grow an organization through capital expenditure.

An organization may want to use several different sources of finance depending on the purpose of the finance. The factors they will need to consider include:

- The length of time for which the finance is required.
- The cost of the finance to the organization.

- The issue of whether to finance an activity by borrowing and taking on additional debt, or by issuing more shares for purchase to existing or new shareholders. This is sometimes referred to as the debt versus equity dilemma for an organization.

### Purpose and time factors

Firms will have immediate, short, medium and long-term needs for finance. The source they choose will depend on the time frame under consideration.

For an immediate financial issue, such as paying a supplier an invoice which is overdue, an extension to a bank overdraft may be all that is required. This would be very short term.

For short-term finance, internal methods may be quicker to access, for example using previous profits or reserves, rather than trying to raise new external finance. Raising additional capital will take time. An extension of credit from a supplier may also be appropriate for some short-term finance.

For longer-term strategic uses involving sums that can run into millions of dollars, an organization will have to conduct a financial SWOT analysis and involve financial institutions or management consultants to source the most appropriate, cost-effective method. The fees from such expertise can run into thousands of dollars, so it is assumed that only the largest organizations can afford these services.

As a general rule, if the purpose or objective to be financed is long term (over several years) then the most appropriate method of finance will also be long term. If the purpose is short term, then a short-term funding solution should be found. Accountants call this the "matching" or "accrual" process.

### Cost considerations

How much finance is needed and whether it has been planned for or not are important factors in determining the cost of the finance.

If a firm has poor planning and runs short of cash to pay immediate invoices, then a hastily arranged overdraft can be expensive with punitive interest rates. Unauthorised overdrafts will annoy any financial institution lending funds, and they are considerably more expensive. Banks in particular dislike customers using their overdraft facility unexpectedly.

Loans from financial institutions may also carry high interest rates if the purpose behind the loan is not carefully communicated to the bank or financial institution lending the money. Discussions and a business plan will be needed at this point. The bank will want to see some clear justification for the loan.

Finally, larger firms have the advantage of financial economies of scale over smaller firms. They can borrow large sums of money at greatly reduced interest due their size and the amount of collateral they can offer the lender as security.

### The debt versus equity dilemma

When choosing how to finance large, long-term projects, an important decision for the organization is: do we take

on more debt, or do we increase the amount of share capital and issue more shares for purchase to existing or new shareholders? We can call this the "debt versus equity dilemma".

To finance a new strategic plan or aim, does a large organization issue more shares, and consequently dilute ownership for existing shareholders (assuming that the shares will be targeted at new owners rather than existing ones)? Issuing fresh shares avoids the need to borrow and pay interest on the loan. The risk of undertaking the new strategic plan is also "shared" among the shareholders.

However, it should be noted that not all share issues are guaranteed to be successful. Not all the shares issued may be purchased. There will be additional scrutiny on the organization. Share issues require increased transparency and will demand greater stakeholder scrutiny. If the organization has issued more shares in the past, how successful were they? Was shareholder value improved in a previous share issue? A share issue can raise several important questions for the organization.

The alternative is to take on more debt in order to finance the new strategic aim. The organization keeps their existing level of control and influence over decision-making. There is no dilution of ownership as the number of shareholders remains the same. With no additional shares being issued, the opportunity for an organization to be taken over by a competitor is also reduced.

For the reasons above, financing through borrowing (debt) is an attractive option for a private limited company. Retaining control in decision-making is particularly important. Of course, the biggest drawback to borrowing is that debt will need to be repaid with interest. The interest costs will eat into profits. Also, to secure additional finance through borrowing, the organization will have to provide "collateral", such as capital assets. These assets will be at risk if the organization gets into financial difficulties (see chapter 3.6 for more details).

If a firm issues more share capital, then interest does not have to be paid. Dividends may need to be paid, but the organization has some control over this process. Some organizations argue that dividend payments should be delayed and the retained profits used to provide finance for future projects. Organizations cannot delay interest payments though, and these will have to be met before any dividends are paid out.

### Revision checklist

- There are a range of internal and external sources of finance available to an organization.
- Smaller organizations (such as sole traders) may be limited to personal funds, retained profits and the sale of personal assets, or loans or overdrafts from friends, family and financial institutions.
- As an organization grows, the range of external sources increases. Share capital becomes a potential source of finance. With increasing growth, an organization can borrow from financial institutions at lower interest rates.
- The growth of the internet has enabled crowdfunding for businesses that might struggle to secure finance from more traditional sources.
- The type of finance that an organization is looking for will depend on several factors, but central to this issue is the idea of matching. Short-term needs should be funded by short-term sources of finance. Longer-term needs should be funded by long-term sources of finance.

## 3.3 Costs and revenues

### Guiding questions

- What are the main costs of production for an organization?
- What is meant by total revenue and revenue streams?
- Why do organizations create new revenue streams?

### Costs (A02)

Table 3.3.1 defines, explains and gives an example of each different type of cost.

Type of cost	Definition	Explanation	Example
Fixed or indirect/ overhead	Costs which must be paid but are not dependent on the level of output. They are also referred to as overhead costs.	These costs are incurred even if the firm produces zero output.	Rent and rates on the premises, insurance on vehicles.
Variable or direct	Costs which are output dependent.	As production increases, so do variable costs.	Raw material costs, wages of production workers.

Table 3.3.1: Different types of cost

For large organizations, such as Disney or Apple, the fixed or overhead costs can be significant. The fixed costs of operating a film studio and producing films, for example, are very high, especially when overhead costs such as insurance, marketing, distribution and salaries are considered.

Consequently, film studios need to constantly look at ways to keep the studio running and generate revenue streams (see below), as the fixed overhead costs will need to be paid if the studio produces one film or ten.

The need to spread the fixed overhead costs of operating a film studio over a range of potential projects is an important reason why studio CEOs and film producers are always looking for new material, scripts, and opportunities to develop.

Fixed overhead costs can be allocated to different projects depending on their likely chance of success, and some flexibility on how costs are allocated is possible. This process of allocating the fixed cost across different projects is called "absorption costing", and it is one of the HL Business Management tools. We will look at this in more detail in chapter 3.9, when we consider budgets and variances, and the role of cost and profit centres, and in chapter 4.5, when we discuss pricing methods.

### Total revenue and revenue streams (A02)

We can define revenue as the amount of money generated from trading activities: selling goods or services to customers. Revenue is the price of the good or service multiplied by the number of units sold. We will look at these calculations in more detail when we consider break-even analysis in chapter 5.5.

If a company earns revenue from activities other than trading in the goods and services for which the business was created (such as dividends from investments or shares

owned), this is referred to as non-operating income. Sales of assets are also not included in revenue.



#### Examples of revenue streams

A revenue stream is a method or range of different mechanisms that a company, organization, or individual uses to gain sales revenue. Revenue streams lie at the centre of all business models. Here are two examples of organizations looking to generate revenue streams.

#### Google

In chapter 2.2 we looked at the decision of Google to restructure its operations into a new holding company called Alphabet in 2015. Figure 3.3.1 shows Alphabet's revenue streams as of 2020 and 2021, with the Google search engine still being its main source.

By separating into distinct units (or profit centres), Google can analyse its main sources of revenue more easily.

Pie charts are an effective way to communicate the contribution of different revenue streams, and we will return to this example in chapter 3.9 when we consider using revenue streams to link to a product/service portfolio tool such as the BCG matrix.



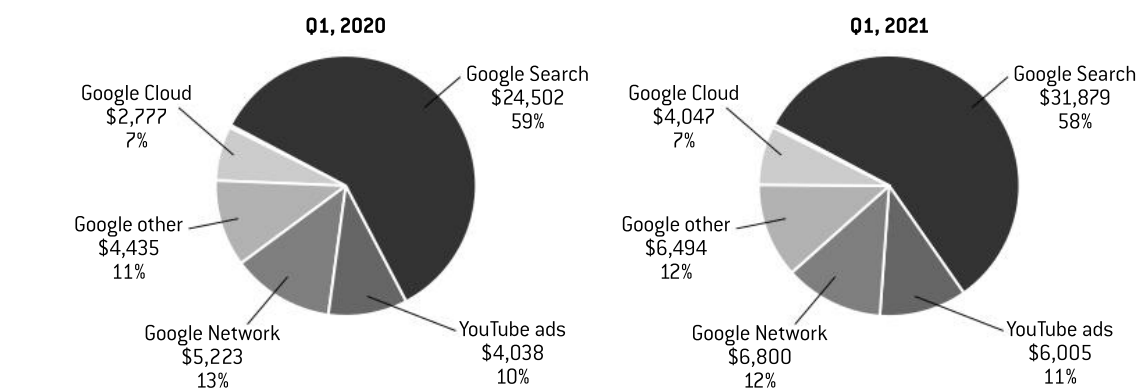


Figure 3.3.1: Alphabet revenue in 2020 and 2021 (\$millions)

### The film industry

This second example comes from the film industry and illustrates how organizations having to adapt to change can create new revenue streams.

Traditionally, film studios have generated revenue streams by selling tickets to customers going to cinemas. This typically meant selling tickets in their own country and a few selected overseas markets. As the distribution outlet for film studios, cinemas are the way that film studios raise revenue. Typically, studios receive about 55% of the earnings generated from cinema ticket sales.

After the film has been released in the cinema, it is normally followed by the DVD – although this practice is now in decline with the growth of streaming sites such as Netflix. Many films only break even once they have finished their initial run at the cinema.

Faced with a range of challenges, especially the closure of cinemas during the Covid-19 pandemic and the falling popularity of DVDs, film studios have had to resort to several other ways of generating additional revenue streams.

The following are examples of how Disney has tried to generate extra revenue streams, but they could apply to a range of other studios:

- The increased use of merchandising to promote films aimed at younger audiences or successful franchises such as Marvel.
- Television rights may be sold so films can be watched at home *before* they have been released to the cinema.
- Allowing third-party organizations to create video games based on successful film franchises.
- Product tie-ins with companies such as Apple or Starbucks, to have their products featured in the film.
- Opening a film to an international market once it has been released in the home country.
- Preselling a film to international markets before it has been released, on the strength of the actors' global popularity.

In all of the above cases, the film studio will generate additional revenue streams. It should be noted that despite the illegal copying of films (which earns the studio no revenue) and the competition from legal and illegal streaming sites, film studios still see a future in the cinema experience.

### Revision checklist

- Fixed or indirect costs must be paid even if the organization produces no output at all. These include insurance and electrical power. These costs are not related to the level of output and are also called "overhead costs".
- Variable or direct costs are related to the level of output produced. The higher the level of production, the higher the level of total variable or direct costs. Examples include raw materials used in the production of goods and services, and wages.
- Total revenue is defined as the price of a unit sold to a customer multiplied by the number of units. The number of units sold is sometimes referred to as the sales volume.
- Ideally, organizations should not rely on just one product and thus one revenue stream. Increasingly, organizations are looking for ways to generate additional revenue streams. The film industry, for example, has had to look for ways to increase revenue other than sales of cinema tickets.

## 3.4 Final accounts

### Guiding questions

- What is the purpose of financial accounts to different stakeholders?
- What is the format of the profit and loss account and balance sheet for for-profit and not-for-profit organizations?
- What are the different types of intangible assets that organizations can own?
- What is depreciation and which method should we use to calculate it? (HL only)

### The purpose of accounts to different stakeholders (A02)

The main purposes of final accounts are:

- To allow a business to analyse its performance in terms of profitability, liquidity, efficiency and gearing (efficiency and gearing are HL only).
- To satisfy legal requirements – especially for publicly traded companies that sell shares on capital markets, which must carry out financial reporting.
- To calculate corporate tax liabilities demanded by the government.
- To provide a degree of transparency about the company's financial position to external stakeholders such as potential investors, lenders, and suppliers.

A stakeholder (see chapter 1.4) is an individual or group who may have a direct or indirect interest in an organization. The following stakeholders will have a direct interest in the final accounts of an organization:

- Senior management can use the accounts to review and possibly adjust a tactical or even a strategic decision made in the previous year. Senior management may also wish to view retained profits, which is an important source of finance for future growth.
- Current shareholders and potential investors will be especially concerned with the profitability and gearing aspects of the balance sheets. They may also wish to view financial accounts over time to build up an overall picture of financial performance.
- Creditors will be concerned with liquidity, profitability, and existing levels of gearing, and perhaps the amounts of fixed assets for collateral purposes if the firm is looking to borrow additional funds. For this reason, many organizations also provide cash flow statements alongside the profit and loss account and balance sheet.
- Suppliers will be concerned with liquidity issues arising from the current assets and the liability sections of the balance sheet.
- Employees may be interested to see how much profit the organization is making. Trade unions who represent employees' interests in wage bargaining may also be very interested to see the final accounts.

### Making use of final accounts

Final accounts can provide an invaluable source of information in the decision-making process. However, they must be taken in good faith and accepted on trust. Different


stakeholders will view the accounts differently depending on their objectives and motives.

The final accounts for publicly held companies are published publicly. You may make the mistake of assuming that the company is "giving away secrets" by publishing its final accounts, but it is not – it would be impossible to run an organization by using these published accounts as they are merely highlights of the performance of an organization.

Internal accounts, sometimes referred to as managerial accounts, are much more detailed and revealing and thus, not surprisingly, are not made available to competitors or external stakeholders.

We must remember that final accounts refer to the past. They are effectively out of date as soon as they are published. This is one reason why the date of the final account is clearly displayed at the top. Final accounts represent the past; they should be used with caution when trying to predict future performance and deciding whether to invest in the business.

### IB Learner Profile

Inquirers and knowledgeable ? 



#### Enron: the smartest guys in the room



No study of ethical accounting would be complete without a mention of one of the most unethical episodes of financial mismanagement by a large organization in recent years, namely the electricity power company Enron. The documentary *The Smartest Guys in the Room* is essential viewing; it is not too difficult to follow and very informative. It remains a worrying story of deceit, greed, and inappropriate creative accounting practices.

Having viewed the Enron documentary, you may link the ethics concept to a range of business content:

- How did the organizational culture of Enron lead to unethical behaviour?
- How did this unethical behaviour impact on the accounting practices at Enron?
- How did the need to keep reporting growing profits impact on the culture of the organization?

## Final accounts (A02 and A04)

### The profit and loss account

The profit and loss or "P&L" account (referred to as the statement of financial performance in some countries) calculates several important figures for an organization, including gross profit and retained profit.

The statement of profit or loss for a not-for-profit organization, such as a non-governmental organization (NGO), is a little different, as "surplus" replaces "profit", and tax and dividends are not paid out. The *Business Management Guide* gives examples of statements of profit or loss for for-profit and not-for-profit organizations.

The profit and loss account for a profit-making organization calculates gross profit, profit before interest and tax, dividends, and retained profits. Note that the term "net profit" is no longer used; it has been replaced by "profit before interest and tax". For non-profit entities, "gross profit" is replaced by "gross surplus", and "retained profit" is replaced by "retained surplus".

### The balance sheet or the statement of financial position

The balance sheet has been referred to as a "snapshot" of a business at a particular moment in time. It is derived from the accounting equation "assets = liabilities + capital", where:

- assets are classified as non-current (similar to capital expenditure in chapter 3.1) and current (similar to revenue expenditure in the same chapter)
- liabilities are classified as current and non-current
- equity is broken down into share capital and retained earnings/profits.

It is important to have a good knowledge of the accounting terms in the balance sheet and profit and loss account for the ratio analysis which follows in chapters 3.5 and 3.6. An example of a balance sheet can be found in the *Business Management Guide*.

## Different types of intangible assets (A02)

An intangible asset is one that cannot be physically touched or seen. However, as we will see in the chapters on branding (4.5) and research and development (5.8), intangible assets such as intellectual property (copyrights, patents and trademarks) are important, especially to large organizations, and can carry considerable value.

### IB Learner Profile

Inquirers ?

Interbrand is an organization that ranks global brands by their value. You are encouraged to explore [www.interbrand.com/best-global-brands/](http://www.interbrand.com/best-global-brands/).

It is revealing to see which brands have moved up in the top 100 chart and which have entered it since the start of the Covid-19 pandemic, such as Zoom and Alibaba.

Brands are the trade names associated with a product. For example, we speak of Coke (the brand) when in fact we are referring to the product (cola).

However, brands have come to take on a "personality" of their own and can represent certain values or characteristics for an individual. This benefits a company because the brand can inspire loyalty for an individual who strongly identifies with it.

In addition to branding, there are several other common intangible assets. The two most important are goodwill, and patents and copyrights. Patents and copyrights will be considered in chapter 5.8.

Goodwill is an asset that can take several forms. It is normally created when an organization changes ownership and the price paid by the acquirer exceeds the book value of a business; it is usually calculated by looking at the balance sheet of a company. The new owner is rewarding the previous owner by paying more than the book value in recognition of their past efforts in establishing a strong brand presence in the marketplace.

For example, in one of the most famous acquisitions in the UK, it is believed that Nestlé paid over \$1 billion more than the book value to acquire Rowntree with its roster of famous confectionery brands, including top-selling KitKat. The goodwill payment reflected the brand value associated with Rowntree that Nestlé was eager to obtain.

In the public or not-for-profit sectors, where there may be no change of ownership or sale and purchase of a business, goodwill can be identified as the skills of the workforce or willingness to work additional hours for no extra pay (the education and health sectors are good examples). These skills do not show up in the balance sheet, but they remain a valuable asset of the organization.

## Depreciation (A02, A04)

Depreciation is a difficult topic. Some refer to depreciation as the "wear and tear" of using an asset. Although this definition has some merit, it is not accurate.

Businesses depreciate assets because over time those assets lose value due to use, or because the technology incorporated in the assets becomes obsolete.

Using accounting terminology, depreciation is the process of allocating the historic cost (or price paid) of a fixed asset less any residual or scrap value, over the number of years that the asset is deemed useful.

Depreciation effectively "writes off" the value of an asset over an agreed period as it is used by the organization.

HL

There are two methods of depreciation that you need to know about for your Business Management course:

- Straight line method
- Units of production method

### The straight line method

Using the straight line method to calculate the depreciation value for a period – normally one year – we will need the following figures:

- The cost of the asset or the original price paid.
- The residual or scrap value, which is the amount that the asset will be sold for at the end of its productive or useful life.
- The number of years the asset will be productive to the organization before being sold off.

The calculation of the depreciation charge per year is as follows:

$$\text{depreciation charge per year} = \frac{(\text{historical cost} - \text{residual or scrap value})}{\text{number of estimated years of useful life}}$$

When charging this expense to the profit and loss account, there is no physical movement in cash. Instead, the depreciation charge for the year is set against the profits earned by the company, and the book or current value of the asset is automatically reduced. For the straight line method, the amount charged to the profit and loss account is a constant amount each year until the whole historic cost has been written off.

Consider Table 3.4.1, showing an asset with a cost of \$200,000, a residual value of \$40,000, and an estimated useful life of 4 years. The depreciation charge to the profit and loss account is \$40,000 per year. At the end of each year the book value decreases by \$40,000.

Year	Opening value of asset: straight line	Depreciation charge for that year	Book value at the end of the year
1	200,000	40,000	160,000
2	160,000	40,000	120,000
3	120,000	40,000	80,000
4	80,000	40,000	40,000
5	40,000	0	Asset sold

Table 3.4.1: Straight line depreciation

Figure 3.4.1 also illustrates this information. As the depreciation charge is constant over 4 years and the graph indicates an identical fall in the book value in each of the

4 years, it is clear to see where the name "straight line" depreciation came from.

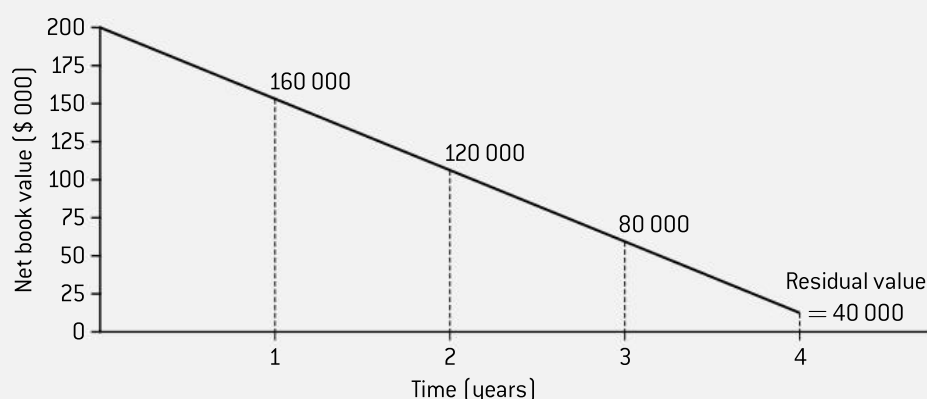


Figure 3.4.1: Depreciation by the straight line method

### Units of production method

The second method of depreciation is the units of production method.

The straight line method writes off the value of the asset according to the number of years of its useful life. The units of production method writes off the value of the asset according to the amount of production that it has carried out. It is argued that usage rather than time owned is a more appropriate way to depreciate an asset.

For example, in the airline industry, aircraft are used frequently. The turnaround time between journeys can be short. Airplanes earn revenue every time they are used to provide a service. Hence a smaller plane with an expected useful life of 5 years, which is being used for regular shorter flights, is likely to need depreciating in a different way to

a large aircraft with an expected useful life of 10 years which may be used less frequently. It may be appropriate to depreciate the 5-year-old plane based on usage and the 10-year-old aircraft based on time owned.

The first step in the units of production method is to calculate the depreciation per unit of production. This is calculated with the following formula:

$$\frac{(\text{cost} - \text{residual value})}{\text{expected number of units produced over the asset's useful life}}$$

Once the depreciation per unit is calculated, this is then multiplied by the number of units produced using the asset for a particular period (typically a year) to arrive at the depreciation charge for that period. An example will help to show this.

A company purchases a machine for \$500,000, and the expected use is 5,000 hours over its estimated life of 5 years. The asset will be sold at the end of 5 years for \$100,000.

What is the depreciation charge for the profit and loss account at the end of the first year if the machine is used for 1,500 hours?

The depreciation per unit =  $\frac{(\$500,000 - \$100,000)}{5,000}$

$$= \frac{\$400,000}{5,000} = \$80 \text{ per unit.}$$

The depreciation charge for the first year would be  $\$80 \times 1,500 \text{ hours usage} = \$120,000$ .

To calculate the depreciation charges in subsequent years, we would need to know the number of hours of usage of the machine in those years.

Using the straight line method of depreciation, the depreciation charge per year is \$80,000. Hence under the units of production method, the charge to the profit and loss account is higher for the first year. This seems appropriate as the machine in its first year is being used for 1,500 hours, which is 500 hours higher than the average usage of 1,000 hours over the 5 years of useful life.

For this reason the units of production method, especially for machinery that is used frequently, gives a more realistic valuation of the book value of an asset.

## Appropriateness of each depreciation method (A03)

HL

With straight line depreciation, if the residual or scrap value is zero or known with certainty then it is possible to spread the cost of the asset precisely over its useful life. Straight line depreciation is easy to calculate and assumes that there will be some scrap value left over for an asset.

However, for products which may become technologically obsolete very quickly, such as personal computers or mobile phones which have increasingly shorter product life cycles, calculating the residual value can be difficult. In these instances, the units of production method may be more appropriate.

The units of production method is recommended for assets where the usage can be accurately calculated, and it is popular within manufacturing industries. In accounting terms, it is argued that this method correctly matches the expense of the asset with the revenue it is earning. If the

machine produces more in the first year and consequently earns more revenue, then this method appropriately matches cost and revenue.

Unlike other depreciation methods (such as the reducing balance method), the value of the asset is completely written off with both the straight line and units of production methods. The cost of the asset is appropriately charged to the profit and loss account for each year that it is used.

Note, however, that in some regions of the world the units of production method may be viewed as unethical for tax purposes. Another important consideration is that once an organization has decided to use either the straight line or units of production method, they should stick with their preferred choice. Changing the method of depreciation during a financial year may give a misleading figure for the final book value of the assets in the balance sheet.

## Revision checklist

- Financial accounts have several purposes for stakeholders. These purposes will depend on the level of direct or indirect interest the stakeholders have in an organization. Key stakeholders such as financial managers, CEOs and shareholders will be looking at the final accounts (through the profit and loss account and balance sheet) to consider the financial performance of the organization.
- For the Business Management course, there are specific formats for the profit and loss account and the balance sheet. There are two versions of the profit and loss account depending on whether the organization is a for-profit or not-for-profit entity.
- In addition to physical assets, an organization will also have several important intangible assets such as brand value and goodwill. Chapter 5.8 will also consider the importance of intellectual property protection such as copyrights, patents and trademarks.
- Organizations must depreciate assets as they are used in the production process and/or become obsolete. Depreciation is the way in which the cost of a fixed asset is spread over the useful life of the asset in accordance with the matching concept of accounting (HL only).
- There are two methods of depreciation to study as part of this course: the straight line method and units of production method (HL only).
- Once an organization has selected a method of depreciating its assets, it should continue to use this so that the value of the fixed assets in its balance sheet is true and fair (HL only).



## 3.5 Profitability and liquidity ratio analysis

### Guiding questions

- How do we use profitability and liquidity ratios?
- What are the strategies businesses can use to improve these ratios?

### The purpose of financial ratios

*In this chapter we will use ratio analysis to help us understand the performance of an organization, as measured by criteria such as profitability and liquidity.*

*All of the ratios used here and in chapter 3.6 are available in the Business Management Guide. Please note the change to "net profit margin", which is now "profit margin".*

A useful way to understand financial ratios is to view them in the same way that a doctor checks a patient's blood pressure, sugar levels or pulse to learn about their health. Each of these checks can be used to identify a concern or reveal a positive development, and they can be used to indicate a suitable course of treatment.

Financial ratios play a similar "diagnostic" role. They can be used to highlight where an organization may need to address issues such as low profitability or a weak liquidity position. This is important given that businesses need sufficient finance to meet their working capital requirements and pay suppliers.

In chapter 3.5 we will focus on profitability and liquidity issues. In chapter 3.6 we will consider the use of ratios to identify how well an organization is managing other financial issues, such as credit to suppliers and non-current liabilities.

Caution is advised when using and interpreting financial ratios. To be of meaningful, practical use, they should be calculated and reviewed over a consistent time frame, such as every six months. Publicly traded companies are required to do this as part of their responsibility to the financial markets that trade their shares.

We should also remember that financial ratios need to be viewed in the context of the external environment in which they were calculated. For example, organizations using financial ratios calculated in 2020 need to be mindful that the global economy was being severely impacted by the Covid-19 pandemic, and the effects of it may be felt for several years afterwards.

### Profitability ratios and ways to improve them (A02, A03, A04)

#### Gross profit margin

$$\text{gross profit margin} = \frac{\text{gross profit}}{\text{sales revenue}} \times 100$$

- Key stakeholders using this margin are line and senior managers.
- This ratio identifies the profit a firm achieves from trading, ie the buying and selling of goods.
- Assuming that selling prices and purchase prices remain constant over a trading period, this ratio should also be constant.
- If the ratio starts to deteriorate, the implication is that sales are not being transferred successfully into trading profits. This is a potential cause for concern. Firms may wish to look at their purchases of stock to see if the cost of stock sold is rising.
- For this reason, this ratio can also be viewed as an efficiency ratio.

#### Profit margin

$$\text{profit margin} = \frac{\text{profit before interest and tax}}{\text{sales revenue}} \times 100$$

Key stakeholders using this margin are senior managers, and current and potential investors.

The ratio signals the capacity the firm has to generate profits after overhead or indirect costs have been taken into account.

The profit figure excludes interest or tax, so this is the favoured ratio of managers as the final ratio will be higher than the profit margin after tax.

The ratio should be constant over a trading period. If it starts to fall, it implies that overhead costs are rising faster than sales and an investigation should be carried out. For example, the company may need to change suppliers, or look for alternative insurance quotes to cover premises or vehicles, to reduce fixed costs.

#### **An appropriate level of margin per unit sold?**

There is an important link between the gross profit margin per unit sold, the industry the firm operates in and the rate of stock turnover (see chapter 3.6).

Supermarkets and increasingly e-commerce retailers can afford to set lower margins per unit given the faster stock turnover that these firms experience. In industries where turnover is slower, especially in niche markets, much higher profit margins per unit sold are the norm.

#### Return on capital employed (ROCE)

$$\text{ROCE} = \frac{\text{profit before interest and tax}}{\text{total capital employed}} \times 100$$

Key stakeholders using this ratio are current and potential investors, media groups, CEOs and the government's tax department.

The ratio is a type of profitability ratio because it considers how the organization uses its capital or total assets to deliver profits to the organization. This is worked out by combining the factors of production into tradeable goods and services financed by the organization's capital employed.

An alternative way of looking at the ROCE is as a measure of reward (in the form of profit) for risk-taking by entrepreneurs.

An entrepreneur has to take the often difficult decision to combine and finance the factors of production such as capital, land and labour to try to create a profitable enterprise. The ROCE is the reward for taking this risk, given that an alternative opportunity could have been considered, such as a low-risk investment offered by saving with a financial institution.

Ratio	Possible strategies to improve the value of the ratio
Gross profit margin	If the ratio is falling, the firm may have to look at stock control and purchasing decisions. If the cost of stock sold is rising, managers may have to consider alternative supply chain management strategies (see chapter 5.6). There may also be marketing factors to consider, such as the effectiveness of the current promotional mix (chapter 4.5), although altering this could raise costs.
Profit margin	If the ratio is falling, the firm will have to look at its overheads and indirect costs. Could the firm outsource some production to reduce overhead costs?
ROCE	A fall in this ratio relative to competitors' ROCEs over time may prompt discussions among senior managers about pursuing a new strategic direction, especially if the fall is sustained, to try to regain lost market share (chapter 1.3). The firm may also consider restructuring (chapter 2.2) to try to reduce variable costs.

Table 3.5.1: Evaluating strategies to improve the values of profitability ratios

## Liquidity ratios and ways to improve them (A02, A03, A04)

### What is liquidity?

A narrow definition of liquidity is how easy it is for an organization to turn an asset into cash. A liquid asset is one that can be sold quickly, and for cash that can normally be placed into the organization's bank account so it can be used for other purposes.

Liquidity in the broader sense refers to the ability of an organization to meet its short-term liabilities. Liquidity has links to insolvency (see chapter 3.6) and cash flow (see chapter 3.7).

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

$$\text{acid test ratio} = \frac{\text{current assets} - \text{stocks}}{\text{current liabilities}}$$

There are some important points to highlight in relation to using liquidity ratios:

- Key stakeholders using these ratios are lenders, potential lenders, investors, suppliers and financial directors of the organization.
- The acid test ratio is a stringent measure of liquidity, as stocks of unsold goods are not included in current assets. It is also difficult to value stocks which have remained unsold. An organization may be forced to sell

off excess stock at a considerable discount to achieve a sale, and this will impact the available cash.

- Some writers have argued that firms should consider calculating a third ratio, namely a "cash ratio" where stock and debtors are removed from current assets, as we cannot guarantee that all monies from debtors will be paid, given the existence of bad debts.

Ratio	Possible strategies to improve the value of the ratio
Current and acid test ratio	See the section on dealing with working capital and liquidity issues (chapter 3.7). Improving the value of the current ratio and acid test ratio links with managing working capital. A possible strategy to improve both ratios is to increase the number of liquid assets and/or manage current liabilities more effectively. However, the current ratio should not be too high. If an organization holds too much cash, then working capital is not being put to its most productive use and potentially profitable opportunities are being missed.

Table 3.5.2: Evaluating strategies to improve values of liquidity ratios

## Revision checklist

- Financial ratios are an important way for an organization to identify issues with their financial performance and financial position. This chapter has focused on profitability and liquidity.
- If a financial ratio gives a poor result, appropriate strategies can be implemented to improve it. After a period of normally six months, the ratios can be calculated again to see if there have been improvements.
- The interpretation of financial ratios needs to carefully consider the external environment in which the organization is operating. For example, if the ratios for profitability stay constant this may be a pleasing result if the overall external environment has deteriorated.
- Financial ratios can also be compared with those of similar organizations in the same industry to measure financial performance.

## 3.6 Efficiency ratio analysis (HL only)

## Guiding questions

- What other ratios help us assess the financial health of an organization?
- What is an efficiency ratio?
- What is stock turnover?
- What are debtor and creditor days?
- What is a gearing ratio and why is it important?
- What is the difference between insolvency and bankruptcy?

### What is an efficiency ratio? (A02, A04)

HL

In addition to profitability ratios, it is useful to calculate several other ratios to judge the financial health of an organization. These efficiency ratios include:

- Stock turnover
- Debtor days and creditor days
- Gearing ratio

An efficiency ratio measures the ability of an organization to use its current assets and manage its liabilities effectively in the short term. In unit 5 we will look at other efficiency and productivity measures such as capacity utilization and productivity rate. These rates focus on capital expenditure.

For this chapter, we will focus on revenue expenditure on current assets and liabilities. We will also indicate the important stakeholders who will use these ratios.

#### Efficiency ratios

##### Stock turnover

Stock turnover can be calculated in two different ways. The first is:

$$\text{stock turnover (number of times)} = \frac{\text{cost of sales}}{\text{average stock}}$$

This gives the number of times the current level of stock is "turned over" or sold.

The second is:

$$\text{stock turnover (number of days)} = \frac{\text{average stock}}{\text{cost of sales}} \times 365$$

where *cost of sales* approximates total credit purchases, and *average stock* equals opening stock plus closing stock, divided by two.

This second formula converts the first figure into a number of days.

- Key stakeholders using these ratios are line managers or heads of departments, for example those involved in purchasing.
- The importance of this ratio will depend on the type of industry the firm operates in and the nature of the product itself.
- In fast-moving consumer goods (FMCG) industries, stock turnover will need to be quick or the firm may find itself with stockpiles of unsold goods. This will be critically important if the firm is supplying perishable goods such as dairy products, fruit or vegetables.

##### Debtor and creditor days

$$\text{debtor days ratio (number of days)} = \frac{\text{debtors}}{\text{total sales revenue}} \times 365$$

where *total sales revenue* is an approximation of total credit sales.

$$\text{creditor days ratio (number of days)} = \frac{\text{creditors}}{\text{cost of sales}} \times 365$$

where *cost of sales* is an approximation of total credit purchases.

- Key stakeholders using this ratio are suppliers and creditors, and department heads.
- The relationship between these two formulae is critical and has important implications for working capital and liquidity. We have already noted the degree of interdependence between credit received from creditors and credit allowed to debtors. It is important that these two cycles are matched as closely as possible, ideally with debtor days being fewer than creditor days so that on average a firm receives payment for goods sold before it has to pay its suppliers.

### Gearing

The gearing ratio is measured by observing how much of the firm's capital employed in the business is provided by long-term lenders.

$$\text{gearing ratio} = \frac{\text{non-current liabilities}}{\text{capital employed}} \times 100$$

where *capital employed* equals non-current liabilities plus equity.

- The figure is usually expressed as a percentage.
- A "high" gearing ratio, such as 50% of capital employed (in an industry where this percentage is typically lower), indicates that the firm is vulnerable to changes in interest rates or external factors which may make credit more difficult to obtain.
- If the firm has sufficient liquidity to pay short-term interest costs, then a high gearing ratio may not be a major concern to some stakeholders. A number of high-profile takeovers have been instigated and financed by new owners (for example in the takeover of English Premier League football clubs), taking on additional borrowing collateralized against the newly created company's assets.
- However, if we return briefly to our point about the debt versus equity dilemma (see page 66), we must be tempted to ask the question of whether other stakeholders would be concerned about the level of gearing and the degree of ownership of the firm. Do we

wish for a company to be predominantly controlled by the firm's management or by long-term lenders such as financial institutions?

- Key stakeholders using this ratio are current and future lenders of funds, and shareholders.

### Financial ratios and stakeholders

We have seen that the key stakeholders involved in using ratios in decision-making include current and potential shareholders, lenders, suppliers and senior managers.

Remember that a single ratio in isolation without comparison to other firms or the external environment (in both their current state and over a longer period of time), is not a basis for making a considered financial decision.

We could consider other stakeholders not yet covered.

First, the lessons from the collapse of Enron, in particular, reveal that huge importance has been attached to a firm's ability to deliver increasing profits. It would appear to many that profitability is the only important measure of performance.

Even when in the case of Enron, these profit figures were mere fantasy, stakeholders such as the financial media, potential investors and financial institutions continued to believe the illusion. There are a number of important TOK issues here which would provide the basis for a good discussion. (If the financial figures look too good to be true, then they probably are.)

Second, the increased need for greater transparency of company financial reporting (perhaps a lesson learned from the Enron collapse) has allowed consumers to access information such as gross profit and net profit margins, regional sales figures, etc.

This new knowledge should be used to try to inform customer decision-making, especially when there have been concerns about the high prices which some brand-driven companies charge for products such as fashionable clothing or footwear. The ease of acquiring this new information quickly and at little cost has been a key driver in the growth of ethical and socially responsible consumer behaviour.

## Possible strategies to improve these ratios (A03)

HL


Ratio	Possible strategies to improve the value of the ratio
Stock turnover	The rate of stock turnover needs to be appropriate for the industry and for the nature of the product, and has links to gross and net profit margins. The firm may need to review pricing methods and the marketing mix in general if stock is consistently not being sold (chapter 4.5).
Gearing ratio	Further borrowing may transfer some control away from shareholders, towards financial institutions. The firm may need to compare its gearing ratio with competitors' gearing ratios and take appropriate action if it is deemed too high. In addition, the firm may have to look at asset sales and leasing schemes, and the debt versus equity dilemma (chapter 3.2).
Creditor and debtor days 	A critical strategy for managing creditor and debtor days is to have clear and effective communication (see chapter 2.6) between the relevant stakeholders. We want to avoid as much conflict as possible as this can delay payment from or to an organization. Offering discounts for early payment could be one strategy. Changing the number of credit days from 30 to 45 may also help the relationship to thrive. For economic sustainability and for goodwill, it is important that all stakeholders pay their debts on time.

Table 3.6.1: Evaluating strategies to improve efficiency ratios

## Insolvency versus bankruptcy (A02)

HL

### Insolvency

Unfortunately, even with good communication and incentives, some organizations find it increasingly difficult to pay all their debts. This could happen for several reasons but a significant and sudden change in external factors could be one of the most important. This neatly leads us on to insolvency and bankruptcy.

These terms are often confused. One definition of insolvency is the inability of an organization to pay its debts when they are due.

This may be due to a cash flow problem which was unanticipated. For example, a significant debtor does not pay a bill, leaving the organization short of cash to meet its own creditor requirements. Then a major creditor sends in another invoice which the organization overlooked, and the problem becomes compounded. A cash flow problem has led to insolvency.

Insolvency can occur to small and large businesses, and is usually a temporary financial situation. Many organizations will try to find support from a new source of finance or may quickly sell some older assets to become solvent.

Further strategies for dealing with liquidity and solvency issues are covered in chapter 3.7.

### Bankruptcy

Continued insolvency will be a more significant issue for an organization. If an organization is unable to pay its debts, bankruptcy will probably be the next step. This is a formal legal process. The organization will cease to be a going concern and the business will be closed or “wound up”. Assets will be sold off and the proceeds will be used to pay creditors.

Before bankruptcy, some businesses are placed in “administration”. Administration is a process that takes place to see if there is a sustainable economic future or potential buyer for the organization, and it can last for several months. In this situation the business may be sold to a competitor but at a greatly reduced price. The competitor will then be forced to honour the debts of the business, or it may strip the business of its most valuable assets. Valuable brand names can be kept, but it is likely that the absorbed business will disappear.

Bankruptcy can be a traumatic experience for those involved. It should be regarded as a “last resort” option for an organization given that it will impact on so many internal and external stakeholders.

If an individual entrepreneur applies for bankruptcy and is accepted by the legal system, there will be serious consequences for their financial future. If an entrepreneur is declared bankrupt, this will remain on their financial history for many years. It will reduce their ability to trade and obtain credit and loans from financial institutions.

### Revision checklist

- In addition to profitability and liquidity, there are other financial ratios which can be used to determine the health of an organization. These ratios identify areas in which an organization is not being efficient with its use of stock or in managing debtor and creditor payments. For HL there is also the issue of gearing to consider.
- Gearing considers the proportion of capital used in the production of goods and services which is financed by long-term borrowing.
- Efficiency ratios, in common with the profitability and liquidity ratios, need to be viewed with some caution and in relation to the external environment in which the organization operates.
- Insolvency has links to cash flow problems (see chapter 3.7). Bankruptcy caused by sustained cash flow problems is often considered as a last resort option for organizations, and the impact on internal and external stakeholders can be considerable and damaging.

## 3.7 Cash flow

### Guiding questions

- What is the difference between cash flow and profit?
- How do I complete a cash flow forecast and what are they used for?
- What is the relationship between investment, profit and cash flow?
- Which strategies should an organization use to solve cash flow problems?

Arguably the best way to learn about a cash flow problem is to experience one. Setting up and establishing a real-life business, handling cash inflows and outflows, forecasting future cash requirements and cash flow planning – these are essential skills for life as well as for creating a business. The knowledge gained is invaluable.

In some countries there are opportunities for students to gain an understanding of the value of working capital

and cash flow through taking part in Young Enterprise schemes or other entrepreneurial-based business simulation programmes. These opportunities could form part of a powerful creativity, action and service (CAS) opportunity.

In chapter 1.1 we looked at the role of the business model as part of a business plan. An essential part of any business model or plan is the need to identify, manage and solve the critical issue of cash flow.



## The difference between profit and cash flow (A02)

**Cash flow** relates to the amounts of cash coming into and going out of a business; **profit** is the difference between income and expenses.

Income is not the same as cash inflow because often goods are bought and sold on trade credit, and there are many non-cash expenses such as depreciation. That is why organizations create both a profit and loss account and a cash flow forecast.

Another way to view the difference between profit and cash flow is that cash flow (and working capital) allows a business to purchase resources, transfer them into finished products, and deliver them to customers. Then, on receipt of

payment from the customer, the business hopefully enjoys a small profit (if the payment more than covers the business's costs for supplying the order). Working capital and cash flow are the financial mechanisms for creating profits.



Unlike in the unethical Enron example (see chapter 3.4), profit is realized or recorded after the final payment is received from the customer. Accounting rules dictate that costs and losses should be provided for by an organization before profits are taken. This is something Enron (and the accounting firm advising them at the time) failed to respect. This is an example of unethical behaviour on the part of two organizations.

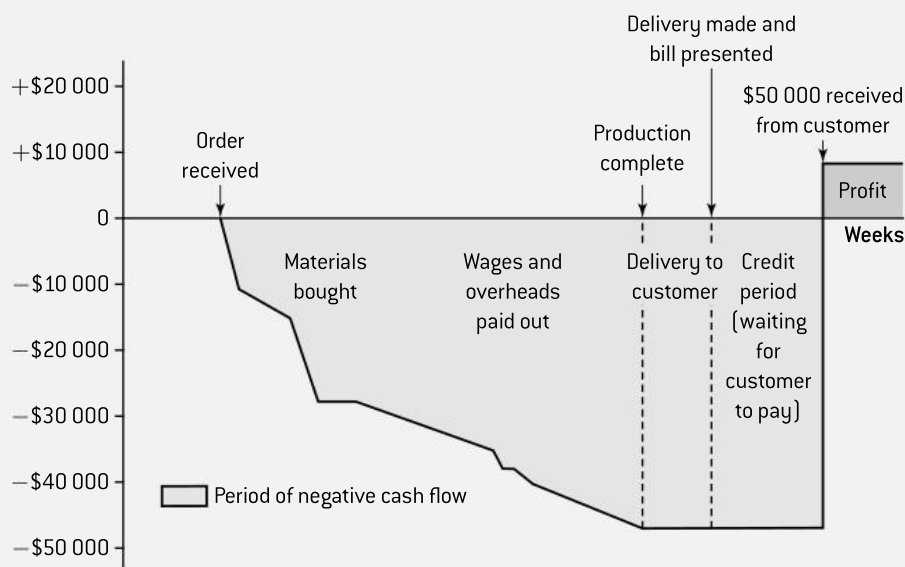


Figure 3.7.1: A typical cash flow process

## Cash flow forecasts (A02, A04)

A cash flow forecast is a natural application and extension of cash flow. If cash flow looks at current inflows and outflows of cash, then a forecast will try to predict when these flows can be expected. The cash flow forecast is an essential planning tool for all businesses but especially for new start-ups.

In SL/HL Paper 2, it may be necessary to calculate a cash flow forecast. For examinations from 2024 onwards, a new template will be provided for both for-profit and non-profit entities. It is likely that the template will be given to you in the examination paper, so the important skill here is to be able to complete one. An example cash flow forecast is given in the *Business Management Guide*.

Here are a few important features of the cash flow forecast:

- The closing balance at the end of the month will become the opening balance for the next month.
- Financial institutions or lenders will want to see if future cash flow issues can be anticipated, and they may ask for some probability of success (in the same way that decision trees operate to calculate expected values).
- The cash flow forecast allows for liquidity or cash flow problems to be highlighted. It may also show if the business has a seasonal revenue stream as the cash flow forecast highlights month-to-month flows.
- The cash flow forecast is only a prediction, and of course external factors can change rapidly.

## The relationship between investment, profit and cash flow (A02)

The relationship between investment, profit and cash flow will depend largely on the nature of the investment undertaken, the level of risk in the investment, and the level of profit expectation. It can be a complex relationship and

we will return to it in chapter 4.5 when we consider the product life cycle. An example from the film industry will help to illustrate these points.

### The film industry

Making a film or movie to be shown at the cinema is a risk.

For every ten films produced in the United States, five will lose money, three will break even after other revenue streams are considered, and only two will make significant profits. Any film studio that achieves a profit on more than 50% of the films it makes will become an industry leader. An example of this is Pixar.

The problem for Hollywood film producers and studios is that, to quote the famous scriptwriter William Goldman, "Nobody knows anything."

Even with extensive market research, a famous actor or director, and a great script, not one film studio executive can say for certain what combination will constitute a success. Films are generally "product orientated" (see chapter 4.1) and there is no guarantee of success.

Film studios make significant investments in actors, directors, producers, and technology, often with no real guarantees that the film they are going to produce will be a success or will return a profit.

To create a film, studios must spend considerable sums before the film is released to create the investment opportunity. It is not unknown for a film studio to use its cash flow to fund an investment in a new project up to three years before the film is released. Cash outflow during this period is significant, while cash inflow may be zero. Some film studios will presell films with recognised stars to international markets (either as a film or an on-demand stream) to offset some of this cash outflow.

Even after the principal photography to create the film has finished, and the actors, directors and producers have moved on to new projects, it may take up to a year for the film to be released, even with rapid changes in film processing technology. At the time of writing,

we are still waiting for the *Avatar* sequels which are being produced simultaneously.

Moreover, the film studio will have to begin an extensive marketing campaign with trailers and interviews before the film is released to try to generate audience buzz. Social media is also used. Again this marketing effort, which can amount to up to one third of the total costs of the film, needs to be funded out of cash flow from the studio before cash inflow is received from cinema ticket sales, merchandising or the other revenue streams identified in chapter 3.2.

Once the film is completed, market research or sneak previews are conducted to see what the initial audience reaction is. In many cases, film studios shoot additional scenes or even whole new endings, if reactions from these screenings are not positive. Again, any additional changes will need to be paid for by the film studio with no cash coming in.

Once the film is finally released, the cash inflows will be earned and hopefully the costs of production will be recovered and profits earned. We say "hopefully" because as we said before, "Nobody knows anything." *Little Miss Sunshine* cost \$3 million and took in \$80 million. *John Mars* cost \$250 million and took in barely a third of that. One of the biggest loss-making films of all time was produced by Disney!

For every ticket sold at the cinema box office, roughly half of the revenue will go to the studio and the rest will go to the distributor (the cinema showing the film) and to the government as a goods and services tax.

In this context, a film which cost \$100 million to make and advertise will need to take \$200 million at the box office *just to break even*. The film business really is a risky business!



As the case study shows, the links between investment, profit and cash flow are as follows:

- Investments require funding, and an organization's cash flow will be used to finance this.
- Profits are not guaranteed on an investment.
- It is certain, however, that an organization will experience significant cash outflows before cash inflows are earned.
- Profits will hopefully be earned after all cash outflows have been recovered. It may take considerable time to collect all cash inflows.
- If it is looking likely that an investment (such as a new film) is not going to yield a profit, then additional marketing funds or extension strategies may be needed. This will add to cash outflow and costs, and reduce the possibility of the investment earning a profit.

### IB Learner Profile

Knowledgeable

### The working capital cycle and its link to cash flow

An understanding of working capital will help to extend your knowledge of cash flow.

### What is working capital?

Working capital is the difference between current assets and current liabilities. It has several alternative names, such as "day-to-day finance" or "circulating capital".

Working capital's role is to bring the other factors of production (such as labour and capital) into productive use.

If working capital is not spent on resources such as raw materials, power or stationery, these factors would be idle and would not be productive.

The working capital cycle can be split into a number of stages that link to the cash flow of an organization.

- **Cycle stage 1:** A firm purchases raw materials (sheet metal) and the equipment needed to turn the sheet metal into spoons.  
Cash flows out or credit is received to pay for the raw materials.
- **Cycle stage 2:** The firm processes the sheet metal into spoons and begins to take orders. The firm may pay the suppliers of the sheet metal.  
Cash flows out to pay suppliers and possible credit allowed to customers as orders is received.
- **Cycle stage 3:** The firm fulfils orders and delivers.  
Cash flows in from customers as invoices are sent to customers and paid with their delivered orders. A truck is hired with a driver to deliver. Cash flows out.
- **Cycle stage 4:** The firm follows up on unpaid orders. Payment is received from debtors. The firm pays creditors. Profit from sales of spoons is kept in reserve. New orders are received.  
Cash flows in from debtors and out to remaining creditors. New orders are hopefully received, and the process begins again.

## IB Learner Profile

Reflective 

### ***Too much working capital or too little?***

It is hoped that the example above clearly shows that enough working capital must be present in an organization to allow production to take place. It also shows the vital role that cash flow and credit play in business operations.

If a firm has too little working capital, it will be difficult for the company to trade with other companies and inevitably there will be liquidity problems. Sometimes an organization may want to use its working capital as hard as it can to drive increased production, but this can lead to the problem of overtrading.

What is perhaps not so obvious is the opposite situation with respect to working capital. We saw this in chapter 3.5 with the liquidity ratios. Having too much capital tied up in raw materials or finished goods, with substantial reserves of cash in a bank account, may imply that the firm is missing out on potential profitable opportunities. Alternatively, if the firm is holding too much stock, this may create additional cost problems.

One regular criticism of Apple is that the company has accumulated too much cash, which is "sitting" on the organization's balance sheet and not being used productively.

## Liquidity position (A02)

The cash flow forecast and working capital cycle can be used to identify where there may be cash flow problems in an organization. A cash flow forecast can be used to highlight a particular month or months where the organization may face a difficult liquidity position.

A liquidity position looks at the rate of cash inflow relative to cash outflow present in a cash flow forecast during a particular period. A weak liquidity position will indicate that some pre-emptive action is required by the organization to continue trading and keep working capital circulating.

For example, if the liquidity position of an organization looks like there will be three months of cash outflow excess

over inflow in six months' time, then the CEO or sole trader can contact financial institutions to organize some external sources of finance to cover the shortfall. This could be a short-term loan or an extension of a bank overdraft.

The advantage of doing this preplanning is that banks look favourably on organizations that are organized and careful, and are likely to charge lower fees and interest.

Organizations that do not closely monitor their liquidity position run the risk of irritating financial stakeholders, and in extreme and persistent cases may run the risk of insolvency and bankruptcy (see page 77).

## Strategies for dealing with cash flow problems (A03)

Table 3.7.1 focuses on four short-term cash flow problems, together with possible solutions and an evaluation of those solutions.

Cash flow problem	Solution	Evaluation
Firm has run out of cash to pay immediate expenses such as wages	Bank overdraft extension to tide the firm over until further cash is received from customers (improving cash inflow).	Using a bank overdraft in this case is a suitable but expensive way to borrow funds.
Firm is unable to pay creditors	Try to extend the credit period (reducing cash outflows).	The business community is linked. The firm's creditors may also have debts to pay. Careful negotiation is necessary. The firm may have to pay interest for late payment.

Firm is waiting for debtors to pay	Offer discounts for payment, but if the situation persists the firm may have to resort to debt factoring (when a third party finances a percentage of the total invoice).	If the situation is critical then some money received is better than none. With debt factoring only a proportion of the debt is recovered.
Firm has unsold stock which is taking up shelf space and tying up valuable working capital	May be left with no option but to clear out stock (improving cash inflow).	Deep discounting is undesirable as profit margins will be cut. Could affect perception of the firm due to low prices. However, goods going out of date or fashion will be worth less as time passes and they remain unsold.

Table 3.7.1: Examples of short-term liquidity problems

**Revision checklist**

- Cash flow is a critical component of an organization's financial operations. In the short term, the economic sustainability of an organization will depend on how the cash flow is managed.
- A cash flow forecast will allow an organization to plan its future cash requirements and try to anticipate future cash needs. A cash flow forecast is looked upon favourably by financial institutions for this purpose.
- There are several different strategies that an organization can use to solve a cash flow problem. All of them require swift action to ensure that a cash flow problem does not become unmanageable and threaten the economic sustainability of the business.

## 3.8 Investment appraisal

**Guiding questions**

- What is investment appraisal (IA)?
- What are the various methods used to carry out investment appraisal?
- What is the most appropriate method for deciding on alternative investment opportunities using payback period, average rate of return (ARR) and net present value (NPV)? (NPV is HL only)

### Investment appraisal and payback period; average rate of return (A03, A04)

**Investment appraisal**

Investment appraisal (IA) is a process that uses a set of quantitative techniques to determine whether an investment opportunity should be pursued or not. External and qualitative factors (those based on opinion or experience) are not included, and that is one of the criticisms of the technique.

In the case of multiple opportunities, investment appraisal can be used to rank projects in order of desirability.

The three IA techniques that guide decision-making are:

- Payback
- Average rate of return (ARR)
- Net present value (NPV) (HL only)

**Payback**

Payback is defined as the time taken before an investment opportunity "pays back" (recovers) its initial investment cost. It is usually expressed as a number in terms of years and months.

**Average rate of return (ARR)**

The formula for the average rate of return is as follows.

$$\text{average rate of return (ARR)} = \frac{(\text{total returns} - \text{capital cost}) \div \text{years of use}}{\text{capital cost}} \times 100$$

What follows is an example to illustrate the first two investment appraisal methods.

Martin and Alex are partners and owners of several retail businesses. They are looking to move into the sports industry, of which they have limited experience, and have begun to investigate this. They would like to consider owning a football team to increase their range of businesses.

They have identified two potential teams, both public limited companies, which may provide investment opportunities. They have prepared financial estimates of returns and costs of each proposal.

Figures in \$m	Team A	Team B
Cost of investment	200	70
Expected returns		
Year 1	-30	15
Year 2	-2	18
Year 3	76	21
Year 4	96	24
Year 5	150	30

Calculate the payback and ARR to two decimal places and comment on your results.

### Solution to payback

For team A the cost of the takeover is \$200 million.

Team A will return \$290 million in 5 years:  $-32 + 76 + 96 + 150 = \$290$  million.

It will return  $-\$32$  million after year 2 and  $\$172$  million after year 4, a total of  $\$140$  million.

Hence for team A to pay back the whole \$200 million, \$60 million of year 5's \$150 million is required.

Assuming that this money is received evenly throughout the year, we can expect the remaining \$60 million to be

generated in 146 days or 4.8 months ( $60 \div 150 \times 365$  days).

Hence the payback for team A is 4 years and 4.8 months or 146 days.

The payback for team B is 3 years and 8 months or 243 days using the same methods.

### Solution to ARR

$$ARR = \frac{\text{average profit per year}}{\text{cost of the opportunity}}$$

For team A, the expected average profit over five years is:

$$\frac{(290 - 200)}{5} = \$18 \text{ million}$$

For team B, the expected average profit over five years is:

$$\frac{(108 - 70)}{5} = \$7.6 \text{ million}$$

$$ARR \text{ for team A} = \frac{18}{200} = 9\%$$

$$ARR \text{ for team B} = \frac{7.6}{70} = 10.86\%.$$

Please note that *(total returns – capital cost) ÷ years of use* (on page 65 of the *Business Management Guide*) is the same as the expected average profit per year.

- From the payback and ARR calculations, team B should be chosen.
- Team B has a lower cost and a quicker return of the initial investment. It has a lower overall profit but a higher ARR.

## Discussion

### Payback

This is a straightforward way of looking at an investment opportunity. It assumes that expected returns are received evenly throughout the year.

In common with ARR, payback assumes that a dollar received in one year's time has the same value as a dollar received today. This assumption will be challenged when we consider NPV and discounting.

A closer look at the expected returns from each investment opportunity in the activity above reveals that for team A, most of the expected returns will only arrive in years 3, 4 and 5. The biggest returns are therefore forecasted much later where their value cannot be guaranteed.

For team B, the expected revenues arrive earlier in the 5-year investment, with only \$30 million expected to arrive in year 5.

This has important implications for decision-making, especially as it is difficult to predict the influence of external factors in 5 years' time, long after the initial decision has been made.

### Average rate of return (ARR)

As we have seen in chapters 3.5 and 3.6, the ARR and other financial ratios are not useful on their own. The ARR for these investment opportunities will need to be compared with other investment opportunities, such as a risk-free savings account in a financial institution, to see whether the potential additional return is justified compared to the level of risk taken.

### Payback and ARR

Of course, the attitudes of Martin and Alex with respect to risk and the external environment will need to be considered in combination with the calculations. For both payback and ARR, one drawback is that qualitative data (such as experience or opinion) is not included in the final calculations.

However, for both payback and ARR, the biggest issue is that when looking at investment opportunities neither consider the time value of money.

## Net present value (NPV)

### The time value of money

The time value of money is a complex concept and below we offer a short introduction. This will be important for HL

students starting to study the final investment appraisal method.

So far we have assumed that \$1 received today from an investment opportunity is the same as \$1 received in one year's time. In reality, this will not be so.

### Towards the final NPV

NPV = future discounted returns added – cost of the investment opportunity

Table 3.8.1 gives the discount factors over 5 years assuming an interest rate of 6%.

We can now calculate the NPVs for the two investment opportunities. (Full workings are not given. It will be up to you to check your arithmetic to make sure you understand the process described below. Negative figures are in brackets.)

Years	Team A	Team B	Discount factor	Present value A	Present value B
Cost today	(200)	(70)	0.000 (as this is today)	(200.00)	(70.00)
Expected return					
Year 1	(30)	15	0.9434	(28.30)	14.15
Year 2	(2)	18	0.8900	(1.78)	16.02
Year 3	76	21	0.8396	63.81	17.63
Year 4	96	24	0.7921	76.04	19.01
Year 5	150	30	0.7473	112.10	22.42
Total of present values				21.87	19.23

Table 3.8.1: NPV calculations of two sports teams with respective discount factors

### Analysis

The NPV for team A is higher than for team B. Hence with the time value of money taken into account and assuming an interest rate of 6%, team A will yield higher expected returns than team B as an investment opportunity. This contrasts with the findings from the payback and ARR calculations.

An alternative way of looking at NPV is that both opportunities offer a smaller return than the firm could achieve by putting a lump sum of – in the case of team A – \$200 million in a low-risk bank account. If the discount factor is 6% then a positive NPV on the proposed investment will give a higher return than a savings account yielding 6% interest per annum.

The time value of money assumes that a dollar received today is worth more than a dollar received in one year's time. A dollar received today can be invested in a savings account and, assuming an interest rate of 10%, would be worth \$1.10 in one year's time. Neither payback nor ARR take this issue into account.

Alternatively, we can find out the true value today of \$1.10 received in one year's time. This is called the present value of \$1.10.

In situations where a firm will receive amounts in the future, these amounts will need to be discounted by a factor in order to arrive at the present value. These discounted amounts will be compared with the cost of an investment opportunity (which we know at today's value) to calculate the NPV.

In order to calculate the present value of \$1.10 received in one year's time at an interest rate at 10%, we must apply a discount factor of 0.91 (to two decimal places), taken from the discount table that appears in the *Business Management Guide*.

$$\text{present value} = \$1.10 \times 0.91 = \$1$$

To calculate the present value of \$1.21 received in two years' time at an interest rate of 10%, we apply a discount factor of 0.83 (to two decimal places).

$$\text{present value} = \$1.21 \times 0.83 = \$1$$

Check your understanding by calculating the future amounts of \$1 invested at an interest rate of 10% over three, four and five years. Then discount these amounts using factors from the discount table.

### Discussion

NPV is a more rigorous method for determining the financial viability of an investment decision. In our analysis above, based on payback and ARR, team B would have been chosen. When taking into account NPV, team A is the likeliest option. However, as ever in business management, decisions are not always so straightforward. We need to consider a few more factors.

The question that needs to be asked to complete our discussion is whether the risk reward of \$21.87 million for investing in team A over the initial cost is suitable for Martin and Alex. This will depend on the degree of risk the investors wish to take.

Martin and Alex have little experience of running a football team as their knowledge is limited to other markets. How will this lack of experience impact on the success of the option chosen?

Investment appraisal is a scientific approach to decision-making based on several assumptions surrounding expected future capital flows resulting from a new project (which are estimates), compared to initial costs today which are more certain.

The longer the time period under consideration, the more cautiously we must treat the final NPV calculations, given the rapid changes in the external environment that have been a constant theme throughout this guide.

But we cannot ignore intuitive management and organizational culture. As we saw in chapters 2.3 and 2.5, opinion, gut feeling and experience (especially among Zeus cultures) will influence the final decision. We do not know enough about Martin and Alex's cultural make-up to

judge whether they have the potential to manage a football team, but these factors are important when considering an investment decision of this magnitude.



### Questions for reflection

When initially considering an investment, should an organization consider quantitative and qualitative information, or just the former?

If an investment decision has significant non-financial benefits for the organization, does this mean that investment appraisal based on quantitative data should not be used?

### Conclusion

Investment appraisal provides a good technique and insight into whether an organization should accept or reject a possible investment opportunity, but a range of other factors must be considered before we can make a confident final decision.

### Revision checklist

- There are various methods to help decide whether an investment opportunity should be undertaken. These include payback and average rate of return (ARR). These methods could be considered at the start of the decision-making process, in the same way that a break-even analysis could be done when deciding whether to produce and sell a new product.
- However, both payback and ARR lack a consideration of the time value of money, which is a critical component of investment decision-making, especially for those projects which may be undertaken over several years.
- Net present value (NPV) is a more rigorous way to decide whether an investment should go ahead, and involves discounting expected future cash flows so that they can be compared with the cost of the investment project today. (HL only)
- All investment decisions are risky. The organization's attitude to risk must also be considered when making a final decision about which project – if any – to invest in.

## 3.9 Budgets (HL only)

### Guiding questions

- What is the difference between cost and profit centres?
- What are the roles of cost and profit centres?
- What is a budget and how do you construct one according to IB guidelines?
- Having created a budget, how do you calculate a variance?
- What is the role of budgets and variances for decision-making?

### The difference between cost and profit centres (AO2)

HL

In chapter 2.2 on organizational structure we saw that some businesses choose to organize themselves into departments according to geographic region, function, or product.

One important reason for this is so the businesses can allocate costs and revenues to specific departments or "centres", hence giving rise to terms "cost centres" and "profit centres".

### Cost centres

Cost centres are allocated their own direct costs and can set their own budgets to control and monitor efficiency. Direct costs are those which are related to the amount of output produced (see chapter 3.3). This could include wages and raw materials.

### Profit centres

Profit centres are allocated direct costs *and* revenues for the purpose of calculating individual profit at that centre. Many multinational corporations have decided to convert all of their major brands into dedicated profit centres for this reason.

Remember that the centre (whether it is cost or profit) will be expected to absorb some of the indirect/overhead costs of the whole organization (see absorption costing below). We will see the implications of this for contribution pricing in chapter 4.5 and operations management in chapter 5.6.

## The role of cost and profit centres (AO2)

HL

An advantage of creating cost and profit centres is that it empowers managers of the respective centres by giving them greater autonomy. This improves motivation, especially if they are motivated by McClelland's acquired needs of power and achievement (see chapter 2.4).

The cost or profit centre becomes accountable for its own actions, and this may lead to greater efficiency and productivity.

The main disadvantage of creating specific cost and profit centres is that when individual managers are responsible for the performance of a specific centre, the centre may set objectives that are different from those of the organization overall. There could be a significant conflict of interests

between the cost and profit centres, the board of directors and even the shareholders. There may also be unhealthy competition between the centres themselves.



### Question for reflection

An interesting question has been posed by Janet Driscoll Miller and Julia Lim in their 2021 book *Data-First Marketing*. Is marketing a cost centre or a profit centre?

They argue that a cost centre is a department often viewed as a necessary expense, but a profit centre is perceived as a department that generates income.


What do you think the answer is?

## Constructing a budget (AO2, AO4)

HL

A budget is a financial target or prediction of how much a firm is expected to spend or receive in a specific period, such as one year.

### IB Learner Profile

Knowledgeable 

You will be familiar with the role of a film director – the person who creates the scenes, instructs the actors, and in the process transfers the finished script to the screen. What is not so obvious is the role of the producer.

Put simply, the producer's role is to organize the finance – in the words of one director, to “babysit the budget”. Producers hire the key talent (including the director) and try to ensure that the film meets its cost budget. This budget has probably been allocated to the producer by a senior executive in the film studio who is not connected to the film.

Many big films have budgets that run to over \$100 million. So a film producer's role is a demanding and stressful one, but it again amplifies how critical the role of finance is within an organization.

Budgets have several functions. They can:

- Impose financial control on departments and require managers to become accountable for every dollar spent. This process is sometimes referred to as “zero budgeting”, and it can be used when the organization is facing a cash flow problem or experiencing lower than expected profitability.
- Provide financial motivation (and thus rewards) to divisions or managers to meet certain targets or forecasts. This aspect of budgets fits very well with Taylor's motivation theory of scientific management (see chapter 2.4).
- Allow senior management to review performance if a new strategic plan has been introduced.

As with balance sheets, profit and loss accounts and cash flow forecasts, it is a good idea to familiarize yourself with the structure of a budget. For HL Paper 2 you may be asked to complete the budget and fill in the missing figures from the stimulus material provided in the question. An example of a completed budget is given in the *Business Management Guide*.

## Variances (AO2, AO4)

HL

A variance occurs if a figure, such as advertising expenditure for a firm, calculated at the end of the financial period is different to the budgeted or forecasted figure. In the budget for ABC Ltd in the *Business Management Guide*, advertising expenditure was expected to be \$8 million but turned out to be higher at \$10 million. Hence there was a \$2 million adverse balance, shown by the figure 2 [A]. This difference is the variance.

Variances can be favourable where the actual figures are greater than the budgeted figures in the case of revenue, or where the actual cost of the expense is lower than expected.

Or they can be adverse where the actual figures are less than the budgeted figures in the case of revenue, or where the actual cost of the expense is higher than expected.

The setting of budgets and calculating variances can help an organization to achieve its financial and strategic objectives and clearly support decision-making. They allow financial management to control and monitor spending, and through variance analysis perhaps highlight or anticipate potential problems. As we shall see in chapter 5.7, budgets can also be used to help with contingency planning.

Creating budgets and calculating variances can also be an important part of reviewing a new strategic objective or deciding to make a change. In common with financial ratios, they can help to identify areas of concern and raise questions for further investigation, such as:

- Have the sales targets of the new strategic objective been met?

- Are the sales targets above or below expectations?
- Has the organization been able to monitor and control costs?
- Is the organization overspending on materials, rent or electricity?
- Is the new strategy resulting in a fall in labour costs as part of a cost-reduction strategy?

Depending on the nature of the strategic plan and the decision to be made, including its scope and time frame for completion, budgets and variance analysis can be used to judge whether the new strategic direction is "on track". They are important diagnostic tools, and if adverse variances are evident and persistent, then further decisions can be taken to try and correct the situation.

## Absorption costing (HL only) and the BCG matrix

Organizations will pay for their overheads (or fixed costs) before they begin production. Absorption costing is a method of allocating this fixed overhead cost if an organization has multiple departments.

Here is an example to explain this process.

Let us assume that an organization has overheads of \$1 million per week and four departments which all contribute to operations. Each department manufactures a separate product.

If absorption costing is not applied, then allocating this overhead equally means that each department/product is "charged" \$250,000 per week as their "share" of the overhead. The question is whether this is appropriate.

A more considered and fairer approach would be to allocate the overhead according to the resources used in production. This is the rationale behind absorption costing.

In our example, the department which uses the most power and electricity or which has the biggest floor space could pay or be allocated a bigger share of the overhead.

Absorption costing allows an organization to allocate the overhead cost according to a range of factors such as production, floor space or number of employees, and it is applied to cost and profit centres where the overhead can be fairly allocated.



The implications for budgets and the allocation of overhead costs to individual centres should be apparent. Organizations can be more flexible with their allocation of the fixed overhead. For example, departments or profit centres that are economically sustainable can be allocated a larger share of the overhead. New cost or profit centres that may be struggling can be allocated a smaller share, and this can reduce the final price of their product offered to customers.

The total fixed overhead cost for the organization does not change, but individual profit centres may be allocated different levels of fixed costs. Established profit centres with strong brand loyalty may shoulder a large share of the fixed cost because they may be able to increase prices without impacting profit margins too much. Innovative but less established profit centres may use absorption costing to allow their product to cover only direct costs and thus charge customers a lower price. (The product may need support in the early stages of its life and use what is known as a contribution pricing method; this is covered in chapter 4.5.)

We can also apply absorption costing to another Business Management tool – the BCG matrix, which is discussed in unit 4. Essentially, a "cash cow" product or "star" may absorb a larger part of the fixed overhead cost than a "problem child" to allow for more flexible pricing of products.



## Revision checklist

- Budgets coupled with variance analysis perform several crucial functions for an organization. They are important mechanisms for maintaining the organization's economic sustainability.
- If an organization has a Dionysian culture or a laissez-faire leadership style, budgets and variance analysis are an essential method of exercising financial control and decision-making.
- Cost and profit centres allow organizations to split into "autonomous" or separate units to allow for greater accountability in decision-making, and this can be a strong motivational force for managers of these centres.
- Organizations can be flexible with their allocation of the fixed overhead cost and pricing if they use absorption costing and have separate profit centres.
- One issue with establishing cost and profit centres is that individual centres may pursue business objectives which could conflict with the main strategic objectives of the overall organization. Careful management and monitoring of cost and profit centres will be required.



## 4.1 Introduction to marketing

### Guiding questions

- What is the difference between market orientation and product orientation?
- How do I calculate and explain market share?
- How do I explain the role of market growth?
- How important is market share and market leadership?

Marketing is an essential business function which brings the organization into direct contact with its customers. However, as we will see in this unit and chapter 5.9 on information systems, the methods by which organizations connect and interact with their customers are changing.

Traditional marketing techniques such as above- and below-the-line promotion and target marketing are being replaced with new systems driven by technological change. These changes include the use of data analytics, social media marketing, and supply chain management. The impact of Covid-19 has sped up this change.

Marketing has adapted. The four Ps marketing mix framework which was created in the 1960s to “find a need and fill it” has been developed into the seven Ps framework which also covers services. We have new brand and customer loyalty programmes, big data and data mining.

If the 1960s was the era for marketing to find new customers, then the new mantra for marketing in 2021 and beyond is to find, retain and continue to serve.



To compete effectively and remain sustainable, organizations now must find new *creative* ways to differentiate themselves from their current and future competitors. *Change* is inevitable, and with the increasing use of social media to drive new marketing strategies, *ethical* implications of using data have become important.

### Market orientation versus product orientation (A02)

An organization embracing product orientation chooses to *ignore* its customers' needs and wants and focuses on creating the best quality product that it can. Product-orientated organizations generally do not undertake market research, and then only in the later stages of a product's life cycle.

A good example of this continued focus on quality and ignoring market trends is the Dyson vacuum cleaner. Unlike its competitors, Dyson decided to follow a product-orientated approach. It decided to be innovative and not use a bag to collect dust when vacuuming. Instead, having spent millions of dollars on research, Dyson focused on creating a bagless machine.

James Dyson, the entrepreneur and founder of the company, allegedly created 5,127 different versions of his vacuum cleaner before settling on his final design, which has now become a market leader in many international markets.

Theodore Levitt provides another example of the difference between market orientation and product orientation:

*“Movie companies do not make movies, but they provide entertainment. In the 1950s, the American movie*

*studios dismissed television and ignored its influence. They lost their customer focus and became too product orientated. They have barely recovered from the impact of television. It took them too long to regard television as an opportunity for market growth (through market orientation) and not a threat.”*

Source: Theodore Levitt quoted in Russell-Walling (2007)

It is interesting to note that many entertainment companies such as Disney and Apple now have their own streaming TV services in direct competition to services like Netflix and Neon.

A few established companies continue to use product orientation. Rolls Royce and Apple, for example, operate profitably by concentrating on the strength and quality of their products and effectively ignoring the needs of the market.

However, most organizations, especially new start-ups, are forced to become market orientated as they conduct market research to develop an understanding of market trends and create an appropriate good or service.

This unit focuses mainly on market orientation.

## Market share (A02, A04)

We can calculate market share for an organization as follows.

Market share is defined as the sales of the individual firm expressed as a percentage of total industry sales:

$$\text{market share} = \frac{\text{total revenue the firm generates}}{\text{total revenue the whole industry generates}} \times 100$$

The total revenue the whole industry generates is the market size.

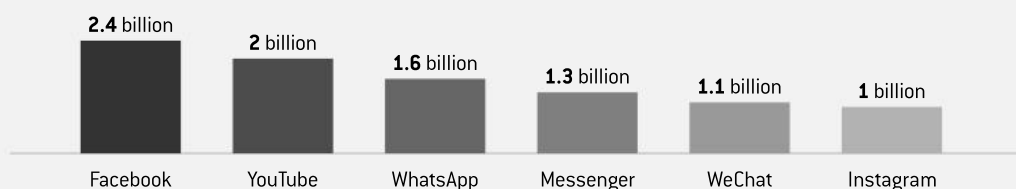
We can use bar graphs or pie charts to represent the share and influence of a particular market. Figure 4.1.1 indicates

the number of active users of social media. Data from 2021 reveals that Facebook is still the most widely used social media platform. It has a large market share, and if we add in the fact that Meta (Facebook's parent company) also owns WhatsApp, Instagram and Messenger, their domination of the social media landscape is complete. We will explore this aspect later in this unit when we discuss market leaders.

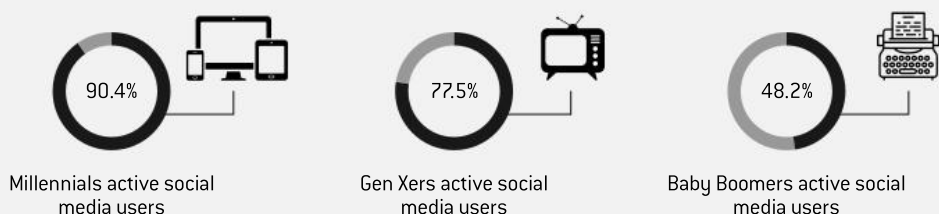
The graphic is also revealing as it shows how data can be represented to communicate important market trends. Pictograms and horizontal bar graphs can help us to understand current market trends and provide insight into market segmentation (see chapter 4.2).

### 1 Facebook is the most popular global social network

Number of active social media users as of July 2019:



### 2 Millennials are the most active social media users



### 3 Exposure is the key benefit of social media marketing

Businesses say that the top benefits they get from social media marketing are:

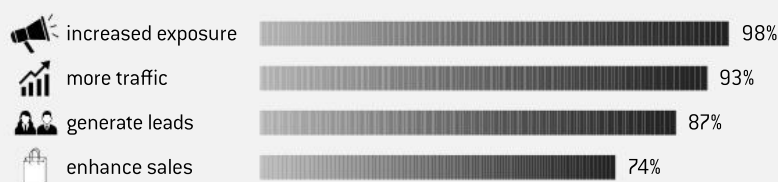


Figure 4.1.1: Social media statistics

Source: <https://financesonline.com/social-media-statistics>

## Market growth (A02, A04)

We have seen that market share is the percentage of an industry's total sales revenue that one organization has. It describes an organization's share of a whole market or industry (for example, the car industry or the breakfast cereal industry). Market growth describes how much that industry is growing, ie how much its total sales revenue is increasing over time. For some organizations market growth may be considerable, but they may retain limited market share.

When the last Business Management study guide was published in 2014, streaming accounted for a very small part of the revenue earned from the recorded music market. Spotify, created in 2006, was the largest music streaming service in the world in 2021, with over 160 million subscribers in 40 countries. In 2021, streaming contributed

84% of all recorded music revenue. However, with a market presence in only 40 international markets, we could argue that Spotify's potential for market growth is considerable.

Figure 4.1.2 helps to link our understanding of market growth with the presentation of data. The combination of a bar graph with a line graph clearly indicates the growth in streaming revenue. It shows that the growth is now slowing – from 45% in 2017 to a forecasted growth of 7% by 2026. As growth slows down in "mature" markets such as the US, UK and parts of Europe, Spotify and other streaming services will be looking to target newer markets in South America and Asia. The challenges and opportunities of entering international markets will be considered in more detail in chapter 4.6 (HL only).

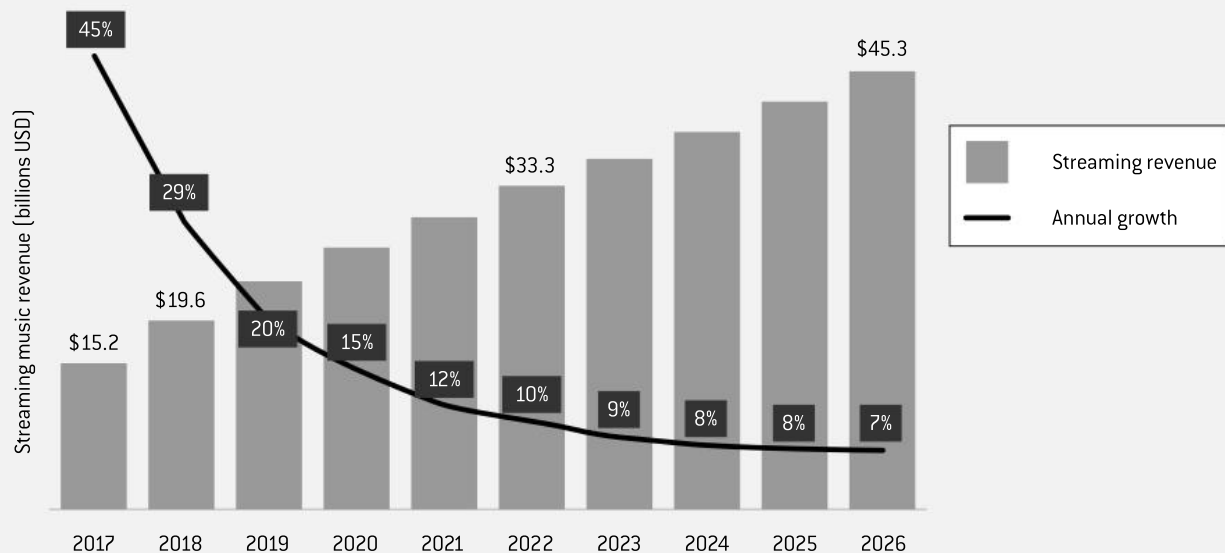


Figure 4.1.2: Global streaming music revenue, 2017–2026

## The importance of market share and market leadership (A03)

HL

As discussed in the section on market share, Mark Zuckerberg's Facebook dominated social media in 2021. Zuckerberg's business model has been remarkably successful since 2004, adding Instagram, Messenger and WhatsApp to its core Facebook business.

Facebook has maintained its market share by penetrating international markets and through joint ventures and key acquisitions. However, on 4 October 2021, Facebook experienced a significant internet outage, and its website went offline for about six hours. It was estimated that during this time, Facebook "lost" \$6 billion. Much of this was due to the share price falling by 5%. The internet outage would have led to significant falls in advertising revenue and impacted on the brand value of the organization. The important lesson from this example is that if an organization has market leadership there is always pressure to maintain this position. Facebook outages can cause many issues for stakeholders.

Organizations that have high levels of market share enjoy many benefits. Businesses such as Spotify, Nescafé, and Starbucks can use their high revenues from that market to meet the demands of as many stakeholders as possible. High market share allows for these organizations to take additional risks in new product and service markets through risk-bearing economies of scale.

New business start-ups, yet to build brand loyalty, do not have this advantage. But as we will see in chapters 4.2 and 6.3, there are ways in which smaller organizations can compete and differentiate themselves.

Organizations with high market share inevitably become **market leaders**. We have seen that in an era of rapid change, it is important that these leading organizations do not become complacent. Continued growth and innovation are two important objectives, and they help to maintain market leadership. Shareholders will be keen to see market-leading organizations maintain their position.

Increasing market share and becoming a market leader can be important aims, but there are potential problems. Being a market leader with rising market share may attract the interest of governments and regulatory bodies determined to stop organizations from abusing their market power and limiting potential competition.



In 2000, Microsoft was effectively split into two parts when the US government considered that it had become a monopoly that was too powerful. At the time of writing, Facebook is also under considerable pressure to sell off Instagram and WhatsApp. The company has been perceived as too powerful, too big, and too unethical. On 4 October 2021, a former senior manager previously employed by Facebook and other social media organizations published a critical report. It indicated that Facebook has consistently put "profits over people" and has undertaken unethical behaviour. Zuckerberg was quick to deny the accusations.

Facebook's influence over the social media market is considerable, even though competitors such as WeChat and TikTok are emerging from China to threaten their global leadership.

Mark Zuckerberg and Facebook are continually looking for new ways to innovate and grow market share. They are always developing new ideas to extend their market leadership. For example, Facebook has revealed a joint venture with iconic sunglass manufacturer Ray-Ban to create a pair of sunglasses which can record video. Google tried to develop a similar product in 2011 with Google Glass, but this product encountered several technological and ethical challenges. It will be interesting to see how Facebook overcomes some of these challenges as the new product is launched into the market.

Facebook is also looking to create an "integrated physical and virtual world". Using artificial intelligence (AI), virtual reality (VR) and other new technologies (see chapter 5.9), Facebook is looking to the future to create the "metaverse". Zuckerberg's intention is to build an expanded version of Facebook that supports both work and entertainment.

To maintain its market leadership, Facebook is looking to further compete with a range of other social media and e-commerce platforms and entertainment providers such as Google, Netflix and eBay.

With almost half of the planet connected to Facebook products and services in some manner, Facebook's market leadership is guaranteed for some years to come. However, competition and challenges to its market dominance will continue.

## Revision checklist

- Market orientation is the process of anticipating, creating, or fulfilling a need through market research and then trying to satisfy this need profitably. This unit's focus is on market-orientated operations.
- In contrast, product orientation occurs when an organization focuses on the creation of a product (or service) with a high level of quality, effectively ignoring the needs of most of the market.
- Market share and market growth are important elements for an organization to achieve economic sustainability.
- Increasing market share can eventually result in market leadership. In an era of increasing competition, it is important for market leaders to develop growth and innovation strategies. Without these, market leadership can be lost. For example, in 2007, Nokia was the market leader in the mobile phone market. The introduction of the iPhone and smartphone impacted dramatically on Nokia's market share, and they were slow to react. Nokia never recovered.

## 4.2 Marketing planning

### Guiding questions

- What is the role of marketing planning?
- What is market segmentation, target marketing and positioning?
- What is the difference between niche and mass markets?
- Why is it important to have a unique selling point/proposition (USP)?
- How can organizations differentiate themselves and their products from their competitors?

### The role of marketing planning (A02)

Marketing planning is the process by which an organization identifies a marketing objective and attempts to create a marketing strategy to meet this objective. There are several ways in which an organization can do this. Here is one example:

- The organization carries out a SWOT and/or STEEPLE analysis to understand the current situation that the organization is in, and the nature of the external factors impacting both positively and negatively on its operations.
- From this situational analysis, some trends or opportunities may emerge. The organization is then likely to carry out some primary and secondary market research to analyse these opportunities before setting a marketing aim (see chapter 4.4).
- The organization will identify a potential target market and/or carry out some market segmentation and product positioning to see if there are any gaps in the market.
- A marketing strategy with a clear aim, monitoring process and opportunities for review will be created. This marketing strategy could include a social media plan and/or a seven Ps marketing mix with an emphasis on promotion (see chapter 4.5).
- Importantly, a marketing budget must be included in a marketing plan. For example, how much will these various promotional ideas cost?
- In the marketing plan, the organization should provide sales forecasts with timelines to monitor progress. Review and modification of the plan may be needed (see chapter 4.3).

These marketing activities will be covered in more detail across the rest of this unit.

## Segmentation and targeting (A02, A04)

Figure 4.2.1 uses a pictograph to illustrate the segmentation of the global games market by device.

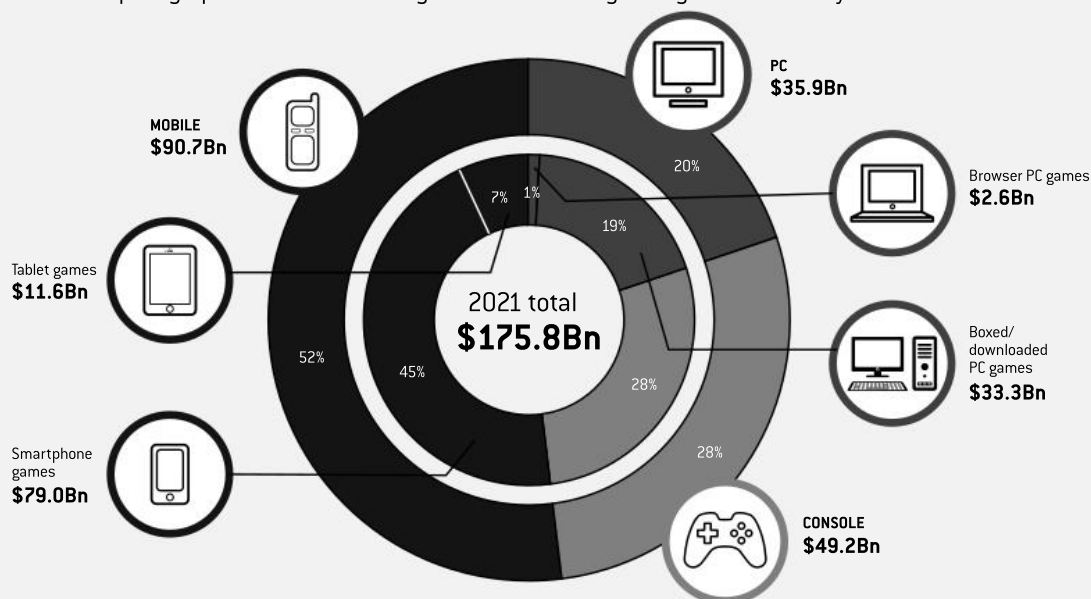


Figure 4.2.1: Global games market 2021

The diagram shows that mobile gaming accounts for 52% of the global gaming market. The diagram also indicates that organizations in the gaming industry who wish to market to potential customers through online advertising would need to focus on mobile and smartphone applications.

The topics of segmentation and targeting are very closely linked.

Market segmentation is the process of classifying customers with similar needs and wants within a whole market.

Market segments could be identified and constructed from the market research undertaken by a business, which might classify customers according to their:

- age
- gender
- geographical location
- lifestyle, including family backgrounds
- occupation/income levels.

Once this classification has taken place, a business may try to determine an appropriate **target market**. Targeting

allows an organization to direct its financial resources and marketing efforts more effectively.

Once a target market has been established, the organization will monitor consumer preferences closely and note any changes in their target market to ensure that it is still relevant to their products or services.

With the rise of social media marketing and data analytics, segmentation and targeting has been transformed. As we noted in chapter 4.1, customer retention has become one of the key aims of marketing in 2021.

As we shall see in chapters 4.4 and 5.9, several important ethical considerations must be considered when using online databases as a way of profiling customers and identifying market research opportunities.

The benefits of segmentation leading to targeting specific markets are principally built around the ability to focus the marketing effort on a group of consumers who share similar characteristics. This may be important when targeting niche markets. Firms could focus on a segment where there is currently limited competition or even a need that has yet to be filled, leading to a gap in the market.

## Positioning and position maps (A02, A04)

*This is a demanding but popular topic and can lead to several interesting discussions, especially within the realm of TOK. But positioning is one of the most contentious areas of marketing for students to discuss.*

Positioning is defined as the way in which a product or service is “perceived” in the marketplace by its stakeholders. This perception could be based on price, quality, reliability, environmental sustainability, or a range of other factors.

Successful positioning is the process of creating consistent and recognized stakeholder perceptions about an organization’s brand, product and/or service.

Jack Trout, a famous marketing writer, stated:

*“Marketing is not about a battle between products. It is about a battle of perceptions.”*

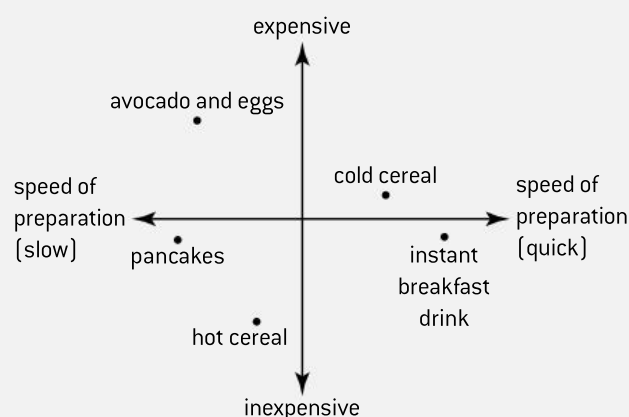


Figure 4.2.2: Position map for an instant breakfast drink

## Position maps

Philip Kotler's work in this area has been important. Figure 4.2.2 is a two-dimensional perception or position map, which illustrates Kotler's analysis of the positioning of an instant breakfast drink relative to the variables of the price of the product and its speed of preparation.

The increasing influence of social media on positioning and perception of a company and its products and services is discussed further in chapter 4.5.

## The difference between niche and mass markets (AO2)

A **niche market** is a smaller segment of a much bigger market. A niche market may try to "capture" a particular specific segment of a market that has been neglected by larger established firms.

For example, in the hi-fidelity (hi-fi) industry, established producers such as Sony, Panasonic and Phillips leave the supply of highly technical and expensive equipment (ie niche hi-fi equipment costing thousands of dollars) to suppliers such as Linn and Rega. Sony operates in the mass market and leaves the niche markets to smaller businesses.

Organizations operating in a niche market must make their profits from small sales volumes. Given that overhead costs are fixed, they must charge relatively high prices to compensate. So niche products must offer significant "brand value" to customers in order to be successful and be positioned correctly.


Alternatively, **mass markets** and mass marketing attempt to create products that have a much wider national or global

appeal. Rather than targeting a specific customer or need, mass marketing aims to reach as many stakeholders as possible. Both for-profit and not-for-profit organizations can attempt to meet the needs of a mass market.

Of course, organizations operating in niche markets can grow into mass market players. For example, Apple has grown from a niche player in the home computer market in the early 1970s into a mass market leader in the computing and mobile communications industry.

Mass marketing requires significant marketing budgets in order for organizations to develop and retain a brand presence and positioning across many segments. Niche marketing will inevitably be carried out with fewer financial resources and specific targeted marketing.

### IB Learner Profile

Knowledgeable and balanced 

### Space tourism – the ultimate niche market?

In 2021, three global entrepreneurs with considerable financial resources each decided to test their space shuttles in anticipation of the full launch of their own new niche "space tourism" service, which is likely to appeal to very few.

Jeff Bezos, Richard Branson, and Elon Musk all successfully launched test missions lasting up to three minutes in the Earth's orbit as part of a "space tourism" promotion. The cost of the journeys by the three entrepreneurs was not fully revealed, but it is anticipated that the cheapest seat when the service becomes economically sustainable will be \$500,000. All three test flights attracted considerable publicity. One could argue that space tourism represents the ultimate niche market.

After the test flights there was a chorus of disapproval on social media from many stakeholders who regarded these flights as publicity stunts designed to improve the brand image of the entrepreneurs and their companies. It was argued that space travel could be economically and possibly environmentally unsustainable. Even Prince William, who would normally remain silent on such issues, commented that rich entrepreneurs should be trying to solve some of the important issues here on Earth rather than trying to find new sources of revenue on other planets. The debate will continue.

Space tourism will be an unobtainable dream for all but the wealthiest. However, we could argue that this is one of the main reasons for targeting extremely niche markets. They are aspirational and difficult to attain. Otherwise, these markets would not be considered niche.



## The importance of having a unique selling point/proposition (USP) (AO2)

A USP is a summary of what makes a business or product unique and valuable to a target market. A USP answers this question:

*How does your organization or product benefit or add perceived value to your stakeholders in ways that other organizations' products cannot?*

If a product is perceived as having a unique selling point (USP) in the minds of consumers, then this can act as a very

powerful marketing tool. Having a USP can also increase brand loyalty and awareness, and can have significant implications for the type of marketing mix pursued by the organization.

For example, a USP may allow an organization to charge a much higher price than that of the competition if stakeholders perceive there is added value.

## How organizations can differentiate themselves and their products from competitors (A03)

All marketing strategy specialists, from Philip Kotler to Jack Trout, would agree on the need for a firm to be able to differentiate its products or services from those of its competitors.

The creator of the art of differentiation is credited as being Rosser Reeves in 1960. In his book *Reality in Advertising* he argued the case that advertising should create a USP for a product to convince a customer to buy a certain brand rather

than a competitor's. His ideas on differentiation have been hugely influential.

Table 4.2.1 includes characteristics which are often assumed to be differentiating (such as price and quality), and discusses some issues with differentiating in this way. If you are interested in learning more you could read Trout and Rivkin's book *Differentiate or Die*.

Differentiating factor	Discussion points
Quality	Trout argues that using quality is a poor way to differentiate. Consumers expect good quality as standard. (Which consumers would knowingly accept poor quality?) He stresses that all firms have the same opportunity to implement quality management, so that "me too" products appear in the marketplace all promising the same level of quality. This is hardly differentiating.
Customer loyalty programmes (CLPs)	The differentiation impact here has been weakened by the fact that many organizations offer customer loyalty programmes. CLPs are easily imitated and not always cost-effective. The airline industry with its "air miles" programme is perhaps one of the most well-known CLPs. However, an air miles programme can: <ul style="list-style-type: none"> <li>• reduce demand for some paid tickets</li> <li>• limit the availability of seats on popular flights which could have been sold at higher prices</li> <li>• irritate loyal customers who cannot "cash in" their air miles easily</li> <li>• lead to some ethical issues.</li> </ul>
Price	Consumers may have the perception that low prices have an impact on the quality of the finished product. Walmart and Amazon have been able to maintain low price positioning through their substantial power over the supply chain to enforce low prices. This has given them unique cost advantages which a new firm would find very hard to match.  Trout concedes that a high price differentiation strategy based on more than just quality can be successful if accompanied by a range of other factors, such as being first in a market or by obtaining attribute ownership. He cites the Apple iPod, Rolex watch and North Face clothing as examples of products which have been successful with high price differentiation.
Line extension	The range of products offered can be a differentiation point but size of selection is critical. Alibaba and Amazon have been very successful due to their huge selection.  New line extensions need to counter consumer scepticism that advertised changes may simply be cosmetic and not significantly different enough.
Appearing to be environmentally friendly or socially responsible	Trout argues that this could be a source of differentiation but we can note these points based on his argument: <ul style="list-style-type: none"> <li>• Customers must be willing to pay higher prices to ensure environmental quality.</li> <li>• Credible information about the environmental and social advantages of the firm's products must be available to the consumer at low cost. An excellent example of this will be provided in chapter 5.9 with the case study on the social enterprise Thankyou, who have exploited the opportunity to position themselves as an ethical and socially responsible brand in Asia and Australasia.</li> </ul>

Table 4.2.1: Discussion of differentiating characteristics

### IB Learner Profile

Inquirers ?



#### The ride-sharing industry

One new industry that has had a profound impact on business management is the ride-sharing industry. The industry has grown in many countries since the start of the Covid-19 pandemic, and is forecast to be worth over \$100 billion by the end of 2025.

Just a handful of the many ride-sharing organizations around the world include Uber, Ola, Lyft, Gett and Bolt.

How do these organizations effectively compete and differentiate themselves?

One way in which they can do this is by using dynamic or variable pricing (see chapter 4.5). This is also referred to as "surge pricing". During peak and off-peak times of the day, the same journey travelling the same distance may vary in price according to the time taken.

Uber uses surge pricing in its pricing model as it is the established market leader. This provides an opportunity for a new entrant to offer a fixed price for a journey to try to compete with the established market leader.

It is interesting to note that due to the Covid-19 pandemic, Uber's business model has changed. It is now effectively a delivery service rather than a ride-sharing service in terms of the revenue streams it generates. In 2021, revenues from takeaway and home

delivery services overtook ride-sharing revenues for the first time, even though in 2019 one of their most famous customers – McDonald's in the US – dropped them as a preferred partner and employed Door Dash instead.

As we discussed in chapter 4.1 with Facebook, businesses cannot take their market leadership position for granted. Organizations must continuously strive to offer more value to customers and other stakeholders.



### Revision checklist

- Marketing planning is a process which includes a range of activities including a situational analysis via SWOT or STEEPLE, an identification of important trends, the formulation of a marketing plan and methods to monitor progress.
- Marketing will be more effective if an organization targets a specific market segment. Market segments can be classified by age, gender, income, and a range of other factors.
- Some organizations focus their marketing efforts on small, specific market segments called niche markets.
- Organizations relish having a unique selling proposition (USP) in the minds of customers, and there are a number of methods by which an organization can differentiate itself away from its competitors. Some methods are more effective than others.
- Positioning is the process where an organization's brand or product retains a clear perception in the minds of stakeholders. Positioning maps can be used to indicate how different products or brands in the same industry can be perceived. Price and quality are two popular ways to build perception.

## 4.3 Sales forecasting (HL only)

### Guiding questions

- What is simple linear regression analysis?
- How can we use simple linear regression to create a sales forecast?
- What are the benefits and limitations of sales forecasting for an organization?

HL

*Before looking at the business content of sales forecasting, we have an ideal opportunity to introduce an HL-only tool from the Business Management toolkit: simple linear regression analysis.*

*This topic should be covered in your SL or HL Mathematics course in the IB Diploma or Career-related Programme but, in this section, we make the connection to business management as it has a direct link to sales forecasting.*

### Simple linear regression

Collecting market research data is a complex skill. Many organizations leave this to outside companies who are skilled in data mining and analytics (see chapter 5.9). These specialist organizations have the experience and technological skills to find, organize and interpret market information to help with decision-making.

From this market research, organizations will create possible marketing strategies, and from these they will create potential sales forecasts. They will project forward to see how potential sales of a product may grow. Sales

forecasts are not the only way to measure the success of a marketing plan. We could also use customer feedback, but at this stage let us assume that sales forecasts are a critical measure.

When it is collected, market research data can look messy. The example of scatter diagrams (Figure 4.3.1) shows that market research may not fall into a linear or straightforward pattern which is easy to understand.

The term "scatter diagram" refers to data that has been collected and illustrated on a diagram. We will assume only two variables are being investigated.



### The market research issue to be considered

An organization wants to find out the potential market opportunities for a new “ethical” chocolate bar that it is producing. To differentiate this new bar from the competition, it will be priced significantly higher.

The organization uses an outside market research company to investigate the relationship between the

age of the potential customer and the price they would be willing to pay for an ethical chocolate bar sourced from environmentally sustainable ingredients. Age and price willing to be paid are our two variables.

The scatter diagram that results from this market research process could look like one of the three in Figure 4.3.1.

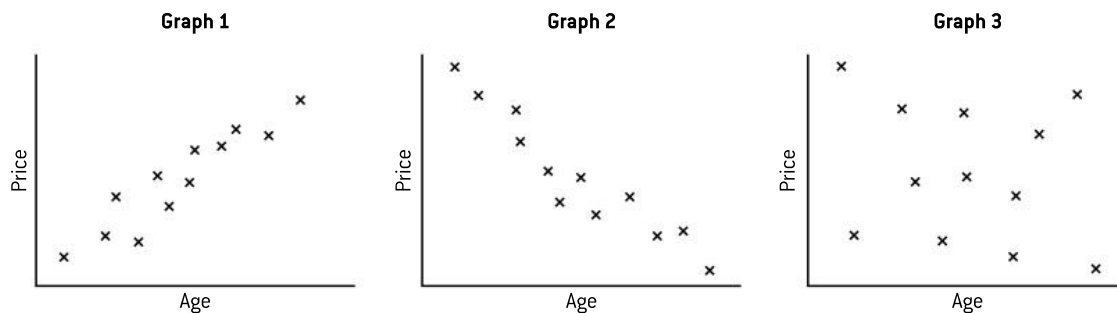


Figure 4.3.1: Scatter diagrams for chocolate bar market research results

Figure 4.3.1 shows there are three possibilities:

- A positive relationship (graph 1)
- A negative relationship (graph 2)
- No relationship (graph 3)

A **positive relationship** between the two variables indicates that as one variable increases, the other variable also increases. In our example, the price customers are prepared to pay for the chocolate bar increases as the age of the customer increases.

A **negative relationship** between two variables indicates a negative relationship. As one variable increases, the other moves in the opposite direction. In our example, the price customers are prepared to pay for the chocolate bar decreases as the age of the customer increases.

If the two variables are not linked at all, we would expect a random scattering of points. There is **no relationship**.

### Correlation

Correlation refers to how closely two variables are linked. In the above example, a positive relationship indicates a positive correlation, or we can say that the variables are positively correlated.

A negative correlation (or negative relationship) infers that the relationship between the two variables means that as one variable increases, the values of the other variable decrease.

A pattern such as that presented in graph 3 represents no correlation. The variables are not related.

It is very important to mention that *correlation does not infer causation*. For example, a positive relationship between two variables does not imply that one variable *causes* the other variable to occur. The age of the consumer does not cause the consumer to pay more for a new ethical chocolate bar.

### Line of best fit and the trend of the data

Once the market research data has been collected and presented on a scatter diagram, the organization will want to create a **line of best fit**. This will likely be done using computer software, but a simpler way is to use a pencil and ruler (as you may want to do in your examination).

The line of best fit indicates the **trend**, which is the underlying pattern of the data. In Figure 4.3.2, the lines of best fit (also called the “trend lines”) indicate a trend of positive correlation in graph 1, and negative correlation in graph 2.

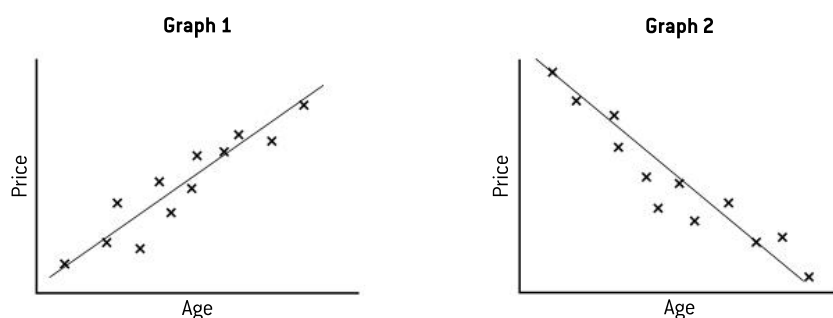


Figure 4.3.2: Line of best fit

### Extrapolating a sales forecast from the trend line

A sales trend line can be extended to create a sales forecast. This extended part of the trend line is called an **extrapolation** and is usually drawn as a dotted line, as shown in Figure 4.3.3.

It is possible to create a range of extrapolations leading to a range of forecasts. An organization may wish to illustrate pessimistic, optimistic, and neutral scenarios given that changes in external factors are unknown. It is assumed that in conjunction with a sales forecast an organization would undertake a STEEPLE analysis, especially if they were thinking of trying to enter a new international market. The benefits and risks of operating internationally are reviewed in chapter 4.6.

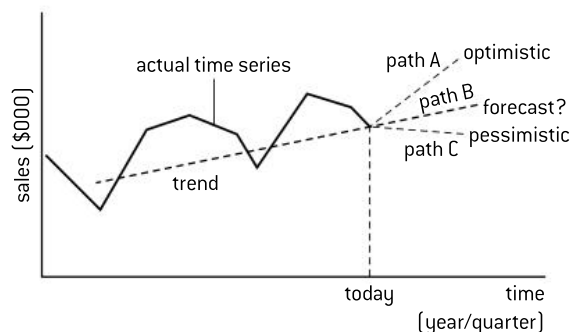



Figure 4.3.3: Sales data extrapolated to show three potential scenarios

### IB Learner Profile

Balanced 

A note of caution is advised with extrapolations. The trend line is drawn as a straight line whether it is a neutral, optimistic, or pessimistic scenario. Whichever path is chosen, it is reasonable to say that the further the trend line is extended, the more likely it is to be inaccurate.

Extrapolations and sales forecasts should be regarded in a similar manner to the process of weather forecasting. External factors can change dramatically after a weather forecast has been made, rendering the forecast less accurate. Likewise, sales forecasts can only be based on the information available at the time the forecast is created. External factors impacting on the organization can change frequently, just like weather patterns.

## The benefits and limitations of sales forecasting (A03)

HL

### Benefits

Sales forecasts allow a marketing strategy to have a "SMART" aim so that its success can be judged. This is much more quantifiable than just indicating that the new marketing plan will increase sales revenue. (A SMART aim is specific, measurable, achievable, realistic, and timely.)

Financial stakeholders such as future investors or financial institutions wishing to invest would clearly want to see predictions of sales forecasts linked to a SMART aim. This would act as a form of security that their financial assistance is going to be used effectively.

Sales forecasts will allow an organization to plan its future cash needs and pre-empt possible cash shortages. As we saw in chapter 3.7, banks are much more willing to grant overdrafts at cheaper rates to solve cash flow problems if they have some indication from a cash flow forecast that a shortfall of cash is imminent. Anticipated financial problems are much easier for an organization to prepare for.

Sales forecasts for three- or six-monthly periods allow for monitoring and control processes, and ensure that financial targets are realistic. Sales forecasts can also help with the issue of over-purchasing raw materials, and can lead to improved stock control.

### Limitations

The limitations of sales forecasts are closely linked to the difficulties of predicting future cash inflows and any potential future monetary benefits used in the decision-making process.

In a rapidly evolving marketplace with new competitors springing up or other external threats occurring at such a pace, sales forecasts cannot ever hope to keep up.

We need to bear in mind that sales forecasts are merely that. They are *predictions* of possible future

sales, rather than *actual* sales. As any publicly traded company will know (and Enron provides a spectacular example), any organization which overpredicts its sales forecasts or provides wildly optimistic figures is risking its credibility and transparency with its stakeholders (especially shareholders).

Sales forecasts need to be realistic, conservative and as accurate as possible. It is not easy to find a balance between optimism and pessimism given the existence of external factors. If an organization is too pessimistic with its sales forecasts, then it risks potentially being short of raw material and supplies. The organization may miss out on valuable profit-making opportunities.

### Seasonal and cyclical variations

We must also note that some organizations operate in markets which are seasonal. For example, sales of tents and camping equipment may traditionally peak in the warmer months. This is called a **seasonal variation**, and it can have an impact on sales forecasts.

Over a much longer period, other variations in camping equipment sales may also be experienced. These longer-term swings are called **cyclical variations** as they depend on the various "ups and downs" that an economy inevitably goes through over a number of years.

The economic term for an "up" is **recovery**, where consumer and business confidence is increasing. The economic term for a "down" is **recession**, where output in an economy falls for at least two consecutive quarters, unemployment may increase, and consumer confidence will decline.

When sales forecasts are created from market research data, the longer-term health of the economy must be considered.

## Revision checklist

- Sales forecasting is important in decision-making. The use of sales forecasts can be critical in deciding on a particular course of action for an organization and/or the use of a particular marketing plan.
- Sales forecasts have their limitations due to the existence of external factors. Organizations carry out sales forecasts bearing in mind neutral, optimistic, and pessimistic scenarios or projections of changes in these external factors.
- Simple linear regression can be used to create lines of best fit through scatter diagrams, which may be used in the data collection process to create sales forecasts.
- Positive or negative correlations can also be identified from scatter diagrams. But care is required when interpreting these relationships, as correlation does not imply that one variable causes another to occur.

## 4.4 Market research

## Guiding questions

- Why and how do organizations carry out market research?
- How is primary market research carried out?
- How is secondary market research carried out?
- What is the difference between qualitative and quantitative research?
- When carrying out market research, why and how do organizations carry out sampling?

### Why and how organizations carry out market research (A03)

Market research is used to identify current and future market trends for an organization, and will have a strong influence on creating possible business opportunities. New revenue streams or business models can be developed.

Market research could be used to find out:

- the current and potential future size of a market
- how competitive a market is or might be in the future, looking at the number of firms that currently operate in the market or that could operate in it in the future
- the potential for market growth for an organization in a new market
- any potential gaps or unmet needs in a new market.

Market research can be both primary (direct from existing or potential customers) and secondary (research that has been published by some other organization or research group).

Once the market research has been completed, organizations will then undertake simple linear regression and sales forecasting analysis (see chapter 4.3) to identify trends or patterns.

#### Discussion on the why and how of market research

We must always recognize that market research is not a perfect process. It is a necessary activity to undertake, but there is no guarantee that market research will lead to success for the organization.

Trout and Rivkin (2008) advise caution over attaching too much importance to the role of market research.

*"Marketing people are preoccupied with doing research – getting the facts. They analyse the situation to make sure the truth is on their side. They sail confidently into the marketing*

*arena; secure in the knowledge that they have the best product and that ultimately the best product will win.*

*It's an illusion. There is no objective reality. There are no facts. There are no best products. All that exists in the world of marketing are perceptions in the minds of customers. The perception is the reality."*

It is worth noting that Trout and Rivkin do also advise businesses to perform market research to identify a point of difference from the competition. But the point is well made. Trout and Rivkin are correct that conducting market research is no guarantee of creating and marketing successful products, especially if the customer's perception or the positioning of your product or service is unfavourable.

We must also note that market research may be inaccurate or misleading. Respondents may claim to be interested in a new product or service but then when given the opportunity to purchase it, they may refuse. The following examples are given to illustrate this point.



Consumers of coffee beans for Nespresso, for example, are aware of the importance of ethical coffee production and pricing through the Fairtrade movement. Market research indicates that many consumers agree with the idea of paying more for Fairtrade coffee beans. However, in a supermarket, away from the scrutiny of the market researcher, many consumers still purchase the cheaper non-Fairtrade supermarket own brands.

Another example relates to elections. In several countries, opinion polls have failed to accurately predict the final outcomes of elections. Evidence suggests that when faced with a representative conducting a poll, respondents may give misleading answers as they do not want to reveal their

true voting intentions. Respondents may be undecided or embarrassed to reveal their voting preference.

There are also other challenges in our discussion of the how and why of market research.

### **Objectivity and relevance – the use of an outside market research company**

Given that bias exists in collecting data, several large organizations do not collect primary or secondary market data themselves, preferring instead to employ a specialist market research agency to increase the degree of objectivity (or to reduce bias).

If an organization is launching a new product in the marketplace, secondary data will be difficult to find. Primary data may also be scarce if a questionnaire or interview is expected to reveal how a consumer “feels” about a product that currently does not exist. It can be hard to find objective and reliable data. An experienced specialist agency may be able to overcome some of these difficulties, as we will see in chapter 5.9.

### **Cost and accuracy of market research collected**

For small business start-ups, the cost of employing specialist market researchers to investigate a new market opportunity may be high, although the time saved could be considerable.

The internet can provide a cheap and immediate source of secondary data, but it is not guaranteed that this data will be accurate and meet the organization's needs.

Given that secondary data starts to date quickly as soon as it is published, primary data may be more accurate, but it will be more expensive and time-consuming to collect.



### **The process of market research and ethics**

To summarize, in carrying out market research a firm needs to balance the degree of accuracy and objectivity required with the cost, purpose and time allowed to collect the data.

However, one critical consideration is that the market research process must be as non-judgemental or as unbiased as possible. It should be collected with ethical considerations in mind. This ethical aspect can create significant problems for market research organizations, even for those with many years of experience.

For example, when conducting primary market research, the interviewer should not ask questions which may embarrass the respondent when they reply. An example could be from a market research exercise designed to collect primary data about a new toothpaste. The market research company asks:

- Do you have bad breath?
- Would you consider using this toothpaste if you had bad breath?

These are well-intentioned questions but poorly phrased. Would a market research respondent really admit to having bad breath, in public to someone they do not know?

This example of bad breath is a minor ethical issue. Market research designed to ascertain feelings or attitudes on race, religion, sexual orientation, or other personal issues may be much more contentious if questions are not phrased carefully, or if they “cross the line” from being acceptable to being intrusive. Ethical implications in these situations are considerable.

As Rosenberg and Daly indicate in their book *Foundations of Behavioural Research*:

*“Behavioural scientists recognize that research is a probing process with the potential to infringe on subjects’ rights. Despite their own sensitivity for the rights of others and the faith in their professionalism of their colleagues, behavioural scientists have come to recognize that a formal code of checks and balances is needed to preserve the ethical integrity of behavioural research.”*

We will return to this issue in chapter 5.9 when we consider the benefits and ethical impact of using advanced computer technologies and data mining to inform decision-making.

## **Methods of primary market research (A02)**

### **Surveys**

Surveys might gather feedback from customers directly via the internet, through online surveys such as those created by SurveyMonkey or Google Forms. A more traditional survey might involve a person-to-person questionnaire or telephone call asking for feedback or reaction to goods or services. Telephone interviews are still used by market research companies looking to gather information about political views or thoughts and opinions on sensitive issues.

### **Interviews**

Interviews tend to be more in-depth than surveys but with fewer respondents. They can be costly to organize and set up. However, if properly conducted, an interview can reveal new and valuable information for a business to use.

One common theme in surveys and interviews is that extracting accurate and useful data will depend on the quality of the questions asked: how they are phrased and how they are interpreted are important.

### **Focus groups**

Interviews can have the drawback that some respondents may feel intimidated by a one-on-one approach. Focus groups get round this problem by asking groups of individuals – not always known to each other – questions about a product, or about their “feelings” towards it. This environment may allow participants to “relax” and spend longer in the primary market research process. Focus groups are also a good way to collect qualitative market research.

### **Observations**

If location is an important consideration for a new business start-up, then some of the most productive primary market research could be obtained by an observation of a possible location to get a sense of “foot traffic” or customer visits. Observations can be carried out quickly and inconspicuously, although there are implications here for bias and security. There may also be ethical considerations from observing an individual for too long.

## Methods of secondary market research (A02)

### Market analyses

The World Wide Web has provided a whole range of opportunities to find research from organizations, government institutions, non-governmental organizations, concerned stakeholders, pressure groups and so on. The problem of course is deciding which market analysis survey is the most accurate and suited to an organization's needs.

### Academic journals and government publications

These are grouped together as there could be potential overlap – many academic papers could be financed from government research departments.

Most governments publish census material on population and demographic trends every five years or so, depending on the size of the country. This information could be useful for businesses looking to target a particular market segment, such as the 16 to 24-year-olds or the over 65s.

Academic journals may be published by universities or research institutes, and may contain specific information relating to a particular industry or market.

### Media articles and online sources

With the rise in social media and "citizen journalism" through blogs or wiki pages, a new source of secondary

data has been created. A discussion around the accuracy of Wikipedia as a source of secondary data is beyond the scope of this study guide and would be better served by a TOK discussion. However, for a quick recall of issues or trends, Wikipedia is an important source of published data and could hopefully provide the starting point for an investigation.

Media and newspaper articles provide another starting point for secondary research. In general, it is important for a market researcher conducting secondary research into a range of topics, markets, opinions and trends to consult as wide a range of available printed material as possible. Increasingly many media articles must be paid for. The era of free, unlimited secondary data from journals and newspapers may be over as online newspapers create new revenue streams.

For a fuller discussion of social media and in particular social media marketing, see chapter 4.5.



### Question for reflection

In an era of rapid change, to what extent is secondary market research out of date as soon as it is published?

## The differences between qualitative and quantitative research (A02)

**Qualitative research** is concerned with ascertaining the attitudes, motivations, and opinions of consumers, particularly when linked to their buying habits. It can be difficult to put a number on an opinion. For example, how would a market researcher measure objectively how a respondent "feels" about a particular product or service?

Qualitative market research can be obtained from consumers taking part in group discussions such as focus groups, or through in-depth interviews. Given the nature of these conversations about emotional connections to products or brands, a good deal of qualitative market research is collected by specially trained market researchers.

**Quantitative research** is conducted mostly through pre-prepared questions that can be answered by large samples of the population. Using computer software, answers to these questions are then collated into a readily digestible form.

Here are some examples of how the results of quantitative market research could be expressed:

- 42% of the 16–20 age group prefer low-sugar drinks to regular soft drinks.
- 95% of all banking transactions in country X are carried out on a smartphone.
- 64% of respondents would be willing to pay more for an ethical chocolate bar.

## Methods of sampling (A02)

Sampling is an important element in collecting market research. In the simplest form, sampling is a process where an organization will investigate a group or segment of current or potential customers, to find out both qualitative

and quantitative information. This "sample" can be chosen according to several different criteria as shown in Table 4.4.1, and they include quota, random and convenience.

Sampling method	Description	Time taken and cost considerations	Accuracy and bias*
Random	There is an equal chance that any particular respondent will be chosen for the sample.	This method can be time-consuming and skilled interviewers may be required. It can be very costly.	Given that there are no preconditions, random sampling has the least bias. For niche or technological product surveys, random samples may not generate enough accurate data compared to quota samples.

Quota	Respondents are segmented into specific groups, which share similar characteristics. The interviewer is then given a target to sample. For example, 10 males aged 18–25 are questioned. Once the target is fulfilled, no more respondents are asked questions.	Given the smaller number of respondents, the quota method may be cheaper than using a random sample. Time will be needed to set up the segments.	If a company requires respondents to have specialist knowledge, eg for technological products, then a quota method may be more accurate than the random method. However, bias is increased due to the preselection of respondents.
Convenience	Also known as “grab” or “accidental” sampling, this is a quick, non-random sampling method which makes it easier to undertake some initial qualitative and quantitative research if the marketing budget is small.	This is a quick, cost-efficient method of sampling.	As convenience sampling is non-random it is very susceptible to bias. For example, if an organization wishes to find out what customers think of a new product and they ask only recent purchasers who just happened to be in the retail outlet, then clearly the results will be biased.

**Table 4.4.1:** Key factors of different sampling methods

*\*A full description of bias and its implications for statistical work is outside the realms of this study guide. However, we should note that researchers try to minimize bias as much as they possibly can.*

The process of sampling saves an organization financial resources and time. It will probably not be possible for an organization to investigate an entire market or the whole population within a reasonable time frame and cost, even if

this was done online. Sampling allows organizations to make a good approximation of the true thoughts and intentions of a potential group of customers.

### Revision checklist

- Organizations carry out market research for a variety of reasons and using a range of methods. Collecting market research for use in decision-making is a complex skill.
  - Primary research is the most time-consuming and expensive to collect but potentially the most accurate.
  - Secondary research can be carried out quickly with the minimum of cost, but it may not be tailored to the organization's needs.
  - Market research is critical when devising new products or marketing strategies, but it comes with difficulties, such as making sure research is unbiased and objective.
- For this reason, some businesses employ specialist market research agencies or consultancies to undertake market research on their behalf.
- Market research should lead to a mixture of both qualitative and quantitative data. Focus groups are increasingly being used to collect sensitive qualitative data.
  - Sampling is an effective way to gain accurate information about a potential market opportunity without needing to question the whole targeted population. Random sampling is the most unbiased. Quota and convenience sampling may lead to bias in the results.

## 4.5 The seven Ps of the marketing mix

### Guiding questions

- What is meant by the seven Ps of the marketing mix?
- What is the most appropriate marketing mix for a particular range of products or services?

## Setting the scene

*This chapter covers a lot of business content and much of it is linked to AO3. AO3 is the assessment objective where the ability to discuss and evaluate business content is very important. We will consider each element of the seven Ps marketing mix separately in the following pages.*



Figure 4.5.1: The seven Ps marketing mix

### The four Ps and the seven Ps

Some textbooks refer to the four Ps marketing mix, which is used when creating a marketing strategy for a product. The four Ps are product, price, promotion and place. The extended seven Ps marketing mix was developed in the 1980s to allow for the creation of a marketing strategy for services. It added people, processes and physical evidence. There are differences between marketing goods (products) and marketing services:

- Product benefits are “embedded” inside the product and/or packaging, and can be delivered to customers through distribution channels. For example, a bottle of moisturizer may claim certain benefits on the outside, and inside it will have certain “desirable” ingredients.
- As services are location-based activities, customers have to travel to the service location. For example, travelling to a beauty salon or spa for a facial.
- Customers like their products to be standardized, for example in terms of features and packaging, but they like their services to be customized to suit their individual needs.

- Products are tangible so customers can inspect them and, in some cases, sample them before committing to buy them. Services on the other hand are experienced, and once carried out may not be reversible. A moisturizer can be sampled at home or in a store, but it is not possible to return a facial or properly sample one without the activity being completed.
- To overcome some of the issues with service-based delivery as opposed to the marketing of products, many service providers give *physical evidence* to assist with the marketing effort, they provide trained *people*, and they have a good overall *process* to deliver the service smoothly.

The conclusion is that we should think very differently about the marketing of products versus services.

### The marketing mix and the seven Ps

The marketing mix should be considered a business tool rather than a theory. This is because there is not one definitive marketing mix. Each product or service should have its own unique marketing mix, otherwise it will be very difficult for stakeholders (especially customers) to be able to differentiate between products and services.

Here is a brief description of each element of the seven Ps marketing mix. These are covered in more detail below.

- Product – the good or service which the organization wishes to offer for sale.
- Price – the amount to be charged to the end user, normally the consumer.
- Place – how the product lands in the hands of the customer, also known as the distribution channel.
- Promotion – how the target market is made aware of the product or service.
- Process – how the service is delivered by the organization and paid for by the customer.
- People – how the interaction between the employee and the customer generates value to the service offered by the organization.
- Physical evidence – a service is non-tangible, so this relates to how the organization, through its marketing, creates a retail environment or online space for the customer to view how the service could impact them. A hairdressing salon with pictures of previous clients' haircuts is the classic example.

## Product

### The product life cycle

The product life cycle illustrates the traditional sales profile of a newly launched product (or service) over time, as shown in Figure 4.5.2. Once a product has been researched and developed, then launched into the market, it will hopefully go through various stages of growth, saturation and maturity before it enters the decline phase of the product life cycle. The word “traditional” is used above deliberately given increasing competition and change.

The traditional product life cycle is only an observation of the sales behaviour of a typical product. Some product life cycles experience a very brief existence when goods are withdrawn quickly. Others may take much longer to enter the growth phase, and the product may experience a dip in sales before regaining market share.

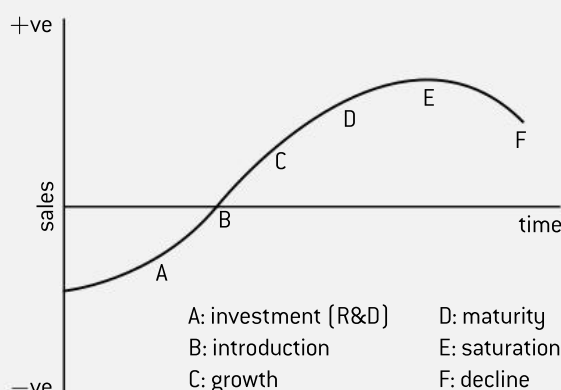



Figure 4.5.2: Traditional product life cycle (focus on sales)

Since the early 2000s, there has been considerable discussion about the shape of the product life cycle, but there is broad agreement that, except for branded items that customers are particularly loyal to, the product life cycle for most products and services is becoming shorter.

## IB Learner Profile

Knowledgeable 

Several business textbooks refer to a model that looks like the product life cycle. It is called the “diffusion of innovations” model, proposed by Everett Rogers, and it tries to explain at what rates technological change spreads through different “cultures”.

He identifies five cultures, including consumers who will want to adopt technological change quickly (“early adopters”) and those who will wait until the end of the product life cycle before making a commitment (“laggards”). The model is a valuable insight into the take-up of technological change by different cultural types.

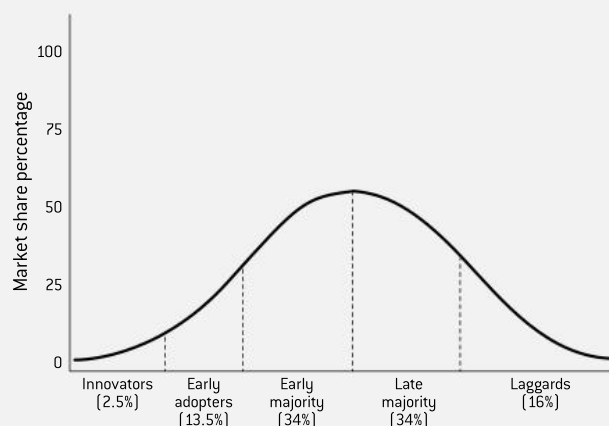


Figure 4.5.3: Diffusion of innovations

## Product portfolio

Generally organizations do not rely on just one product to generate revenue. Instead, they will have a range of products for sale, commonly referred to as a product portfolio.

Multi-product firms will offer different products for sale or variations of the same product to appeal to different market segments and allow greater targeting. A good example of an industry where competing businesses each have a product portfolio is the private motor vehicle industry. Different vehicle models and various features are designed to meet different consumer needs and budgets.

Figure 4.5.4 illustrates the revenue streams generated from different products in a portfolio. In the diagram an organization has a range of products (A–D), all at various stages in their product life cycles so that a consistent total revenue stream can be created. As products A and B move into decline, products C and D move into growth to compensate.

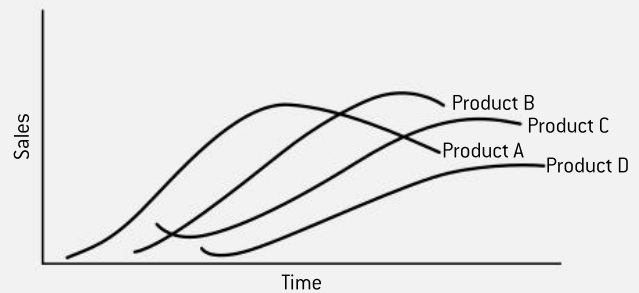


Figure 4.5.4: Product portfolio map

## The BCG matrix

The Boston Consulting Group (BCG) matrix (see Table 4.5.1) is a useful way for an organization to classify its products within a portfolio. It can be used to assist strategic decision-making when producing a range or portfolio of products.

	High relative market share	Low relative market share
High market growth	Star	Problem child
Low market growth	Cash cow	Dog

Table 4.5.1: The BCG matrix

Let us use the BCG matrix to show how these classifications can be applied in the recorded music industry based on the data in Figure 4.5.5. These classifications are approximations only.

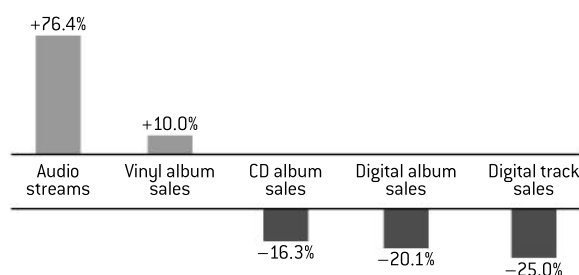


Figure 4.5.5: The rise of music streaming (year-on-year change in music consumption in the US, 2015 vs 2016)

From the data in Figure 4.5.5 we could make the following generalizations:

- The “star” service in this portfolio is music streaming.
- The “problem child” is vinyl records, which have enjoyed a resurgence since the data in Figure 4.5.5 was collected.
- The “cash cow” could be CDs or digital albums, which have passed their peak (ie reached maturity in the product life cycle and are in decline).
- The “dog” could be individual digital tracks, which are falling in popularity.

Please note that the classifications in the BCG matrix are not exact and that they can change over time. If we were to look at the data for the period 1990–2000, we would find that new vinyl record sales would be virtually zero, and individual track sales would enjoy a high market share.

In 2021, vinyl record sales overtook CD sales in terms of sales volume for the first time in 20 years, and there were positive signs that a product which may have been “lost” had been discovered by a new target market.

We should also note that “dogs” can have strategic importance for an organization. There is a tendency to assume that dogs should be removed from the portfolio. However, the internet has created new opportunities for products that may have been forgotten. Classic game consoles from the 1980s and 1990s are just one of a number of products that have re-emerged given the rise of social media and onselling retailers such as Amazon.

The BCG matrix provides an engaging way to classify our understanding of the product portfolio. It can be used to identify possible tactical and strategic options, given that an organization's resources may be limited. For example:

- Does a problem child need support at the expense of a dog?

- How much more market growth does a cash cow have?
- Should we support the cash cow or divert promotional spending to maintain the strength of a star?



### Relationship between the product life cycle, product portfolio and marketing mix (AO2)

Table 4.5.2 shows links between the stages of product life cycle and potential adjustments to the marketing mix. If an organization has a product portfolio, it may decide to look at

the marketing mixes of the individual products and services, considering each one's stage in the product life cycle. Then it would adjust the individual product's marketing mix to benefit the overall total revenue earned by the whole organization. Some of the terminology below refers to the diffusion of innovation model highlighted above.

Stage of the product life cycle	Adjustment to the marketing mix
Introduction	Heavy promotional spending on informative advertising is required. Distribution channels may be few. A premium pricing or penetration pricing method (see page 105) is chosen depending on the product's technical complexity. An innovation may be positioned to gain "early adopters".
Growth	Distribution channels will need to widen if product sales grow rapidly. Price increases may be feasible if sales soar. Promotional mix may be altered to take advantage of this growth.
Maturity	Sales growth slows down. Prices may need to be lowered as new competition enters the market. Promotion should focus on differentiation from the new entrants.
Saturation	Sales growth has peaked and a decision needs to be taken about extension strategies (see below).
Decline	Strategic or tactical decisions need to be made about the future of this product. Price should be at the lowest possible, which may attract the "laggards". Promotion spending should be reminder orientated. Product repackaging will be possible although this will add to costs. Some distribution channels will need to be closed as sales decline.

Table 4.5.2: The marketing mix at different stages of the product life cycle

### Extension strategies (AO3)

As a product enters the maturity or saturation stage of the product life cycle (some textbooks combine them both into one classification), a firm may decide to "breathe new life" into the sales of the product by introducing extension strategies.

An extension strategy does not occur at the introduction or growth phase of the cycle. It is designed to "extend" the life cycle of the product.

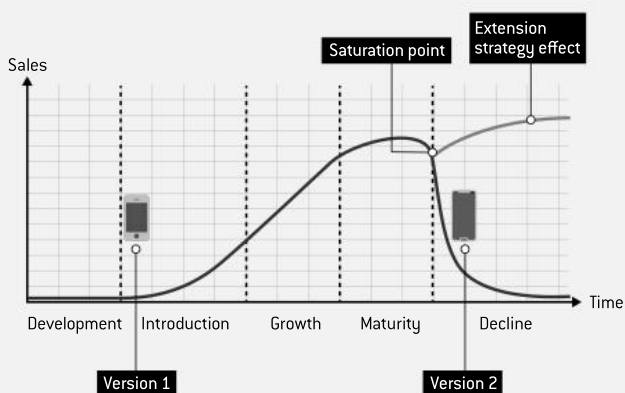


Figure 4.5.6: Extending the life cycle of a product

Here are some popular extension strategies:

- Modify the existing product with minor changes, such as repackaging it or adding new features.

- Increase promotional spending on the product or offer reduced prices for a limited time.
- Develop a line extension to complement the existing product, to boost sales of both products.
- Try to find a new international market by using Ansoff's matrix and engaging in research into overseas markets.
- Reposition the product. Change the way the product is perceived in the market by current consumers so that it can attract new ones.
- Add free services to an existing cash cow or star to increase market share. A good example of this is Netflix, which is going to offer free gaming alongside its film and TV subscription streaming services.

To meet the AO3 assessment objective, we need to highlight some of the disadvantages of using extension strategies:

- Extension strategies should aim to be cost-effective and lead to an increase in profits. There is little point in spending huge sums of money on a promotional campaign for a product, especially in the maturity phase of the product life cycle, if the forecasted profits are too small. Additionally, if the organization has a product portfolio, it would not be prudent to use up all of its cash reserves supporting just one product while neglecting others.
- New market research will be required before an extension strategy can be chosen. This will take additional time and financial resources. The market research will have to be as relevant and up to date

as possible. The firm will need to accept that their competitors may also be engaging in extension strategies, and this may have an impact on the success of their own product.

- Trout argues that there is considerable consumer scepticism and fatigue over new versions of old products. In the music industry, to extend the product life cycle of groups, record companies have released "new" versions of previously available albums with claims that they are either "remastered" or "remixed" from the original tapes. Clever marketing premises such as "from the vaults", "recently discovered" or "previously unreleased" can be used to entice loyal, long-suffering fans to repurchase items which they already own.

At the time of writing, one of the most famous rock groups in the world – the Beatles – are releasing a new version of their album *Let It Be*. It was originally released in 1970 and is part of an extensive 50-year re-issue programme instigated by the Beatles' record company. It is available in five different versions. It has also previously been re-issued in other formats.

### Relationship between the product life cycle, investment, profit and cash flow (A02)

The first stage of a product's life cycle is often overlooked. Figure 4.5.7 indicates that in the early stages, a product may be a drain on cash flow as the research and development costs need to be paid. This phase is often referred to as the investment part of the product's life cycle.

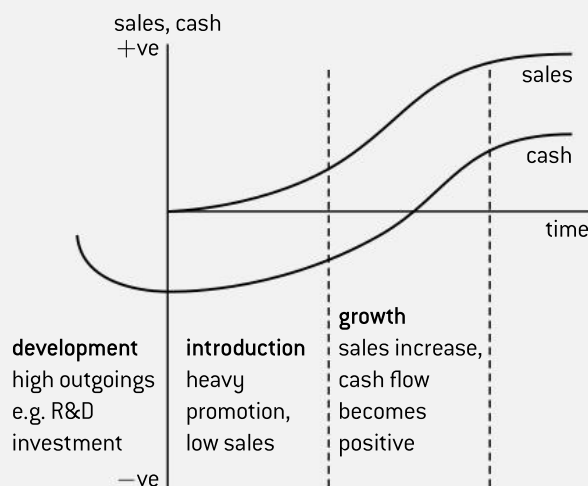


Figure 4.5.7: New product life cycle (focus on sales and cash)

Given the traditional shape of the life cycle, we can expect that even after the research and development costs have been paid, cash is likely to be leaving the business until the point when significant growth in sales is achieved. This is because during the introduction phase the firm will need to support the product with promotional spending, especially on informative advertising.

Finally, assuming the product enters the growth phase without the company having to use all of its reserves of cash to fund the promotional effort, sales of the product will start to rise at an increasing rate.

Assuming also that the firm can confidently manufacture the product in larger production runs, the firm should start to experience some economies of scale. With profit margins rising, the company should finally start to reap the reward for taking the risk of launching the product in the first place – that is, profit.

The amount of profit will depend on the length of the growth phase before the maturity and saturation stages are experienced. It is also important to consider that other competitor firms may be attracted into this market by the thought of making profit themselves. Depending on the nature of the patent and other intellectual property issues (see chapter 5.8), as well as any barriers to entry, the original firm may find that it faces competition. This will erode the opportunities for the firm to continue making large profits in the future.

In the decline phase, profits may fall to zero, but there may be strong reasons for continuing to make the product available, albeit in smaller quantities.

### The importance of branding (A02)

Defining a brand can be a difficult task. In the 1950s and 1960s, a brand could easily be defined as a product name, a trademark, or even just a logo.

In 2021, our definition needs refining. Trout and Ries (2001) refer to a brand as being:

*"The sum of all experiences and values associated with a particular product."*

A brand now must try to encapsulate values, perceptions, and experiences in terms of qualities such as health, luxury, quality, reliability, and youthfulness.

### IB Learner Profile

Inquirers ?

In recent years, the Apple brand has positioned itself to become the brand of luxury and necessity, and of acceptance and difference.



### Question for reflection

How can a single brand encapsulate all of these competing values successfully?

We can now define the following aspects of branding:

- **Awareness** – the idea that the brand becomes recognized and understood by the target market.
- **Development** – focusing on how the brand is perceived by the target market and adjusting the marketing mix if necessary. The organization may need to undertake more market research or change the promotional method or distribution channel.
- **Loyalty** – if the brand is recognized and accepted by the target market, then this will create customer loyalty and retention. In 2021, the new marketing mantra would seemingly be not only to add customers but to retain existing ones so that they are not tempted away by the competition. Customer loyalty programmes can be very useful in this respect as they help to maintain and develop the brand relationship with current customers.
- **Value** – the aim of the three previous aspects combined is to create and maintain brand value and sustain this over time in the eyes of the customer. The brand generates a continued commercial return for all the investment in brand awareness and development, and can also be used to finance the customer loyalty programme set-up costs and implementation.

## Price

### Appropriateness of pricing methods (A03)

There are many pricing methods that an organization can use. The method chosen will depend on several factors, including but not limited to:

- the organization's short-term and long-term objectives
- the degree of market competition the organization faces

- whether the organization is operating in a mass or niche market
- the characteristics of the external environment in which the organization is trading.

Pricing methods are used as part of an overall marketing mix to help guide a marketing strategy for an organization. Tables 4.5.3 and 4.5.4 (HL only) discuss the pricing methods included in the *Business Management Guide*.

Method or strategy	Description	Example of appropriate use	Other implications
Cost-plus (mark-up)	Price is determined by calculating the cost of an individual product and a profit margin is added.	This is used for expensive luxury items and one-off purchases in small niche markets (eg classic cars).	This is more of a pricing method rather than a strategy. Cost-plus pricing ignores market demand conditions.
Penetration	A firm tries to undercut its competitors with a lower price.	An established firm trying to enter into a new market will use this strategy. Virgin Airlines has offered lower prices on popular routes as an entry strategy. Ryan Air and EasyJet are other examples.	Substantial cash reserves are needed to support potential short-term losses. It may be difficult to raise prices once the firm is established without losing goodwill.
Loss leader	A product is sold below cost to encourage consumers into a retail environment who (it is hoped) will then purchase other items with higher margins.	The loss-leader approach is adopted by supermarkets that offer milk, bread or some soft drinks at below-cost prices.	This is not a strategy that can continue indefinitely as losses are made. Many loss-leader goods are rotated periodically to maintain consumer interest and so that a brand is not "hurt".
Predatory	A firm sets a very low price with the intention to remove competition from the market.	No-frills airlines such as EasyJet and Ryan Air have taken huge slices of market share from British Airways on some routes using this pricing strategy.	Setting very low prices can be illegal in some countries when it is classified as unfair competition. This strategy can lead to price wars and there have been some concerns over product quality and safety in the airline industry.
Premium	The price is set higher than the competition due to the perceived benefits and quality offered to the purchaser.	Expensive clothing or high-quality jewelry. Niche markets often use premium pricing.	Brand value could be enhanced through the higher price, and higher gross and net profit margins could be earned by the organization. Sales volumes are likely to be low. Marketing budgets will need to be used to maintain the positioning of the product in the marketplace.

Table 4.5.3: Different pricing methods (SL and HL)

HL

Method or strategy	Description	Example of appropriate use	Other implications
Dynamic	The use of variable prices given changes in market conditions.	Petrol stations change their prices when the price of oil changes due to economic or political factors, or other external factors. Some restaurants may offer "happy hour" prices on meals or drinks at various times of the working day. Uber use surge pricing during peak travel periods.	Depending on the customer's perception and the timing, dynamic pricing could be viewed as an opportunity or an irritation. Reducing prices when there is spare capacity is a sensible move and may allow an organization to earn a contribution to fixed costs even though it may not generate a profit (see below and chapter 5.5).

Competitive	A price is determined based on the price being charged by competitors. Also be referred to as "market pricing".	Used by industries or markets where there are many close substitutes/competitors. The casual dining or fast food industry is a classic example of where organizations use competitive pricing.	Increasing prices will be difficult if competitors do not also increase their prices. Reducing prices may give a short-term boost to revenue, but note below the need to consider price elasticity of demand. Competition pricing may mean that an organization must consider other methods of competing, such as product differentiation or finding new target markets.
Contribution	The price of a product covers the direct or variable cost only. There is no profit margin using contribution pricing, but the excess over the direct cost per unit can be used to contribute to the fixed overhead.	Multi-product firms may use contribution pricing to encourage customers to try new products (or problem children in the BCG matrix). For special or one-off orders, contribution pricing may be used to use up spare capacity.	Contribution can be used to calculate the break-even point, and it can be used to decide whether an organization buys in a component from another supplier or makes it themselves. See chapters 5.5 and 5.6 for more detail.
Price elasticity of demand	The aim of setting a price is to maximize revenue. Knowledge of the price elasticity of demand can be useful when looking to change the price of a product.  If the product is price elastic (quantity demanded is responsive to changes in price), then the product will be priced accordingly, and price cuts should be used.  If the product is price inelastic (quantity demanded is not responsive to price changes), then prices should not be cut and in some cases should be increased.	Transport companies (such as bus or rail companies) may charge higher prices during peak times of the day, eg before 9am or after 4pm. If demand is more inelastic during these times, then any increase in price will lead to an increase in total revenue.  Organizations which enjoy very strong brand loyalty, such as Apple, may increase their prices above those of the competition due to the inelastic nature of their products and services.	Table 4.5.5 shows the range of possible options/implications for an organization.

Table 4.5.4: Different pricing methods (HL only)

Price elasticity of demand	If organization cuts price	If organization increases price
Product is price elastic	Total revenue is likely to rise	Total revenue is likely to fall
Product is price inelastic	Total revenue is likely to fall	Total revenue is likely to rise

Table 4.5.5: Options/implications for using price elasticity of demand

## Promotion

### Above-the-line promotion (AO2)

Above-the-line (ATL) promotional activities are directed at consumers through mass media such as the cinema, radio, and television. These activities can reach many potential consumers at once, making the average cost per unit of above-the-line advertising small. Above-the-line activities attempt to build and maintain large-scale brand awareness.

However, organizations using above-the-line promotion are not able to receive immediate feedback from consumers about the effectiveness of the advertising activity.

### Below-the-line promotion (AO2)

Below-the-line (BTL) promotional activities are focused on advertising techniques that allow immediate consumer feedback, such as sales promotions in stores, public relations

exercises (where there is direct contact with customers), store coupons and competitions, and email advertising. The organization has some control over how the promotional activities are perceived and controlled.

Some of these methods of promotion can be successful and cost-effective for small start-ups that may not be able to promote using mass media.

Below-the-line promotional activities are highly targeted towards the appropriate market segment and can be adjusted if they are not having the desired effect to increase sales or raise awareness.

### Through-the-line promotion (AO2)

Through-the-line promotional activities combine both above-the-line and below-the-line activities.

Increasingly with social media and other online platforms, organizations can create an above-the-line method and then link to a below-the-line method. For example, a pizza takeaway service such as Dominos could create a YouTube video (ATL) and accompany it with a link to a coupon giving the viewer a discount on their next purchase (BTL).

### Above-the-line and below-the-line explained in more detail

We shall use the following criteria to look further at the benefits and limitations of different promotional techniques:

- Targeting – the ability of the promotional technique to target the right customers to avoid wasting the marketing effort.
- Reach – the ability of the promotional method to reach the widest audience possible.
- Frequency – how often the advertiser wants the message to be repeated.
- Cost – measured by average cost per viewer.
- Feedback – the ability to provide instant feedback to the business to gauge the impact of the promotional method.

Promotional technique	Examples and discussion
Broadcast media (ATL)	<ul style="list-style-type: none"> <li>• Includes media such as TV, cinema, and radio.</li> <li>• Can have a dramatic impact on a large audience (the average cost per viewer of advertising during major sporting events such as the Superbowl will be very low).</li> <li>• Cinema has a captive audience and can be segmented according to the film genre.</li> <li>• Can be too expensive for small businesses or new start-ups.</li> <li>• Not able to receive direct feedback.</li> <li>• Under threat from new technology.</li> <li>• The frequency of adverts can irritate some consumers.</li> </ul>
Printed material such as newspapers and magazines (ATL/BTL)	<ul style="list-style-type: none"> <li>• Allows close targeting as each newspaper has its own readership profile and audience.</li> <li>• Cheaper than TV to advertise.</li> <li>• High reach if the newspaper or magazine has a large readership.</li> <li>• Printed material can be used to inform and convey a lot of information.</li> <li>• Some highly specialized magazines focusing on a particular niche market could be considered BTL.</li> </ul>
Point-of-sale material and company newsletters (BTL)	<ul style="list-style-type: none"> <li>• Cheap to produce and immediate feedback possible if given out in store.</li> <li>• Can be targeted and updated quickly.</li> <li>• Visual impact is limited. Many flyers or newsletters may be discarded immediately if the consumer is not interested.</li> </ul>
Coupons, special offers, competitions (BTL)	<ul style="list-style-type: none"> <li>• Money-off/discount coupons can be very successful and are cheap to produce.</li> <li>• Direct contact with the customer.</li> <li>• Reach may be limited.</li> </ul>
Internet (ATL)	<ul style="list-style-type: none"> <li>• Inexpensive, with potentially unlimited reach.</li> <li>• Marginal cost is effectively zero.</li> <li>• Email notifications can be irritating for consumers.</li> <li>• Easy for consumers to delete unwanted emails.</li> </ul>
Sales promotions (BTL)	<ul style="list-style-type: none"> <li>• Need to be short term/infrequent or the customer will just wait for the next sale. They will not purchase products with higher margins at times when the sales promotion is not on.</li> <li>• Sales promotions need to be eye-catching to generate good word-of-mouth. There will be costs associated with preparing the retail outlet for the promotion.</li> <li>• Overuse may lead to consumer fatigue and scepticism.</li> <li>• Goodwill may be lost if an item is unavailable or the store becomes crowded (the “Black Friday” phenomenon in many countries being a case in point).</li> </ul>
Public relations/word-of-mouth (ATL)	<ul style="list-style-type: none"> <li>• Public relations is referred to as an uncontrollable method of promotion because even with the most tightly controlled media event, its success depends on the perception and reception of the message by stakeholders. This is not easy to measure.</li> <li>• Staging events to generate goodwill is not cheap and reach may be limited unless backed up by mass media support, such as coverage of the event on TV or radio, or in the printed media. This cannot always be guaranteed.</li> <li>• Word-of-mouth promotion is something that every company wants to have, but only if it is positive. Relying on social media to generate positive word-of-mouth promotion can be a precarious strategy.</li> </ul>

Table 4.5.6: Examples of ATL and BTL methods

Social media marketing as a promotional strategy (A03)

This topic is a difficult one to objectively assess as every individual will have an opinion on the role that social media plays in shaping a promotional strategy for an organization. However, every organization is likely to have a social media presence in some form to drive its promotional strategy. The focus of this discussion is to look at the role that social media marketing can play for an organization. Issues of data collection and ethical behaviour will feature in chapter 5.9.

The other important consideration is that social media is still evolving and by the time this study guide is published there will probably be new media platforms. This is one area of the Business Management syllabus that can rapidly become outdated.

Finally, the disadvantages of social media marketing are yet to be fully appreciated. Two critical documentaries – *The*

*Great Hack* and *The Social Dilemma* – present compelling arguments that social media may have several unwelcome ethical issues for stakeholders.

What we can say with confidence is that traditional methods of promotion, such as some of those in Table 4.5.6, have been disrupted by the growth of social media. The creation of new media technology has created both opportunities and threats for organizations.

The growth of the internet, and the proliferation of streaming and social media platforms, have given organizations many new ways to reach and target audiences at greatly reduced cost. Figure 4.5.8 shows some of the most popular social media platforms and their benefits and limitations when it comes to marketing.










	Facebook	Twitter	Pinterest	YouTube	LinkedIn	Instagram	TikTok
							
Demographics	2.7 billion users Ages 25–34	353 million users Ages 30–49 68% male	442 million users Ages 30–49 78% female	2.3 billion users All ages	740 million users Ages 46–55	1.2 billion users Ages 25–34	689 million users Ages 18–24
Purpose	Building relationships	News & articles; conversation	"Scrapbook-ing"	"How to", lifestyle, educational	News & articles; networking	Building relationship; conversation	Building relationships; conversation
Best for	Building brand loyalty	Public relations	Lead generation; clothing, art & food businesses	Brand awareness; lead generation	Business development; brand awareness	Lead generation; retail, food, entertainment & beauty businesses	Building brand loyalty & community
Downside	Limited reach	280 characters or less	Images and video only; narrow demographic	Resource intensive	Limited interactions	Images and video only	Videos only; very specific demographic

Figure 4.5.8: Comparing social media platforms  
Source: <https://aofund.org/resource/choosing-right-social-media-platform-your-business/>

  The social media landscape is changing. For example, prior to 2020, very few of us would have heard of TikTok as a social media platform. Yet by the end of 2021, TikTok was regarded as a serious competitor to YouTube and Facebook. TikTok has clearly been influenced by the "attention economy" issue, and showcases short attention-grabbing videos, produced by a range of individuals and organizations.

However, as we shall see, some of this new social media has also become a threat to stakeholders. Consumers are becoming irritated by spam email, the practice of "phishing" and frequent notifications. Clever machine learning opportunities and the "internet of things" (see chapter 5.9) are creating automatic product recommendations without the individual knowing how these recommendations were created.

In recent years, in keeping with our concepts of change and creativity, the promotional strategies and opportunities available to organizations have been increasing hugely. If we add in the increasing use of smartphone applications, one could argue that we are effectively seeing the emergence of a 24/7 culture of constant promotion.

 Question for reflection

Increasingly, organizations are using social media influencers to drive their social media presence. What are the challenges and opportunities for organizations of using well-known online celebrities in addition to other brand ambassadors such as famous actors or sports stars?

## Place

This element of the marketing mix is critical for businesses to get right, regardless of whether it is linked to products or services. The impact of Covid-19 has lifted "place" higher up in the thinking and marketing strategy of all organizations. If promotional strategies have been disrupted by the arrival of the smartphone and social media, then it is fair to suggest that in the post-Covid-19 world distribution will also be driven by new terms such as "contactless delivery" or "click and collect". Moreover, in common with traditional methods of promotion, traditional channels of distribution are under threat, especially the retail outlet.

This has been exacerbated by the arrival of new home delivery systems. Uber's shift from ride-sharing to home takeaway delivery was as a result of organizations changing the way they distribute their products, especially freshly made or perishable meals. Restaurants with only dine-in experiences have had to rethink their service models and become more creative.

### Distribution channels

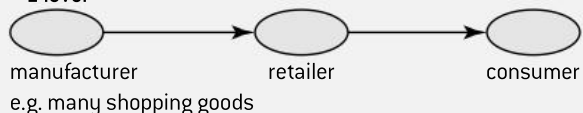
The channel of distribution describes how a good or service passes from producer to end user. The end user is usually a consumer, but we must not forget that we can also have distribution channels operating to industrial markets as well.

Several distribution channels are open to a producer. The channel chosen will depend on the nature and complexity of the good or service, and on whether the target market is a mass market or niche market.

#### Short or direct



#### 1 level



#### 2 level

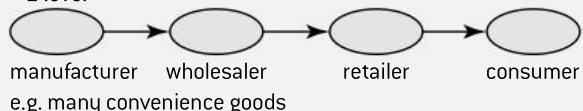


Figure 4.5.9: Channels of distribution

In Figure 4.5.9, distribution channels are influenced by the number of intermediaries. These include wholesalers, retailers, and agents. Depending on the number of intermediaries, distribution channels are termed short or long.

### Examples of appropriate channels

Baked beans are normally distributed via long channels. Wholesalers and retailers break down very large quantities of cans from the producer to take advantage of buying with economies of scale. The product is not complex and is easily transportable. This system of distribution allows baked bean manufacturers to target as many customers as possible (it is a mass market).

Industrial cranes for use in civil engineering are generally distributed via very short channels. The product is delivered by the producer to the industrial end user directly. The product is complex, difficult to move easily, and serves a very small niche market segment. Training, installation, and supervision may be required before the end user can successfully operate the equipment. The product will be very expensive and may require continued customer support.

### The role and importance of different distribution channels (A03)

Wholesaling and retailing are the traditional way of distributing FMCGs (fast-moving consumer goods). With large production runs and the possibilities of economies of scale, FMCGs are distributed to warehouses in bulk and then broken down into smaller quantities for retail producers. Naturally, there are purchasing and marketing economies of scale due to a reduction of per unit transport costs.

However, in some markets such as the real estate industry or the luxury car market, agents have been used to provide local knowledge or expertise to ensure a smooth exchange between buyer and seller. In the case of the real estate market, important legal procedures may require an agent to conduct the transaction. Agents are paid a commission on completion of work undertaken.

If a firm is looking to move into a new international market, it may be too expensive or risky to set up a distribution network in an untried region without local knowledge. A local agent can provide this at lower cost than setting up a new offshoring facility. Offshoring is considered in more detail in chapter 5.4.

Using an agent or intermediary with local knowledge can be an efficient way of establishing a market presence without spending large sums of money. There may also be cost savings for undertaking primary market research and local agents can provide valuable knowledge about the local culture and customs ("cultural intelligence").

As we shall see in the remaining elements of the marketing mix, the retail experience for many customers can be critical. We must also note that there is a crucial relationship between distribution channels and the supply chain (see chapter 5.6).

## People

As a service is intangible (you cannot take home the process of getting a haircut), the "people" element in the marketing mix focuses on the process of how the employee and customer interact to create a service experience.

The people element demands that employees must have ongoing customer service training to ensure that customer needs are met. Including after-sales service and maintaining

a relationship after the service transaction has been completed is also important.

### Importance of employee-customer relationships (A03)

As mentioned above, the new marketing mantra of 2021 is that the purpose of marketing is to find *and retain*

customers. The relationship between employee and customer has therefore become critical. For example, during the start of the Covid-19 pandemic, even though service-based organizations could not open physically in many countries, many employees worked remotely and kept in contact with their customers through social media.

We should note, however, that social media notifications trying to maintain employee–customer relationships can be intrusive, and there may be privacy concerns.

As we saw in chapter 2.6, we must also be alert to the fact that there are different cultural norms and values associated

with communication. If a service provider wishes to operate internationally, it should undertake “cultural intelligence” (CQ) research.

CQ research aims to discover the customs, values, backgrounds and preferences of consumers in any new markets an organization may wish to enter. CQ should not be considered simply as more market research on consumer tastes, but as a more systematic attempt to build a consumer and social profile of existing and new customers across a range of global markets.

We will return to this aspect in chapter 4.6.

## Processes

The process element in the marketing mix looks at how services are consumed and paid for. It is crucial in industrial markets when large sums of money are exchanged, or large service providers undertake work stretching over many months.

A good can be purchased in store and paid for in several ways, such as by cash, an electronic bank transfer, or credit card. Apple and Chinese social media giant WeChat also offer payment mechanisms.

When paying for some services, payment methods may be more limited or spread out over a longer period of time. A computer technician installing a new computer system for a company may take many days to do the job and is unlikely to be paid until after the work is completed.

The process element of the marketing mix is also associated with the way in which employee–customer relationships are created. For example, there will be processes for handling customer complaints, processes for identifying customer needs and requirements, and processes for handling orders and checking that these orders arrive on the intended date.



### Importance of, and changes to, delivery processes in marketing (A03)

Delivery processes are changing. Even before the onset of the Covid-19 pandemic, retailers were experimenting

with contactless payments and the marketing of services. For example:

- Some supermarkets have removed checkout assistants, so customers pay for their products at self-checkout tills.
- Some technology retailers using artificial intelligence have created “virtual assistants” who can advise on customer inquiries and requests.
- If you visit a website, you may be supported by an online bot.
- With over 90% of banking transactions being conducted via applications and smartphones, banks are changing their service delivery model, as we shall see in the next section on physical evidence.
- It is now possible to purchase petrol at the pump rather than walking into the garage to pay.

Inevitably there has been some criticism of these changes. The interaction between customer and employee can add considerable value in the marketing of services. Depending on the customer’s needs and wants, the marketing of some services needs to be carried out face to face.

It is interesting to note that Amazon has launched a chain of physical retail stores in shopping malls in the US. Given Amazon’s market leadership in the online retail space, this move surprised many stakeholders. But it may be a model which they introduce in some other international markets where the culture of face-to-face retailing is stronger.

## Physical evidence



Banking systems are undergoing change. Banks today look very different than they did a decade or so ago, as Figure 4.5.10 demonstrates.



Figure 4.5.10: Been to a bank lately?

### IB Learner Profile

Open-minded

With so many of their services now being offered online or through smartphone apps, banks have become more like living rooms: they are now discussion spaces rather than places where transactions happen. Some offer break-out rooms or creches to occupy children while their parents are discussing their financial arrangements.

### Importance of tangible physical evidence in marketing a service (A03)

Physical evidence is a critical component in the marketing of services. A physical presence is meant to reassure the customer that the service provider is competent and can provide value.

Some hairdressing salons can charge high prices for haircuts. The salon may include special lighting and music to provide

relaxing surroundings for customers. Physical evidence can help to reassure customers that the salon is competent and experienced. This can include in-store demonstrations, reviews, or testimonials from previous customers. Images of successful styles the salon has previously created could also be used. This physical evidence can be created in store, or presented in an online or social media space.

### Starbucks

Starbucks was one of the first service providers to understand the importance of physical evidence when they positioned the Starbucks brand as being the “third way”. Their intention was to create the perception that Starbucks was neither the workplace nor the home, but somewhere in the middle. Hence the term “third way”. Free Wi-Fi, jazz music and sofas became the norm in a Starbucks café to create a “softer” atmosphere where customers could relax.



The emphasis on physical evidence has no doubt been part of a competitive strategy by physical retailers. With greater competition from e-commerce, several retailers have tried to enhance the “retail experience” to lure customers back to the physical store and away from the internet.

Shopping malls are common in many parts of the world. Focusing on all aspects of the seven Ps marketing mix leads to a shopping experience that involves customers much more, with cinemas, food courts, children’s playgrounds, and other recreational activities. The intention is to retain customers long after they have finished shopping by providing additional services.

This has been taken to the limit in the UAE with one shopping mall – Mall of the Emirates – having its own indoor ski field. UAE also has the largest mall in the world by floor area – the Dubai Mall – which has its own indoor aquarium and ice hockey rink. The capital invested into these new malls is substantial and provides outstanding physical evidence, customer service and delivery processes.

However, service providers must always be in fear of the changing online and retail landscape. In Sydney, Australia, the opening of a new mall was “sabotaged” when a perfectly legal billboard was created and displayed nearby by an online competitor on the mall’s opening day. It contained the following ominous message: “Browse in the mall – buy it on eBay.”

### Appropriate marketing mixes for a particular product (AO3)

In chapter 2.2, we highlighted the common belief that an appropriate structure for an organization is one which allows it to achieve its objectives.

The same argument can be applied to creating an appropriate marketing mix for a particular product. An appropriate marketing mix is one which allows an organization to achieve its marketing aims and satisfy the needs of its target market. These marketing aims are normally decided after the marketing planning process has been carried out.

We will discuss appropriate marketing mixes using a theoretical approach, then provide an example based on two organizations looking to satisfy two target markets.

Appropriate marketing mixes need to consider the costs of marketing planning activities (see chapter 4.2), the time frame under consideration before a change might be needed (such as an extension strategy), and of course whether the mix is successful in meeting its marketing aims. Careful and regular monitoring of the mix will be required.

### Theoretical approach

An appropriate marketing mix should also aim to satisfy the needs of the target market:

- For a marketing mix to be appropriate, the product at the core of it needs to satisfy the consumer needs and wants of the target market.
- The price should reflect the value the customer places on the product. It should be sensitive to potential competition while allowing an organization to meet its marketing aims.
- There must be a combination of above-the-line and below-the-line promotional methods, which raise awareness of the product in consumers’ minds and are appropriate to the target market.
- There must be a distribution channel (place) which allows the consumer to purchase the product.

For services, we add the following three Ps which again need to be appropriate to the target market:

- People – customer service should be linked to the needs of the target market. If the product is aimed at a niche market or has some new technological innovation, then the initial customer experience with the employee will be critical.
- Process – delivery and payment should be considered to allow for smooth payment for the service.
- Physical evidence – the tangible retail or service experience should be positioned to meet the perception of the service being offered and the needs of the target market. For example, expensive boutique retail outlets such as Tiffany & Co. employ strategies such as having security guards outside the outlet and only letting a limited number of customers in at any one time. It all adds to the image of exclusivity.

### Compare and contrast Starbucks and Storyville

Starbucks is the market leader in the delivery of high-quality coffee in the US and in many international markets. Storyville is an ethical coffee provider located in several US cities.

Starbucks has global reach and positions itself as the market leader in the distribution of quality coffee and

related drinks. They use Fairtrade coffee and have a commitment to sustainability concerns. Their target market is as wide a range of customers as possible.

Storyville’s mission is to provide high-quality coffee experiences and to raise awareness of the issue of human trafficking. The organization provides millions of dollars each year to the International Justice Mission. Storyville’s target market are customers driven by strong social values.





Element in the seven Ps marketing mix	Starbucks	Storyville
Product	High-quality coffee and a diverse range of beverages. Some local product differences depending on the international market they operate in.	Two brands of coffee supported by B Corporation certification.
Price	Price leadership with premium pricing.	Competition-based pricing.
Promotion	Global marketing opportunities, product placement in films. Above-the-line and social media strongly feature.	Mostly below-the-line but social media and word-of-mouth promotion are important. In-store demonstrations and the use of social media influencers.
Place	Retail outlets in 83 countries. An extensive supply chain linked to 30 countries to source its beans.	US-based only distribution for coffee beans. Only a handful of retail outlets in US cities.
People	High-valued training model focusing on respect and well-being. Advocates a living wage for frontline staff who interact with customers.	Customer service training is critical for providing outstanding service.
Process	Online and in store.	Online and in store.
Physical evidence	Standardized design with some local variations in products and branding.	Customized physical evidence. The cafés are designed to not look like traditional cafés.

**Table 4.5.7:** Starbucks and Storyville marketing mixes compared

We can see that there are some similarities and differences between the marketing mixes. The important learning point is that the marketing mix

for each product/organization is appropriate to the target market.

### Revision checklist

- Marketing is one of the longest units in this study guide, with a considerable amount of business content to understand even before we try to explain and discuss appropriate marketing mixes for a particular product or service.
- The seven Ps marketing mix is at the centre of this business content. But we should also note that there are other elements to study such as market orientation and planning, the role of sales forecasting (for HL only), and the challenges and opportunities of collecting market research.
- The first four Ps of the marketing mix – product, price, promotion, and place – apply to products. These elements need to be tailored to a target market for the mix to be effective. Each product is likely to have a unique combination of these four elements.
- The additional three Ps in the marketing mix apply to services. They focus principally on the relationship between the consumer and the service provider, the process of service delivery and payment, and the physical space where the service is created and offered directly to the customer. These additional elements also have to meet the needs and requirements of the target market in order for the whole marketing mix to be effective.
- Increasingly, instead of finding an existing need and filling it, marketing processes are now geared towards anticipating or even creating new needs or identifying unmet needs through market research.



## 4.6 International marketing (HL only)

### Guiding question

- What are the opportunities and threats posed by entering international markets and operating internationally?

## Methods of operating internationally

HL

Before we begin our discussion of the opportunities and threats posed by entering and operating in international markets, it is important to understand the methods by which organizations can undertake this.

### Organic growth

There is no doubt that entering an international market involves some degree of risk. One way would be for a business to "go it alone" and try to grow organically into international markets. This is called organic growth (see chapter 1.5).

Organic growth can be expensive and challenging – even if the organization carries out extensive market research and cultural intelligence (CQ) to make the transition into a new market smoother, there are significant costs. Of course, the potential profits from such a move could be considerable.

However, given some of the CQ issues (which we will discuss further below), a "partnership" or the involvement of local entrepreneurs to share the financial burden of entering a new market could be one way to reduce the risk.

### Franchising or licensing

Subway has driven its enormous growth by franchising to enter over 104 countries outside the US. The organization has been able to take advantage of local enterprise and capital and share the risk of developing brand awareness with local entrepreneurs.

Licensing is a scheme like franchising. The intellectual property of a product or service (such as the brand, logo or production method) is licensed to an organization in an overseas market so that the local producer is allowed to produce the product or deliver the service on behalf of the global parent company.

An example of how an organization that operates internationally can use licensing as a method of entry into new markets with reduced cost can be found in the soft drink industry. Global organizations such as Coca-Cola or PepsiCo can franchise part of the supply chain process

to local operators, such as the bottling of the soft drink. The global organization retains the intellectual property of the soft drink, such as the essential flavourings used in production, but through a licensing scheme the local operator provides the bottling equipment and other ingredients.

### Joint ventures (with equity) and strategic alliances (without equity)

There are two ways to share the risk of entering international markets. The first is by creating a joint venture, with some ownership-sharing through an equity deal. The other is by joining forces, via a strategic alliance, with an organization that may already be operating in the international market of interest. There is no change in the ownership structures.

Forming a strategic alliance with a competitor who is already in an overseas market allows for the sharing of local cultural intelligence. This could lead to a much faster entry into an international market.

To test the commitment of this new partnership, some joint ventures planning to enter into new international markets require that each partner take an ownership or equity stake. In a voluntary strategic alliance without equity, there may be some fear that if the early signs of entering the international market are not promising, one partner could pull out, jeopardizing the whole entry strategy. The equity joint venture method gives some reassurance that the move into an international market will be sustainable.

### Acquisition

A relatively straightforward way for an organization to start operating internationally is to acquire a business already operating in that market. This is inorganic growth.

Acquisitions are likely to be subject to government approval and local anti-monopoly laws that exist in the overseas market. This method of entry is also likely to be expensive due to the cost of acquiring the overseas company.

## Opportunities and threats posed by entering international markets (A03)

HL

### Opportunities created by operating internationally

We can highlight some of the following opportunities:

- The growth and spread of globalization have led to cost savings, which can be made by outsourcing some or all parts of the production process. Operating internationally can lead to economies of scale with no reduction in quality. This point is developed further in chapter 5.4.
- Linked to this is the idea that offshoring and outsourcing can also provide an opportunity to gain knowledge of these markets at a relatively low cost, before committing to fully entering the market. Thus, offshoring helps to minimize the financial risks of entering a market.
- Another benefit is that by gaining local knowledge of new overseas markets, organizations can become more culturally aware. This awareness might be useful when promoting products or interacting with customers.

- The Ansoff matrix growth model strongly advocates market development or differentiation to define a new competitive strategic position. Both could be achieved by operating internationally.

### Threats when operating internationally

The threats from moving into an overseas market can be classified as "weak" or "credible".

- Weak threats are defined as those which could be overcome with some careful management planning. If we apply Lewin's force field analysis, we could argue that these weak threats are restraining forces which could be reduced in influence.
- Credible threats need to be considered in some detail and may in some circumstances be beyond the influence of the organization. Senior management may struggle to overcome these threats and will have to take them into account when making a final decision as to whether to operate internationally.

### Weak threats

*The firm will have to be aware of and account for language barriers when operating internationally.*

It is unlikely that a firm would not operate internationally just because senior management were not fluent in the local language. It would be expected that an organization would hire local agents or translators to minimize language concerns.

*The product may not be successful in this new market.*

This could be true for any market and not just an international one. The organization would be expected to conduct extensive primary and secondary research before entering the market, to understand the competitive nature of it, either by using SWOT or STEEPLE analyses. They would also carry out considerable market planning.

The Ansoff matrix or Porters' generic strategies do not assume that all market development or cost leadership strategies will be risk-free. Operating internationally will carry significant risks.

*There will be competition from local producers.*

Again it is assumed that the organization thinking of entering a new overseas market will do its market research, for example by carrying out a STEEPLE analysis.

Some form of local competition is inevitable. If an organization is concerned, it should be able to determine the needs and wants of existing customers in the new market, as well as whether a market gap exists and whether the market can grow significantly beyond its current size. A cost leadership strategy, as suggested by Porter, will also act to differentiate the organization's products from its competitors.

### Credible threats

These are threats which an organization may struggle to overcome if it decides to operate internationally.

*There may be legal constraints on operating in an overseas market.*

A firm entering an overseas market must ensure that it complies with local rules and regulations regarding the conditions of work and employment (particularly if it wishes to bring in expatriate managers on work visas). It must also comply with any minimum wage legislation or other human resource management issues.

Organizations will need to consider local taxation rules (such as corporation tax and indirect tax) when operating internationally. There has been a great deal of discussion in the media about the tax avoidance schemes that some multinational corporations have been using to reduce tax liability. However, operating internationally implies that multinational firms will comply, or they are likely to face criticism from a range of stakeholders.

*There may be economic, political, or social instability in the overseas market (STEEPLE factors).*

Organizations looking to operate internationally will need to be aware that some countries have launched "buy local" campaigns in favour of locally produced goods rather than imported products. This has become more common since the onset of the Covid-19 pandemic.

We must also note that operating internationally involves risks with exchange rate volatility. Operating internationally means that organizations will need to set up international payment transfer mechanisms.

Although very large firms can protect themselves from currency fluctuations by buying and selling forward in the financial markets (known as the "futures" or "derivatives" market), there is still a danger for firms moving into new markets that financial gains could be lost when funds are repatriated from the overseas market back to the country of origin, if exchange rate volatility is present.

However, perhaps more significantly, economic recessions can lead to political instability in some overseas markets as governments struggle to tackle the growing list of economic and social problems created by the Covid-19 pandemic and developing issues such as climate change. Political instability, as well as social unrest, can strongly impact a firm's ability to be successful in a new international market.

The impact of Brexit and the withdrawal of the UK from the European Union is just one example of an economic and political credible threat to an organization looking to operate internationally. Five years after the 2016 referendum, the confusion over trade deals and the movement of goods, services and capital remains. At the time of writing there is still considerable uncertainty as to what the future of the European market looks like, and this level of anxiety will be a key driver for organizations looking to operate internationally in these areas.

## IB Learner Profile

Inquirers ?

We noted in chapter 4.5 that Starbucks enjoys market leadership in many international markets. However, even with all its financial wealth, experience and global brand awareness, Starbucks has struggled in some territories.

China and New Zealand are two examples where success has not been straightforward. Starbucks struggled in New Zealand to such an extent that the organization was acquired by a private equity firm. Starbucks in New Zealand is not managed by Starbucks and has scaled back its operations considerably.

You are encouraged to find out for yourself what happened with Starbucks in Asia.

## Revision checklist

- Operating internationally presents both opportunities and threats for an organization.
- This chapter has considered both the financial and non-financial aspects of deciding to enter into new international markets.
- The opportunities for market growth and increased global market share are considerable – assuming that the organization undertakes thorough market research and cultural intelligence activities to understand new target customers who may be unfamiliar with the products or services the organization offers.
- Threats to operating internationally are classified as either weak or credible. Organizations could overcome weak threats with some extra investigation or planning. Credible threats arise when economic, social or political factors in new international markets inhibit growth or limit the financial opportunities. The Covid-19 pandemic has also raised concerns about the costs of operating in international markets.



# 5.1 Introduction to operations management

## Guiding question

- What is the role of operations management?

## Introduction

To quote from the 2014 edition of the *Business Management Guide*:

*"In this unit, students return to the fundamental rationale of business management: to make goods and services that meet consumers' needs and wants. Without efficient operations, leading to products and services customers are satisfied with, success in the other business functions is unsustainable."*

For organizational decision-making, the importance of operations management cannot be overstated. Faced with shorter product life cycles and an explosion of choice, organizations are revisiting lean production, total quality management, outsourcing and supply chain management. Sales revenue growth is under threat. The renewed interest in operations management is understandable given the need to boost profits through cost reduction and operational efficiency. This is also necessary to satisfy the growing demands of shareholders for greater profitability.

Three newer developments have also impacted on operations management:

- The Covid-19 pandemic has shifted attention onto the problems of supply chain management.

- Environmental sustainability has played an increasing role in driving business models and operational choices – hence the interest in circular business models.
- Information systems are increasingly being integrated into operations management. This is a very new topic for the Business Management course and will be discussed in more detail in chapter 5.9.

An excellent resource for this unit on operations management is the film *The Founder*, which features Ray Kroc's attempts to transform McDonald's from a successful local restaurant into a global franchise. The film provides some good illustrations of the operations methods discussed in chapter 5.2 (especially batch production) and production planning (covered in chapter 5.6). You are encouraged to watch it.

McDonald's is also used as a case study example with respect to contingency planning in chapter 5.7, and it features again in chapter 5.8.

## The role of operations management (A02)

Operations management is vital. Without the process of transforming factor inputs into outputs for the market, a business would not exist.

Figure 5.1.1 illustrates the operations management process of transforming inputs into outputs.

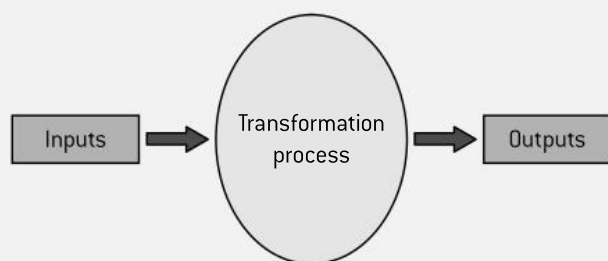


Figure 5.1.1: Transforming inputs into outputs

### Operations management in organizations producing goods and services

How an organization chooses to produce goods and services via this transformation process will depend on a range of factors which will be developed through this unit.

A business could choose to create and manage the means of production itself through the purchase of capital

and revenue items, as identified in chapter 3.1. The key advantage of this is that the business would have complete control over the operations management process. But of course this would be costly to set up and time-consuming to establish before final goods and services could be produced. Alternatively, a business could choose to take advantage of the opportunities made available by improved technology and globalization, and decide to allow an outside organization to produce the whole goods or the component parts for them. This is the process of outsourcing and it will be discussed in chapter 5.4.



### Operations management and sustainability

Increasingly, with growing scrutiny from stakeholders such as pressure groups via social media, the transparency of organizations in their operations has become critical. External stakeholder concerns about the exploitation of both human and natural resources, in addition to the huge profits earned by some corporations, have led to calls for an additional line of financial reporting to monitor the operations of organizations, especially the largest ones. This has been called the "triple bottom line" (see Figure 5.1.2).

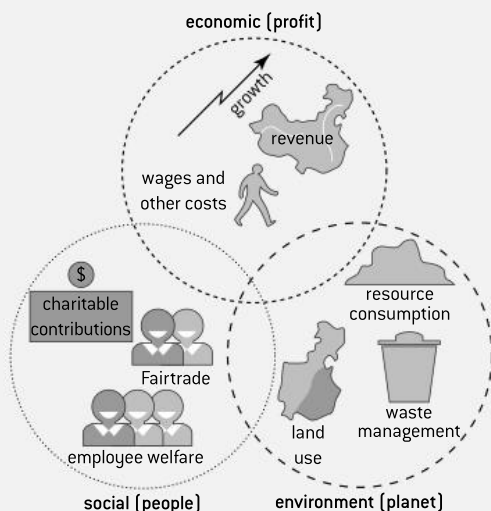


Figure 5.1.2: The triple bottom line

We discussed this in the Introduction on page 10 but it is worthy of review. The intention behind the triple bottom line is to note that organizations have a responsibility to people and planet, as well as profit. The operations management connection is that given the scarcity of resources and the need for environmental sustainability, organizations need to ensure that in addition to profit they consider the “wider” picture of their economic activity, as Figure 5.1.2 clearly shows.

Although not all organizations are required to report their “triple bottom line” given the wide range of global accounting and reporting conventions that exist, it is argued that there are compelling financial and social marketing reasons for reporting a business’s wider commitment to the community in which it operates.

## Circular business models

The increasing awareness of environmental concerns has led to the development of a new economic system known as the circular economy, which in turn has led to the creation of a circular business model. There are several definitions of the **circular economy**, but at the centre there are four characteristics that have become known as the 4R framework, which influence circular business models: Reduce, Reuse, Recycle and Recover.

The primary goals of the circular economy and thus the circular business model are to create sustainable development, environmental quality, economic prosperity and social equity, as well as to consider future generations.

Each organization will have a slightly different circular business model. The *Business Management Guide* includes five different versions:

- Circular supply model
- Resource recovery model
- Product life extension model
- Sharing model
- Product service system model

A useful way to understand circular business models is to look at some examples.

## Ikea's circular economy model

Ikea, which is a multinational organization that we looked at in chapter 1.6, has created a hugely successful home furniture and lifestyle business model. For many years, the focus of Ikea's business model was to reduce costs through allowing customers to select furniture in stores and online, pick up in their vehicles and assemble it at home.

A circular business model was introduced in 2021. Ikea built new supplier relationships based on their sensitivity to environmental sustainability. The company introduced a new tool – the e-Wheel – that allows products to be assessed for their environmental impact. Ikea also began to investigate sustainable supply chains in India, for example using renewable resources such as bamboo, banana fibres and sugar cane. Ikea has begun to win awards for its circular business model.

## Starbucks' commitment to environmental sustainability

As we saw in the two SWOT analyses in the Introduction, Starbucks faces many external threats, but it has maintained a strong, ongoing commitment to sustainability. This includes:

- Reducing carbon emissions, waste output and water usage.
- Using more plant-based foods and recyclable cups.
- A commitment to its 18,000 business partners through its “Greener Apron” project to protect the environment.

Read the article “5 things to know about Starbucks new environmental sustainability commitment” on Starbucks’ “Stories & News” website to learn more about Starbucks’ circular business model.

### Revision checklist

- Operations management is concerned with the production of goods and services. Inputs, such as raw materials, are transformed into outputs, such as finished products or services.
- Given growing competition and the trend towards shorter product life cycles, organizations are increasingly looking to use operations management to boost efficiency and thus profitability.
- The reduction of waste and the ability to reuse and recycle have become critical parts of the circular business model.
- Organizations are reporting their commitment to the triple bottom line, which implies that the impact on people, planet and profit are all taken into consideration when reporting financial performance.

## 5.2 Operations methods

### Guiding questions

- Which operations methods can an organization use to produce goods and services?
- What is the most appropriate method for an organization to use?

### Production methods (A03)

Table 5.2.1 compares the features and applications of each method of production.

Production method	Description	Examples
Job	This is the production of a one-off project built to specific customer or industry specifications.	The building of a ship or production of a film, or a house which is built specifically to customer requirements.
Batch	Items are produced in consignments (batches) and undergo a part of the production process together. The whole consignment is then moved on to the next stage and another task is performed.	Carefully planned groups of products with slight modifications to customize batches. Two good examples are bread making and clothing. Batch production allows for product variation such as wholegrain or brown bread, or different-coloured T-shirts.
Mass/flow	This is a continuous mass production process. It is similar to batch production but the consignment moves from one stage of the process to the next without stopping.	The car industry with its mass-market car production. (Note that luxury cars such as those made by Ferrari are usually produced by the job method.)
Mass customization	This is large-scale production based on mass production, with production quantities in the millions. Mass customization allows for some flexibility and personalization of products which is not available to mass production.	Large-scale food processing. Fast-moving consumer goods (FMCGs) such as food items in a supermarket are usually produced in large batches which allow for some customization, such as low-sugar baked beans, spicy baked beans or other variations.

Table 5.2.1: Features and examples of different methods of production



#### McDonald's

As we mentioned in chapter 5.1, the film *The Founder* looks at the growth of the McDonald's franchise model under the leadership of Ray Kroc. This film has some excellent scenes regarding the "Speedee" production method created by the McDonald brothers that effectively changed the way in which hamburgers were produced, or to be more accurate "assembled".

The Speedee production method is a combination of batch and flow production. Batch production can be a difficult concept to explain, and seeing it in action visually in the film is a good way to develop greater understanding. The McDonald brothers experimented with several different production systems before they arrived at the system which McDonald continues to use even in 2021. The McDonald brothers showed the same resilience and commitment which Harry Beck demonstrated when designing the London Underground Map (see page 12). Creativity requires patience and determination.



## The most appropriate method of production for a given situation

We can draw some conclusions from Table 5.2.1:

- **Job production** lends itself appropriately to niche markets, as production quantities are very small. Niche markets are demanding for producers as customers may have specific requirements or ask for specific modifications not catered for by batch or flow production. However, if valued by the customer, this small-scale customization can be a point of differentiation for small businesses.
- **Batch production** allows for some flexibility and the potential to modify each consignment or batch, making it possible to customize larger production runs. Thus, batch production can avoid the problems of standardization, which is a feature of flow production. Batches can also be "made to order" for customers in reasonable quantities, allowing some economies of scale not available to job production. This will have an impact on the final price charged to customers.
- For mass markets with large and mostly predictable sales through repeat purchases, **flow production and mass customization** provide the most cost-effective methods of production. Amazon is a market leader in the online retail space due partly to its ability to recommend repeat purchases and offer customers a range of potential options/variations. This is one aspect of artificial intelligence and algorithms which has been built into its operation management models, and is developed further in chapter 5.9.

Significant economies of scale can be obtained from flow production and mass customization, but this requires investment in large-scale capital items such as machinery and technology.

HR management and technological issues can be considerable in a flow production environment.

Coordinating, monitoring and organizing this production is an important task. Organizations will need to carefully plan to avoid the possibility of diseconomies of scale. In chapter 5.6 we will look at two Business Management tools which can assist with this coordination and monitoring process.

A summary diagram that analyses the different types of production is called the product-process matrix. It is a useful tool to compare appropriate methods of production for a range of products and services (Figure 5.2.1).

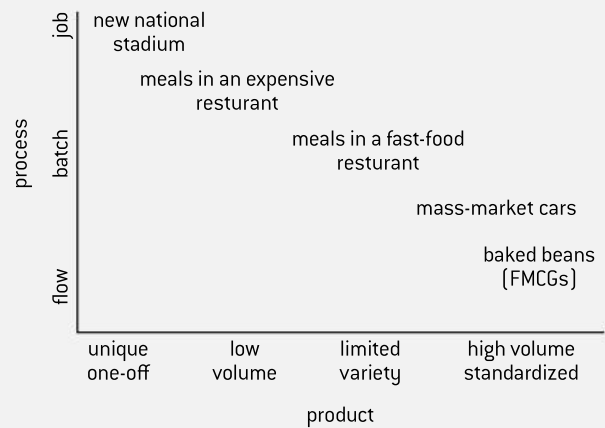


Figure 5.2.1: The product-process matrix



### Question for reflection

Even though McDonald's have used batch production to great success globally, they are now offering more local customization. It is possible to create your own burger meal by adding ingredients in-store. McDonalds also offer local customization such as the Teriyaki Burger in Japan or M Burger in France.

Can a globalized organization such as McDonald's really be localized?

## Revision checklist

- There are several different production methods available to an organization. These include job, batch, mass/flow production and mass customization.
- A critical factor in deciding which method is appropriate is the size of the mass or niche market in which the organization operates.
- There are increasingly important connections between operations methods and information systems. The use of information technology is an important factor in deciding what should be produced.

## 5.3

## Lean production and quality management (HL only)

### Guiding questions

- What is meant by less waste and greater efficiency?
- What is lean production and how can this impact on an organization?
- What are the features of cradle-to-cradle design?
- What are the features of quality control and quality assurance?
- What are the important methods of managing quality?
- How does lean production and total quality management impact on an organization?
- What is the importance of national and international quality standards?

## Introduction to lean production and quality management

HL

Many organizations now focus on reducing costs and improving efficiency in the production process. In some industries and markets, cost reduction may be *the* competitive strategy to employ.

In chapter 5.1 we learned about the introduction and development of circular business models. These are designed around the 4R framework (see page 116) to build in a new environmentally sustainable approach to operations management.



One challenge for organizations of this move towards lean production and cost reduction is to maintain the highest quality standards for the finished product and consequently retain brand value. The focus on lean production raises several important questions:

- Is a continued focus on cost reduction sustainable given the existence of scarce resources?
- Is it ethical to use cheaper raw materials in the production process to maintain quality standards?
- What if the final product fails to live up to consumer expectations?

## The features of lean production (A01)

HL

Lean production can be summarized as follows:

- Lean production is about doing more with less (hence the word “lean”): less time, inventory, space, labour, and money.
- “Lean” is shorthand for a commitment to eliminating waste, simplifying procedures, and speeding up production.
- The aim of lean production is to be as efficient as possible in the production process.

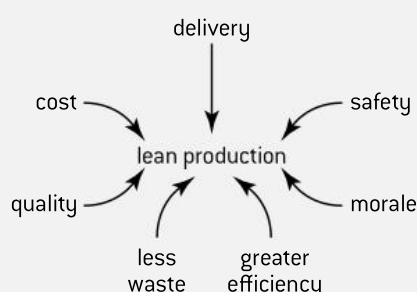


Figure 5.3.1: The seven areas that drive lean production

### Less waste and greater efficiency

As we saw from chapter 5.1 and the circular business model, the reduction of waste is an important element in the 4R framework. Operations management under lean production should be strongly influenced by the need to reduce waste in the production process.

“Efficiency” is a business term which is harder to define. There are several possible interpretations. For example, an economist may use the lowest possible unit or average cost of production for an organization as a measure of efficiency. An accountant may use a reduction in debtor days or increasing stock turnover as a measure of efficiency.

Referring back to the idea that operations management oversees the transformation of inputs into outputs, we may define efficiency as the method which achieves this transformation at the lowest possible cost per unit without compromising quality standards.

## Methods of lean production (A02)

HL

Lean production should be regarded as a “philosophy” of operations management that incorporates several theoretical and statistical contributions from Lord Deming – one of the founding fathers of quality control and total quality management (TQM). We will return to Deming’s work later when we introduce quality assurance and TQM. Lean production methods are also strongly associated with Japanese car manufacturers – especially Toyota – and Japanese management principles in general.

### Continuous improvement (kaizen)

Kaizen is the Japanese word for the concept of **continuous improvement**. This is at the centre of lean production and TQM.

Kaizen (continuous improvement) includes the following features:

- The organization’s goal should be to introduce small, incremental changes to operations to improve quality.

- Kaizen as a philosophy should be extended to include continuous improvements in other functions of the organization, such as improving customer service.
- The objective of continuous improvement is to produce products that have zero defects, and to eliminate waste.
- Kaizen does not assume that mistakes will not happen, but aims to minimize them as far as possible.
- To successfully monitor and implement continuous improvement, statistical control and data collection need to be rigorous. Kaizen uses a scientific approach to data management.
- Kaizen’s philosophy requires that managers and employees are willing to change. Empowerment of the employees in the organization is critical.
- For kaizen to be implemented successfully, regular on-the-job and off-the-job training is required.

### Just-in-time

- As part of a commitment to lean production and the reduction of waste, just-in-time (JIT) allows organizations to minimize their amount of stock, which reduces the costs of holding stock.
- With JIT, components are delivered at the required moment in the production process. They are often outsourced: manufactured by another organization or third party to order.
- The outsourced firm will hold stocks of components and materials subject to the prevailing level of demand. Only the absolute minimum is held. The organization using these components in their production process also aims to hold zero stocks.

JIT requires excellent communication and strong relationships between the manufacturing company and the outsourced company supplying the components.

In the car manufacturing industry, for example, component parts are delivered to the factory in real time (that is, just as they are about to enter the production process). In some cases, suppliers of components may be on call 24 hours a day to ensure that there are no delays. In return, many suppliers are given exclusive contracts to supply raw materials.

As a component part may arrive in the flow production process "just in time", suppliers with JIT contracts are also responsible for ensuring quality control and assurance, with zero defects. Passing the responsibility for quality control to a third party may be a concern for some organizations.

## Features of cradle-to-cradle design and manufacturing (AO2)

HL

*There are links between cradle-to-cradle design and the circular business models explained in chapter 5.1.*



In an era of increasingly scarce resources and the race to fulfil unlimited wants, concerns have been raised about the oversupply of products that are now taking up space in landfill sites around the world.

Linked to the triple bottom line and an organization's responsibility to people, planet and profit (see chapter 5.1), cradle-to-cradle design takes the ecological angle to a deeper level. It reminds us that the issue of the ever-growing waste that corporations produce needs to be incorporated into operations management decision-making.

Cradle-to-cradle manufacturing implies that a product will be designed and produced in such a way that at the end of its useful life, the product can be entirely recycled. In fact, the phrase "cradle to cradle" infers that once a product is

ready to be recycled it can be transformed into a completely new product.

The Cradle to Cradle Products Innovation Institute rewards products with a Cradle to Cradle certification if they are assessed and found to be safe, responsibly made and circular (in that they are part of a circular economy; see page 116). Products are assessed across five categories:

- material health (the product is safe for people and the environment)
- product circularity (the product enables a circular economy)
- clean air and climate protection (the product is made in a way that promotes renewable energy and clean air)
- water and soil stewardship (the product is made in a way that promotes clean water and healthy soils)
- social fairness (the product is made in a way that respects human rights).

## Features of quality control and quality assurance (AO2)

HL

There is a slight difference between these two terms:

- **Quality control** is a process which focuses on the inspection of a product and attempts to identify defects.
- **Quality assurance** is a process which is created to prevent defects from occurring in the first place.

### Deming, Japanese management thinking and quality assurance

Although the Japanese have been rightly applauded for achieving outstanding levels of quality in the production of consumer goods, the original idea for adopting a total quality management (TQM) philosophy came from an American statistician, W. Edwards Deming. Deming was at the forefront of a major change in thinking about approaches to quality and he is still revered in Japan where his ideas were implemented.

- Deming rejected mass inspection by one individual department assigned to this task (the more traditional method of quality control).
- Deming argued that quality should be built into each stage of the production process to allow quality assurance to be present. This should be analysed carefully through the use of statistical methods.

- Training should be continuous and widespread for all workers to allow them to undertake quality inspections. Quality circles should be set up to allow an additional check on this process.

Deming called for a PDCA cycle of continuous improvement:

1. Plan (find the right data, analyse the problem, plan the solution)
2. Do
3. Check
4. Act (modify process as necessary)

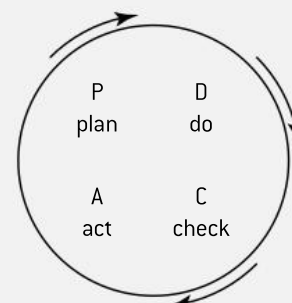


Figure 5.3.2: The PDCA cycle

## Methods of managing quality (A02)

HL

### Quality circles

One central element in the TQM process is the idea of quality circles. These are created for employees and management to work together in project teams to identify causes of poor quality or analyse why defects/faults may be occurring.

For quality circles to be successful, hierarchical barriers within an organization should be removed to allow discussions to take place to solve problems and not to apportion blame. Employees involved with the production process should work alongside senior managers.

Quality circles have been credited with leading to empowerment in employees, improved motivation, and increased productivity.

For Toyota, successful quality circles have saved the organization billions of dollars in efficiency gains. There is evidence that quality circles have increased productivity in a range of countries and cultures including Saudi Arabia and the United States.

It is interesting to note that individual workers in the quality circle are normally not financially rewarded for their suggestions through bonuses or commission. In keeping with the spirit of creativity and Harry Beck from page 12, with kaizen and TQM, the solving of the problem becomes the critical motivator.

### Benchmarking

Another approach to quality management or quality assurance is the process known as benchmarking. The idea behind benchmarking is that an organization will try to "benchmark" (align or measure) their operation management process, customer service and marketing, or human resource management against the market leader in its industry. Based on this knowledge, the organization then models their own behaviour on what could be industry best practice.

Benchmarking has several critics. At a basic level, one argument put forward is that benchmarking represents a poor use of management time. Why spend time thinking about your competitors when you should be focusing on the strengths of your own company?

Next, there is a philosophical criticism that all benchmarking can do is make all companies look the same, leading to similar strategic positions and therefore a distinct lack of differentiation. Not surprisingly, on this point Jack Trout is unequivocal:

*"Benchmarking doesn't work because regardless of a product's quality, people perceive the first brand to enter their mind as superior. When you opt to benchmark a product and become a me-too, you are a second-class citizen."*

Source: Trout and Rivkin (2008)

### Total quality management

We noted above Deming's contribution to the idea of total quality management. TQM is a philosophy of management thinking that argues quality control, quality assurance and continuous improvement should be at the centre of all stakeholders' involvement in operations management. The customer is the critical stakeholder, and it should be the role of TQM and kaizen to continuously strive to meet customer expectations of quality. TQM should be present in all aspects of operations and extends to employees, managers and suppliers.



### Question for reflection

If TQM is such a powerful philosophy, then why is it that all organizations involved in operations do not follow it?

And if all organizations follow TQM in the same industry or market, does this in effect eliminate any competitive advantage which one firm may achieve?

## The impact of lean production and TQM on an organization (A03)

HL

Both lean production and TQM have important implications for organizations and their operations management, as well as their organizational culture and structure, leadership styles and even methods of non-financial motivation.

TQM presents challenges and opportunities for senior management. Traditional autocratic leadership styles, with strict levels of hierarchy and accountability, are not appropriate for the successful implementation of TQM. Organizations have to ask whether senior management are willing to adapt and give up some of their power and authority over final quality control.

The importance of both on-the-job and off-the-job training cannot be underestimated for the successful introduction of lean production and TQM, and this will require financial resources and time to implement.

Deming's scientific and data management work on quality control was initially overlooked in his own country, the US. It was only when the Japanese rate of labour and capital productivity soared using TQM that the US finally took notice. Unfortunately, for some US car manufacturers it was too late and Toyota, Nissan and Mazda began to eat into US market share. They continue to do so. Influenced by TQM, their brand loyalty and USP for vehicle reliability remain.

Now you have read through this chapter, the role and importance of kaizen and TQM may seem intuitive. It would appear obvious that the detection and prevention of defects *before* they occur should be a priority, and quality should become every employee's responsibility.

If the quality of a product is only checked once it is finished and a problem is found, it may be too late to fix the problem without scrapping the whole product. This would seem to be a significant waste of resources.

Another important question to ask is what if imperfect products slip through quality control and then are present in the marketplace? The organization may then have to deal with a much bigger crisis (see chapter 5.7) and this could have a significant impact on the perception of the brand and organization.

Waiting until the product is finally completed to check its quality seems foolish at best. However, in the days of separate quality control departments and testing, this process was the norm for many industries.

TQM and kaizen allow for shared responsibility in terms of quality control. They also adopt the mindset that the operations process will start with the assumption that there will be no mistakes and zero defects.

## The importance of national and international quality standards (A02)

HL

Another source of quality assurance would be for an organization to demonstrate a commitment to an internationally recognized standard of quality assurance such as ISO 9001. This can have a significant influence on customers, and can build brand value and loyalty. National quality standards can also provide customers with reassurance.

For example, child car seat manufacturers can reassure customers that their product has satisfied several national and internationally agreed standards on safety. For a product such as this, safety may be the critical USP, although this may come with a higher price.

ISO 9001 certification highlights the fact that the company is following accepted and rigorous manufacturing processes. In the example of car seats, this certification should give the perception that the product is a safe product.

Some commentators have argued that ISO recognition is simply a marketing tool designed to convince customers that the product is high quality. This is not the purpose of certification. ISO 9001 indicates that a product has met minimum agreed standards. It is not designed to indicate that one product is necessarily better than another. We should also note that quality standards differ between countries.

### Revision checklist

- This chapter has explained how the philosophies of lean production and quality management can be embedded into operations to reduce waste and lead to greater efficiency.
- Continuous improvement (kaizen) lies at the centre of lean production, along with a strong adherence to quality assurance and control. If we add in the use of quality circles, then the process of TQM becomes central to operations management.
- Benchmarking or adopting national and international quality standards are other methods of ensuring that product quality is maintained.

## 5.4 Location

### Guiding questions

- What are the reasons why a specific location is chosen for production?
- What are the most appropriate ways to reorganize production both nationally and internationally?

## The reasons for a specific location of production (A02)

The following factors can influence the choice of location:

- Easy accessibility to the market. This will limit transport costs, which is especially important for firms where the production process involves weight gaining. This is a key factor for "heavy goods" industries (such as the car industry) and "white goods" production (manufacturing large domestic appliances such as washing machines).
- Access to government grants and allowances, and tax considerations. For example, Ireland has seen a surge in firms wanting to locate there due to favourable government incentives and tax environments.
- The availability of land. This will be an important factor for firms involved in large-scale production or perhaps looking to build a distribution network around large warehouse space. This is becoming very important for firms that are looking to provide extensive product ranges, such as e-commerce firms like Amazon or retailers like Tesco and Walmart.
- The existence of reliable infrastructure, such as energy generation and transport links. Traffic congestion and delays can significantly add to firms' costs. Ikea is particularly careful when locating its retail outlets, as it wants to ensure customers (and the local community) do not experience sustained traffic congestion.
- The ability to develop reliable working relationships with local suppliers. This is crucial if a firm wants to employ just-in-time stock control methods, as we saw in chapter 5.3.
- The availability and suitability of local labour to satisfy the firm's requirements. This can be a powerful motivating factor, although increasingly with globalization firms are able to offshore and outsource more and more of their labour input. An organization may wish to locate in areas with high levels of local unemployment.

## Reorganizing production, both nationally and internationally (A03)

### Outsourcing/subcontracting and offshoring

Location theory for production assumes that all aspects of the production process will be organized in one facility. However, the reality for many large organizations is that they will allow third parties or other organizations to carry out specific tasks for them.

These tasks can be carried out in the country where the organization is based using subcontractors, or it may be carried out in another country. The process is known as outsourcing or offshoring, respectively.

**Outsourcing** is the process by which firms subcontract to (or use) independent suppliers rather than undertake the activities themselves. Outsourcing differs from offshoring in that it can be achieved without the need to subcontract or move production overseas.

**Offshoring** is carrying out these activities in another country. However, given the growing transparency around global labour costs, the two terms (outsourcing and offshoring) have become synonymous with each other. They will be discussed together in this section under the single term "outsourcing".

Outsourcing allows firms to concentrate on their core activities and benefit from the experience and knowledge of specialists. Examples of commonly subcontracted activities include catering, call centres and other customer service activities, security, office cleaning, market research and, in some industries, design.

### Benefits of outsourcing

Outsourcing has been proposed mostly as a strategic decision for organizations looking to remain competitive in an increasingly connected and transparent external environment, by reducing costs and maintaining quality standards.

Information, communication and technology (ICT) functions such as customer service and helplines remain the most outsourced function. India, Malaysia and the Philippines are the main beneficiaries. The growth in the number of Indian university graduates has been noted by multinational firms, and has allowed firms to outsource administrative and call centre functions with no noticeable drop in the quality of service provided.

### Possible difficulties of outsourcing

Outsourcing may transfer final responsibility for quality to the subcontractor, especially if the subcontractor is working as a JIT partner. JIT requires that subcontractors monitor and provide quality assurance guarantees. This issue can become more important if the subcontractor is offshored or overseas. Senior managers may have to visit these subcontractors regularly to enforce the host company's expected standards of performance.

Russell-Walling (2007) has argued that the cost savings from outsourcing are not as dramatic once cultural alignment and awareness activities have been completed. Despite training and cultural awareness activities, there will still be transitional costs in outsourcing.

There may also be public relations issues in the host country for the firm outsourcing operations. The firm may be regarded as unethical if it transfers work to other

subcontractors overseas through offshoring, while the rate of unemployment increases in the host country where the organization is based.

At the time of writing, the disruption to global supply chains due to the Covid-19 pandemic is still very much in evidence in several countries. The future of outsourcing will be an issue that many organizations will be concerned about for some time to come.

### Reshoring and insourcing

Insourcing is the opposite of outsourcing; reshoring is the opposite of offshoring. Hence our discussion on outsourcing and offshoring could be applied to insourcing and reshoring, but taking the opposite view.


Insourcing allows an organization to gain control over the production process and quality assurance. If an activity is "insourced" then it is carried out by the organization itself. Reshoring specifically describes the process of returning subcontracted operations previously carried out overseas back to the organization.

Some organizations, such as Dyson and Fisher & Paykel, insource the development of new product ideas (ie product research and development), and outsource parts of the production process such as assembly and manufacturing to lower-wage economies.

The decision to outsource or insource will be influenced by many factors. These include the organization's attitude to risk, its ability to communicate effectively, the long- and short-term costs to the organization, the degree of control required by the organization, and profit considerations such as make or buy decisions (which are covered in more detail in chapter 5.6).

The question of whether to insource is currently very much in the minds of CEOs and senior decision-makers. If we add in the influence of VUCA (see page 6); the economic, political, and social instability as a result of the Covid-19 pandemic; and the current disruption to global supply chains, then it is likely that the trend of insourcing and reshoring will continue.

### IB Learner Profile

Principled 



Apple has insourced the design of its products for many years and has outsourced production of its smartphones and other products to China, in particular to the Foxconn organization. Apple has faced criticism for effectively "exporting" jobs overseas. It has had to undertake a number of public relations campaigns to inform and remind their critics that they have created many other employment opportunities in the US.

This is a contentious issue and a full discussion of the ethical and moral implications of outsourcing would make a worthy TOK discussion.



### Question for reflection

If Apple claim to be confident in and satisfied with the skills of US production employees, should the company reshore back to the US?

## Revision checklist

- In an era of change and globalization, the reasons to choose a specific location of production are changing.
- Traditional location theory factors, such as being located near to raw material supplies and local labour, are being challenged.
- Increasingly, many organizations are outsourcing as many of the parts of the production process as they can to reduce costs and to maintain quality. Improved communication technologies have acted as a catalyst in the process.
- However, the Covid-19 pandemic has led to some organizations questioning the role of outsourcing, leading to renewed calls for insourcing and reshoring.

## 5.5 Break-even analysis

### Guiding questions

- What is the breakeven point and why is it important?
- How do we construct a break-even chart to include a margin of safety?
- How do we calculate the breakeven point given a target level of profit?
- What happens to the break-even point if a variable such as price or cost changes?
- What is the limitation of break-even analysis as a decision-making tool?
- What is the difference between total contribution and contribution per unit?

### Introduction to break-even analysis and contribution

Break-even analysis and contribution are important decision-making tools for management and organizations.

For example, consider the following question regarding a possible extension strategy for organization Z: should organization Z release a new version of an existing product? Several management steps will need to be taken before the organization decides:

- A STEEPLE analysis could be undertaken to investigate the external environment.
- Market research will need to be carried out to discover the potential market reaction to the new version.
- Sales forecasts based on this market research will need to be drawn up.
- Budgets for costs and sales revenues will have to be decided.

However, before this data collection begins in earnest, organizations will often carry out a simple break-even calculation to get an estimate of the potential profit/loss of such an extension strategy. This break-even calculation will only be a rough estimate and could be loosely based on previous experiences of other extension strategies. However, this calculation will give an early indication of whether the opportunity is worth considering further.

For example, if current sales of the product are 50,000 units and the rough estimate calculated to break even for the new improved version is 60,000 units, then the organization may

have to decide whether the sale of an additional 10,000 units is possible, and whether the potential profit through the extension strategy justifies the risk.

We must also consider that even if the extension strategy does not provide a profit to organization Z, it may provide a contribution.

### Contribution

Contribution is an important business concept. An organization may continue to produce a product or service if the revenue earned from selling it covers the direct cost of production.

If **total profit** is defined as total revenue minus total cost, then **total contribution** can be defined as total revenue minus total direct costs or total variable costs.

The implications of bringing contribution into the decision-making process are important. Continuing with our example from above, although the new improved version of the product may not generate a profit given that the estimated break-even point is higher, it could provide a contribution to pay for fixed or indirect costs. A forecast loss should not imply that we should not carry out the extension strategy.

Break-even analysis and contribution both provide a starting point for the decision-making process for an organization. We will consider break-even analysis first and then look at contribution again at the end of the chapter.

## Aspects of break-even analysis (A02, A04)

## IB Learner Profile

Inquirers ?

The article that follows is a rare insight into the finances associated with a major media or sporting event featuring a globally recognized personality. It neatly introduces the importance of using break-even analysis at the start of the decision-making process.

Auckland Regional Council (ARC) paid \$2.9 million on David Beckham's LA Galaxy and lost \$1.7 million.

The ARC spent \$2.91 million on travel, accommodation and promotion for the ill-fated football match between LA Galaxy and the Oceania All Stars in December 2008, a report has shown.

It was also revealed yesterday that the ARC banked on David Beckham's "world superstar" status drawing Auckland's Asian community to its football game that lost \$1.7 million.

"Beckham is a phenomenon in Asia and with Asian people", councillors were told in a pitch from staff for staging the LA Galaxy fiasco at the ARC-owned Mt Smart Stadium.

The proposal for the match was pitched as a concept devised so that a wide range of people of differing ethnic descent would be attracted.

The Auckland Football Federation was to help by promoting the event to its 20,000 registered players and clubs.

"Therefore, it was not expected that there would be too many problems in attracting a healthy crowd for the event", said the report.

The "break-even" crowd needed was 25,000 and considering a similar event in Wellington had attracted 31,800 people in 2007, the report said it was unlikely that this crowd size would not be achieved. Auckland has nearly four times the population of Wellington.

The report suggested the ARC set ticket prices for a 30,000-seat capacity, with 29,000 paying ticket sales.

A profit of \$484,350 was expected if 30,000 tickets were sold.

On the night only 16,587 people turned out. As for their tickets, "a portion of these were complimentary or were offered in a two-for-one deal, resulting in lower revenue".

Mr Winder's review of what went wrong is highlighted in the following details:

There was a loss of \$1.79 million.

Costs of \$3,057,602 were \$151,052 or 5.2% above expectations.

Revenue of \$2,075,599 was 61% lower than expected.

Expected revenue from ticket sales was on the day of the match 70% less than hoped for.

What went wrong?

Mr Winder said the ticket price was set too high, the marketing effort was ineffective and the Oceania team were not good enough to be considered a creditable opposition against Mr Beckham's team. It was likely that any future matches of this kind would not occur.

Source: Adapted from an article by Wayne Thompson, "ARC paid \$2.9m for David Beckham", *New Zealand Herald*, 21 February 2009

- A previous match with a team featuring David Beckham was successful in 2007. Why do you think this latest match was unsuccessful?
- What does the article suggest are the difficulties in trying to predict revenues, even for an event that has been successful in the past?
- Given the example above, how useful do you think break-even analysis is for an organization?

## Break-even quantity

$$\text{break-even quantity} = \frac{\text{fixed costs}}{(\text{price} - \text{variable cost per unit}) \text{ or contribution}}$$

Figure 5.5.1 is a summary of the important elements of break-even analysis.

**Break even** is the output at which revenue equals costs, i.e. no profit or loss is made.

- Total revenue = price  $\times$  quantity
- Total costs = fixed costs + variable costs

Fixed costs do not change with output, e.g. rent

Variable costs vary directly with output, e.g. materials

- Profit = total revenue – total costs

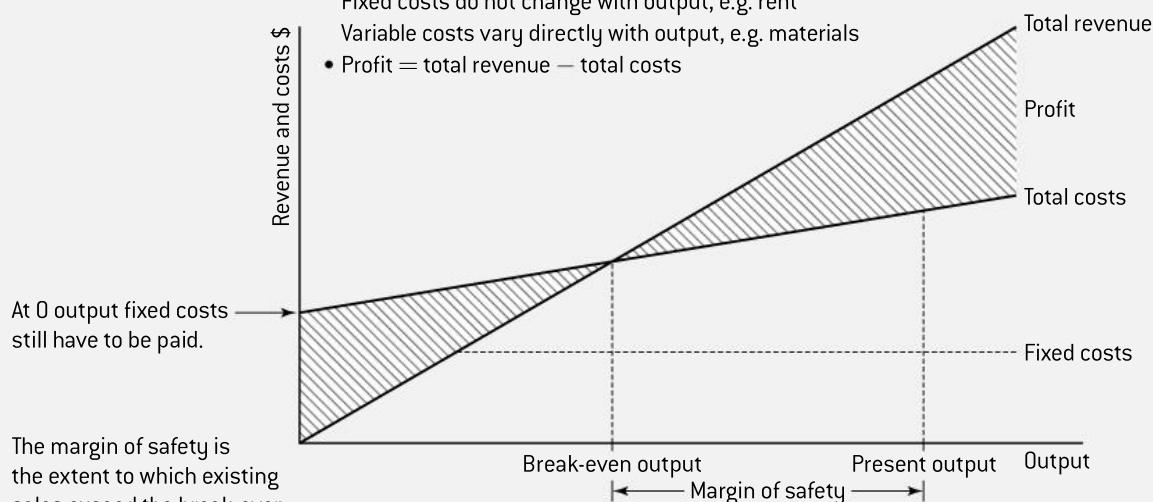


Figure 5.5.1: Break-even analysis

### Break-even quantity with a target profit

If the firm is looking to try to guarantee a minimum level of profit, perhaps to satisfy shareholders or ensure a sole trader's salary, fixed costs will need to be adjusted. The profit target effectively becomes an overhead and must be included. The break-even quantity will have to rise accordingly.

$$\text{break-even quantity} = \frac{\text{fixed costs} + \text{profit target}}{\text{contribution}}$$

The above formula can also be rearranged so that we can calculate a target profit output and target price, and allow for some different scenarios.

**Target profit output** is the output that will need to be sold to achieve a target profit. In the example below, we need to calculate a quantity sold which will generate a profit of \$8,000.

The **target price** is the price required to achieve a minimum level of profit. In the example below, the organization wants to calculate the price which will yield a profit of \$10,000.

This analysis, where we are looking to change the variables of the break-even calculations, is sometimes referred to as "What if" analysis. It allows an organization to change the variables to see the impact on profits and output, or to calculate a new price. The following example will illustrate how we can do this.

You are given the following information concerning an organization.

Fixed costs	\$20,000
Price	\$10
Variable cost per unit	\$6
Total maximum capacity	8,000 units
Current level of production	6,000 units

For this organization, calculate:

- (i) The contribution per unit.
- (ii) The break-even quantity.
- (iii) The profit/loss for this organization at the current level of production.

The manager of the organization wants to use the break-even formula to undertake a "What if" analysis.

- (iv) What is the break-even point if a profit target is set at \$4,000?
- (v) What would the target output be if the profit target is raised to \$8,000?
- (vi) What target price will guarantee a profit of \$10,000 if the organization produces at maximum capacity?

#### Answers:

- (i) Contribution per unit =  $10 - 6 = \$4$  per unit.
- (ii) Break-even point =  $20,000 \div 4 = 5,000$  units.

- (iii) Total profit at current level of production = total contribution – total fixed costs =  $(6,000 \times 4) - 20,000 = \$4,000$ .

- (iv) If the profit target is set at \$4,000, then the new break-even point becomes \$24,000 ( $\$20,000 +$  the profit target)  $\div 4 = 6,000$  units.

- (v) If the profit target is raised to \$8,000, then the target output (the break-even quantity) becomes \$28,000 ( $\$20,000 +$  the profit target)  $\div 4 = 7,000$  units.

The break-even quantity needs to increase to allow the organization to make a higher profit. In situations such as these, the profit target is treated like a fixed cost of production.

- (vi) To achieve a profit of \$10,000 at maximum capacity, we need to use the break-even formula again and substitute all the known figures to calculate the target price (P).

$$8,000 = 30,000 \div (P - 6)$$

$$8,000 (P - 6) = 30,000$$

$$8P - 48 = 30$$

$$8P = 78$$

$$P = 78 \div 8 = \$9.66$$

For the organization to make a profit of \$10,000 at maximum capacity it would have to sell all their units at \$9.66. The target price should be at least \$9.67.

### The margin of safety level of output

This is the amount by which the demand for a firm's product can fall before a firm incurs losses. Alternatively, it measures how close the firm is to the break-even level of output.

margin of safety = current level of demand – break-even output

Continuing with the example in the activity above, the margin of safety at the break-even point with no profit target is  $8,000 - 5,000 = 3,000$  units.

With a profit target of \$4,000, the margin of safety falls to 2,000 units.

It falls to 1,000 units if the profit target rises to \$8,000, and it disappears if the organization decides to produce at maximum capacity.

The relationship between the break-even quantity and the margin of safety is negative. If the break-even quantity increases and the organization does not increase maximum capacity, then the margin of safety will fall. The reverse is true for a fall in the break-even quantity.



## Effects of changes in price or cost on break-even quantity, profit, and margin of safety (AO2, AO4)

### Graphical and quantitative analysis

How does changing the price of a product impact on break-even analysis? Consider the following example.

Firm X has fixed costs	= \$3,000
Price of the product	= \$10
Variable costs	= \$7
Current level of demand	= 1,500
The break-even quantity	= $\frac{3,000}{3}$
	= 1,000
Margin of safety	= $1,500 - 1,000 = 500$
Profit	= total revenue – total costs
	= $(1,500 \times 10) - [3,000 + (1,500 \times 7)]$
	= $15,000 - 13,500$
	= \$1,500

If the firm cuts the price by 10%, the quick complacent answer is that the break-even quantity will need to rise by at least 10%. The answer is actually 50%!

If the price falls to \$9 from \$10, and variable and fixed costs remain the same:

$$\text{new break-even quantity} = 3,000 \div 2 = 1,500$$

$$\text{margin of safety} = 1,500 - 1,500 = 0.$$

The business has reached maximum capacity.

$$\text{New profitability} = (1,500 \times 9) - [3,000 + (1,500 \times 7)] = \text{loss of } 3,000.$$

From this example several issues are highlighted.

Price cuts are not always the most effective method to generate increases in revenues or profits. This method only works if demand for the product or service is expected to rise significantly more than the price decrease in percentage terms. As we saw in chapter 4.5, price cuts are only effective if demand is price elastic.

Organizations will have to answer several difficult questions when they consider cutting prices. For example:

- Is a 50% increase in demand achievable even with the price decrease?
- Will a price cut affect the perception of the quality of the product?
- What if competitors (if any) follow this price reduction? What will be the impact on quantity demanded?
- Could the additional demand required be produced quickly without significantly raising short-term variable costs, ie is there spare capacity in the organization? If not, fixed costs may need to increase if the firm needs to finance additional capacity.

### Summary

We have seen that break-even analysis can be used to predict what will happen under different cost, revenue and pricing scenarios to the break-even point and margin of safety.

An increase in total costs will generally lead to an increase in the break-even quantity and a reduction in profits. The same outcome is likely for a decrease in total revenue.

An increase in total revenue should lead to a reduction in the break-even quantity, but we must be careful. If the increase in revenue was "paid for" with an increase in promotion, such as above-the-line advertising, then total costs should increase and the effect on the break-even point and profits will be more difficult to determine. It will depend on the size of the increase in total revenue compared to the increase in total costs.

The graphs in Figure 5.5.2 illustrate what happens to the break-even point if price increases impact on total revenue, or if total fixed costs and variable costs change. Only one change is considered at a time.

- Graph 1 – price increases lead to a fall in the break-even point/quantity.
- Graph 2 – price decreases lead to an increase in the break-even point/quantity.
- Graph 3 – total fixed costs increase, leading to an increase in the break-even point/quantity.
- Graph 4 – total variable costs increase, leading to an increase in the break-even point/quantity.

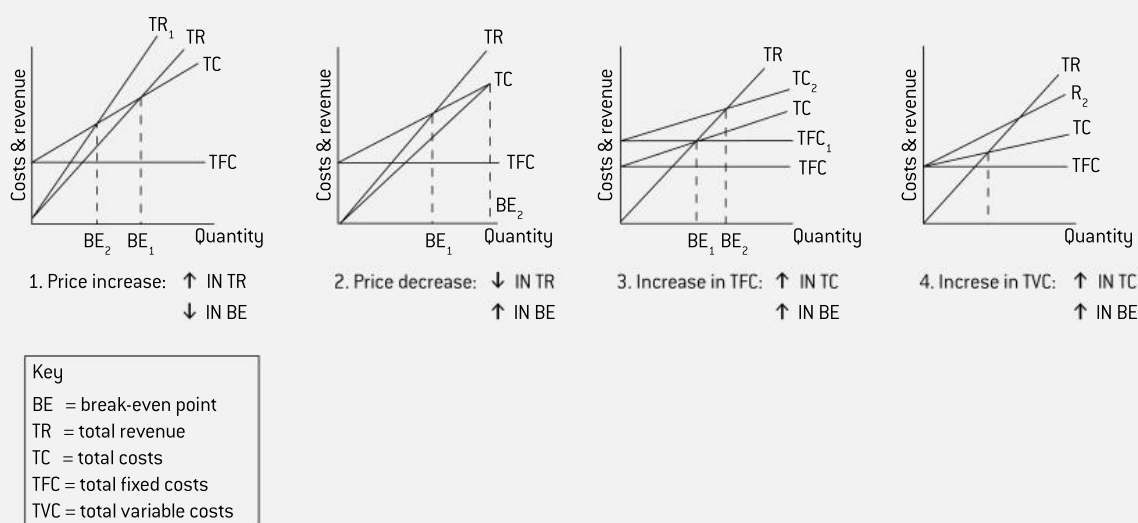


Figure 5.5.2: Examples of changes to the break-even point

## Limitations of break-even analysis as a decision-making tool (A03)

Break-even analysis is an important decision-making tool, but from the previous points and the David Beckham case study (page 125) we can see there are several limitations.

The break-even model assumes that an organization can sell as much as it wishes of a product at the same price. There is

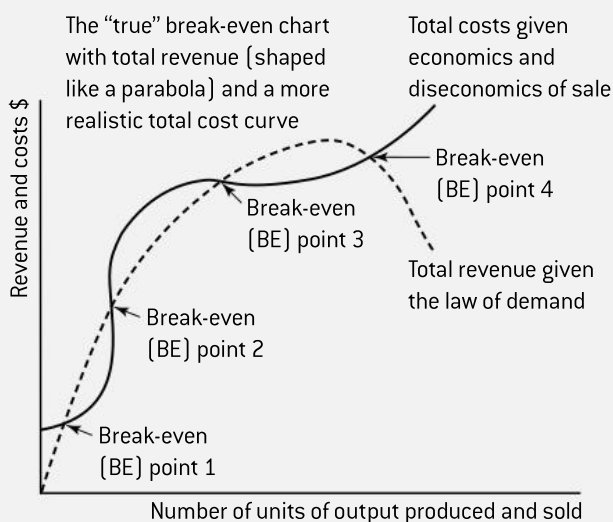


Figure 5.5.3: Multiple break-even points

assumed to be a linear or positive relationship between the price charged and the amount purchased. This is unrealistic. To sell higher quantities of a product, the organization may have to reduce prices significantly.

Taking costs into account, the break-even model assumes that variable costs also increase in a linear fashion. If large production runs are required, then a firm's variable costs in the long run may fall due to economies of scale or rise due to diseconomies of scale. This could lead to a multiple number of break-even points as Figure 5.5.3 illustrates.

The David Beckham example shows that Auckland Regional Council's use of break-even analysis was correct, but they did not consider several other external factors.

Non-financial factors (outside the control of the organization) will need to be considered once the break-even quantity and margin of safety have been calculated.

There is evidence from the David Beckham example that Auckland Regional Council underestimated these.

A break-even analysis should not be static. Different break-even points under different cost, price and revenue scenarios should be calculated.

The pricing of one-off events is difficult when there is no exact match or previous evidence to draw upon.

## Total contribution versus contribution per unit (A02)

We saw that with the break-even calculations, a formula can be used to provide a quick confirmation of the break-even point before or after the break-even chart has been drawn. This formula is given again here:

$$\text{break-even quantity} = \frac{\text{fixed costs}}{\text{contribution}}$$

Where contribution per unit = price of the product – variable cost per unit.

To calculate total contribution, we can either multiply the contribution per unit by the number of items sold, or we can use this formula:

$$\text{total contribution} = \text{total revenue} - \text{total variable costs}$$

### Revision checklist

- Break-even analysis is an important decision-making tool. It is used to give a quick indication of the profit or loss of a proposal.
- The break-even point can be calculated by using a mathematical formula or by drawing a diagram illustrating total cost, total revenue, and total fixed costs. When drawing a break-even chart on paper, care and accuracy are required. It is good practice to check the break-even point with the mathematical formula before the construction of the chart.
- When either prices or costs change, the break-even point and the margin of safety will change as either the total revenue or total cost curve will shift.
- The margin of safety indicates how much spare capacity an organization has between the break-even point and the maximum level of possible output produced. The margin of safety and break-even points are always measured in units produced.
- Break-even analysis assumes that an organization can sell as much as it wants to at the same price. This is an unrealistic assumption.
- Break-even analysis is used to show that a proposal may yield a profit, but further investigation is usually required before a final decision is made.
- Break-even analysis is a tool which is used at the start of the decision-making process. It is used when proposed projects are short term in nature. For longer-term investment projects over many years, investment appraisal is the preferred mechanism to evaluate the value of a project.

## 5.6 Production planning (HL only)

### Guiding questions

- What is meant by the supply chain with respect to operations management?
- What is the most efficient way to control the stock of raw materials used in production?
- How can we measure productivity for an organization?
- Should an organization “buy in” or make component parts or finished products used in operations management?

### The local and global supply chain process (A02)

HL

Russell-Walling (2007) defines a supply chain as:

*“A chain that is made up of physical and information links between suppliers and the company on one side and the company and its customers on the other.”*

A **local supply chain** will have the full production and distribution process in close proximity to an organization. An example of a local supply chain could be within a community where farm produce is transported to manufacturing plants to be processed into finished products for distribution to regional supermarkets.

A **global supply chain** may contain many more intermediaries between the primary producer and the final consumer. It will normally extend over a range of countries. One way to try to explain a supply chain is to present it in diagrammatic form. Figure 5.6.1 illustrates the Amazon supply chain, which has global reach and is one of the most established supply chains. It should be clear that this process involves not only the physical movement of goods, but also information flows between consumers and the organization. The supply chain can also include production planning, purchasing, materials handling, transport, and storage.

Customer places order—assigned to the closest of seven Amazon US distribution centres

Red lights show workers which products are ordered—bar codes matched with order—product placed in crates on conveyor

Crates ride conveyors through distribution centre

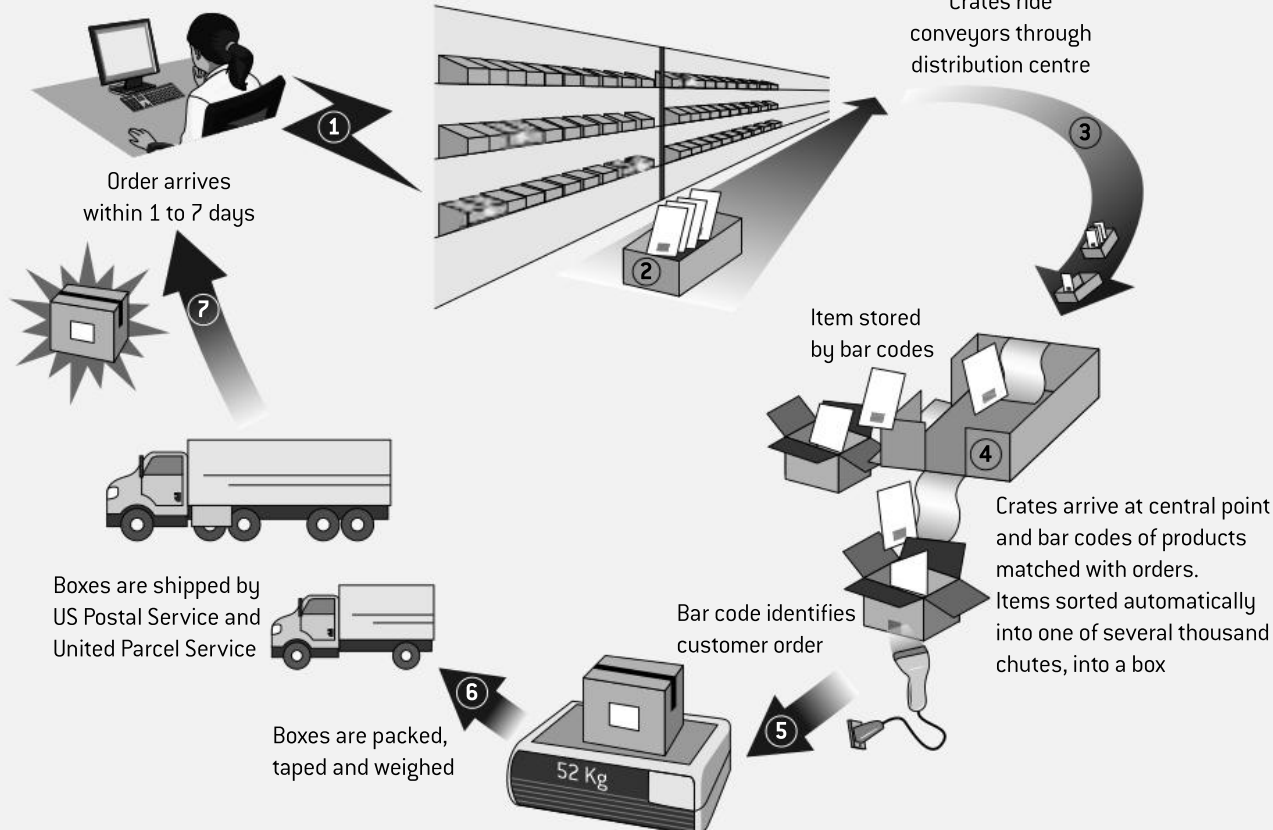


Figure 5.6.1: Amazon's supply chain in the US

Source: <http://files.myopera.com/CHIEMKIMNGAN/blog/amazon.JPG>

Figure 5.6.2 features the second most widely traded commodity in the world after oil: coffee.

Coffee's supply chain can be local or global depending on the type of coffee bean being distributed and the intended final market once the coffee bean has processed through all the stages of transformation from green bean to the final beverage.

Note that as the coffee bean moves through the various stages of the supply chain, the value of the coffee product increases. For this reason, some supply chains are referred to as value chains.

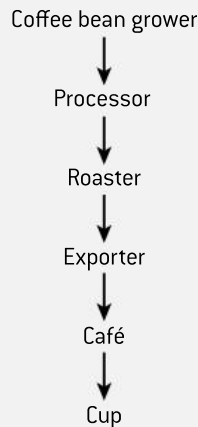


Figure 5.6.2: Coffee supply chain



The supply chain in the coffee industry adds significant value at each stage of the production process, as green beans are roasted into brown coffee beans and shipped all over the world. Coffee harvesters who often live in developing countries may receive very little for growing green coffee beans. Yet the price charged for a coffee in the developed world can be up to \$5 per cup. The coffee harvester typically sees little of this money and may only receive a few cents per cup.

This is deemed to be unethical, and in response the Fairtrade movement was created to give coffee harvesters and producers a larger share of the added value created when processing coffee. The Fairtrade agreement gives coffee harvesters in developing countries a significantly higher price for their coffee beans than prices decided by market forces. The Fairtrade movement in coffee has allowed coffee farmers to improve the standard of living in the communities they operate in.

*Amazon and the coffee market will be referred to in chapters 5.9 and 6.3 respectively. The coffee market is a business context which we will use for the internal assessment.*

### The importance of the supply chain

With globalization and the growth of outsourcing (see chapter 5.4), supply chain management has taken on a whole new competitive focus. Supply chains have also increased in complexity. The following examples will highlight this.

### Nokia and Alibaba

When a Finnish mobile phone producer manufactures a mobile phone in China to ship to a retailer in Australia, the supply chain is potentially stretched to breaking point. The more links in the chain over a greater distance, the greater the complexity and the more likely those mistakes will occur.

AliExpress the Chinese online retailer and its parent company – Alibaba – have taken the supply chain and made it into a cost leadership strategy as proposed by Michael Porter. This organization is now able to offer free shipping of its products to effectively any customer globally who registers an account.

Not only does Alibaba offer free shipping but the volume of orders processed daily indicate that supply chains are working with a level of efficiency that other online retailers cannot match.

Each year, Alibaba has a special promotion for "Singles Day". In 2020, in one day, Alibaba processed 2.8 billion orders and distributed these one week after the

promotion. The revenue generated was equivalent to \$74.1 billion. These revenue figures are quite staggering, and of course in 2020, Alibaba was operating during the Covid-19 pandemic.

The following quotes summarize the complexity and importance of the supply chain:

*"The supply chain is no longer a back-office activity. It has become the competitive weapon in the boardroom."*

Source: IBM

*"The supply chain is super tricky."*

Source: Elon Musk

In terms of outsourcing, Russell-Walling (2007) writes that:

*"It is not surprising that many companies feel that, to draw every cost saving, outsourcing in the new millennium has become the mantra for proponents of the global supply chain. Several manufacturers have outsourced every link in the logistics process."*

### IB Learner Profile

Balanced and knowledgeable

### Assumptions about outsourcing

We must be careful before we jump to the conclusion that the outsourcing of supply chain management is being directed from the developed to the developing world and at lower cost.

As we saw in chapter 5.4, the impact of the Covid-19 pandemic and rising wage costs in many manufacturing countries such as China and India have given rise to reshoring. Covid-19 has had a devastating impact on global supply chains and transportation, especially air and sea freight. Given the uncertainty it has given rise to, there has been some reshoring of operations from the developing to the developed world.



## Difference between just-in-time and just-in-case (A03)

HL

We noted in chapter 5.3 on lean production that with just-in-time (JIT), firms try to minimize the costs of holding stock. Goods are made to order. The firm will hold stocks of components and materials subject to the prevailing level of demand, and only the absolute minimum is held.

JIT requires excellent communication and strong supplier relationships.

In just-in-case (JIC) systems, additional stock is held to provide a back-up or contingency plan against unexpected events such as a sudden increase in demand, or a breakdown in the manufacturing process or supply chain. During the Covid-19 pandemic, organizations that held onto additional stocks of products created a competitive advantage.

JIC is an expensive way of holding stock, but it does reduce the risk of stoppages in the production process, which could be even more costly to the organization.

JIT demands that there is a very strong and reliable relationship between supplier and final manufacturer. This will take time to develop and will need to be managed. Until recently, Nissan's production plant in Sunderland,

UK, demanded that suppliers of components sign contracts guaranteeing that components for its assembly line would be on call (ready to deliver) 24 hours a day, 7 days a week.

Although JIC is expensive to implement, some online retailers such as Amazon and Walmart have built their business infrastructure around huge warehouses stocked full of products to satisfy incoming online orders from customers. Amazon calls these "fulfilment centres". By using JIC, Amazon can take advantage of bulk-buying economies of scale that firms using JIT will not be able to obtain.

JIC is appropriate for Amazon given their enormous influence and market leadership in e-commerce. Small business start-ups may not be able to use JIC stock control due to the costs involved and may have to service customer requirements using JIT, usually at higher prices to the end user.

In conclusion, the decision to use either JIT or JIC will depend on a range of different factors related to market size, the degree to which an organization can afford to hold stock, and the nature of its relationships with suppliers.

## Stock control charts (A02, A04)

HL

The purpose of stock control is to be able to hold enough raw materials, work in progress and finished goods to enable production and sales to continue uninterrupted. Several different methods have been suggested to try to achieve this. The two methods of stock control, which we have already considered, are JIC and JIT.

Figure 5.6.3 is a traditional stock control graph identifying lead times, buffer stocks and reorder levels and quantities.

### The costs of holding stock

These can be considerable and include:

- costs of storage, for example refrigeration or warehousing
- insurance and security costs
- opportunity costs of tying up money that could have been used elsewhere in the business, if stock levels begin to increase beyond the buffer stock.

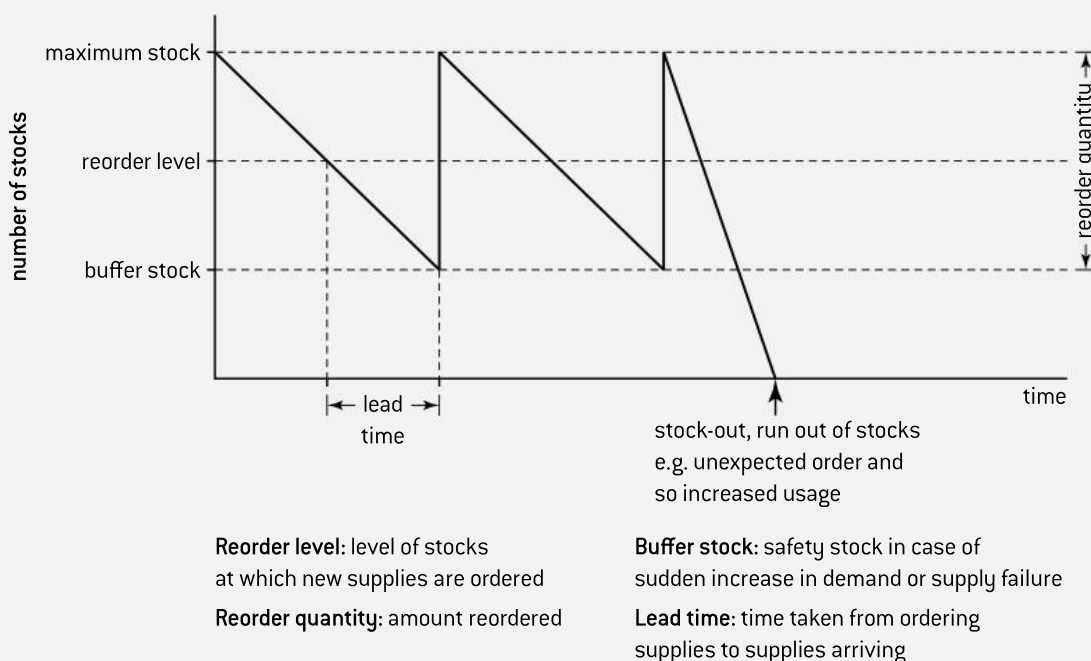


Figure 5.6.3: Stock control

## Capacity utilization (A02, A04)

HL

$$\text{capacity utilization rate} = \frac{\text{actual output}}{\text{productive capacity}} \times 100$$

The capacity utilization rate for an organization indicates the degree of actual capacity that is being used. It is expressed as a percentage. 100% capacity utilization implies that an organization is using every available resource at its disposal and producing at a maximum amount.

However, working at maximum capacity may have its drawbacks. Employees and managers may feel overworked, leading to stress and fatigue. Working capital will be used up so quickly that overtrading will occur and additional

liquidity issues may arise. An organization can run out of cash trying to service unsustainable levels of production and could develop diseconomies of scale.

Some spare capacity is acceptable in many organizations. This will allow some flexibility around managing labour, and also potentially allow the organization to satisfy new unmet needs without having to invest in additional fixed capital. An organization can pivot by working existing capital a little harder.

Rates of capacity utilization below 70% could be a concern for an organization and questions will need to be asked about whether the current rate of production is economically sustainable.

## Defect rate (A02, A04)

HL

The defect rate measures the percentage of output that fails to meet a quality target or threshold. If 10 out of 200 tested units from a sample are defective, then the defect rate would be 10/200 or 5%. Depending on the industry, this result may be unacceptable and could trigger the launch of an investigation with further samples being tested.

It is likely that an organization would take mean samples and calculate standard deviations to see if the defect rate is deteriorating. The production line may have to shut down until the issue is resolved.

With flow and mass production, defect rates are often stated in terms of defects per million.

Defect rates have links to quality control and quality assurance processes, which were discussed in chapter 5.3.

## Labour and capital productivity, productivity rate, and operating leverage (A02, A04)

HL


**Labour productivity** is measured by output produced by labour per hour, and it is calculated by dividing total output by the number of labour hours worked.

**Capital productivity** indicates how efficiently fixed or working capital is being used to generate output. For example, if 90,000 goods are produced using 1,500 machine hours then we could say that capital productivity is 60.

Linked to both is the **productivity rate**, which is calculated by dividing total output by the factor input.

$$\text{productivity rate} = \frac{\text{total output}}{\text{total input}} \times 100$$

### IB Learner Profile

Inquirers and balanced 

### The use or misuse of productivity data?

Capital and labour productivity rates are not helpful for decision-making unless they are compared with previous years' data and/or an industry standard or average performance (if this is possible to calculate).

If we were to apply a Tayloristic or scientific view of motivation or management, then these capital and labour productivity rates could provide valuable data to monitor employee performance. They could also be used to measure the impact of training or financial reward systems on employee performance and productivity.

However, in common with capacity utilization, productivity growth must be checked carefully. Increases in individual output per worker are welcome, but if it is at the expense of product quality or it impacts on relationships between and within departments, then some unwelcome side effects could arise. Competition between departments might be unhealthy.

For example, McDonald's has "scoreboards" of the service speeds of its drive-throughs in New Zealand. The scoreboard is based on the rate at which drive-throughs complete customer orders. For those at the top of the scoreboard this may give a boost, but for those looking to improve, customer service could be rushed too much, leading to incomplete or inaccurate orders.

This point will be developed further in chapter 5.9 under our discussion of Digital Taylorism, as there are important ethical issues to consider.

### Operating leverage

Operating leverage measures how a business can transform increasing revenue into increasing profits. As we saw from the breakeven analysis, an increase in revenue may not generate an increase in profit if costs, especially variable or fixed costs, increase at the same time. An organization that has operational leverage is one that has a high gross profit margin and low variable costs. An increase in sales volumes in this situation is likely to lead to higher profits.

In summary, operational leverage indicates how risky or volatile gross profit is if the organization decides to increase sales volumes.

## Cost to make and cost to buy (A03, A04)

HL

This section has links to several important SL/HL and HL-only topics such as:

- The opportunity of outsourcing (5.4)
- The role of contribution pricing (4.5)
- Organizations which are considering separating into profit centres (3.9)
- Organizations which have product portfolios (4.2).

The choice between "make" or "buy in" boils down to an organization deciding to either insource production and make an item themselves, or to let a third party or subcontractor produce that component part or batch of goods. Hence cost to make (CTM) focuses on production within the organization, and cost to buy (CTB) focuses on production from outside.

An important consideration when deciding whether to make or buy in is the difference in cost. Which process is less expensive? However, as with so many business decisions, cost is not the only important factor. Other considerations include:

- The spare capacity within the organization. Even if the organization could produce an item cheaper than a subcontractor, there may be a lack of capacity to do so. If the organization allows a subcontractor to produce at a more expensive cost, then possible diseconomies of scale are avoided.
- Quality control concerns. For intricate and delicate components, buying in may be cheaper, but if zero defects and quality assurance are critical aspects of the production process, then an organization may wish to make these item themselves.
- The size of transport costs. Once the final component or product is produced by a subcontractor at a cheaper price, the cost of transporting it to the organization may eliminate the cost difference, and any disruptions could lead to delivery delays.
- Bought-in excellence. An outsourced component may be more expensive to produce, but the external provider may have some unique production process or

brand value which adds real value to the final product. This is one reason why some car manufacturers install more expensive stereo systems (such as those made by Apple or Bose) in their vehicles rather than produce their own.

These points show that the decision to buy in or make should not be taken purely based on the cost difference between the two processes. There are other factors which will need to be considered.

The following example will illustrate some of the questions that an organization needs to consider when looking at the possibility of outsourcing part of a production process.

### Discussion through an example

If a certain component will cost firm X either \$14 to produce in its own factory or \$10 by outsourcing to company Y, the firm will have to consider the following issues/questions before making a final decision:

- Is the \$4 per unit saving significant, given quality control concerns about another company producing the component?
- Will company Y be able to guarantee delivery and sufficient batch size?
- What are firm X's core activities? Does it have the knowledge and skills to begin producing this component immediately? Does it have the spare capacity to do so?
- Given the possibility of larger batches and economies of scale, in the future will company Y be able to charge a price lower than \$10?
- If company Y are running close to full capacity, what are the implications for human resource management and quality control?
- If firm X produces this component, will motivation and productivity be affected in the firm?
- If firm X produces this component, will additional training be required to maintain current productivity levels?

### Critical path analysis

#### Constructing a network from the beginning

A network diagram consists of a series of nodes and arrows to represent stages in a project. Arrows represent activities and often have a letter next to them to identify them; the length of time the activity takes (its duration) is put underneath the arrow. Circles or nodes represent the start or end of an activity.

A node has three sections:

- The left-hand side shows a node number to make it easier to follow the sequence of tasks.
- The top right segment of the node reveals the earliest start time (EST), which is the earliest time the next task can begin.

- The bottom right segment of the node shows the latest finish time (LFT), which is the latest time the previous task can finish without delaying the next.

Node number

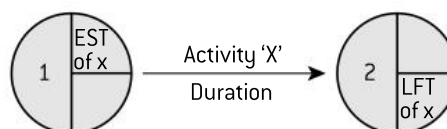


Figure 5.6.4: Starting a network diagram

**Step 1:** given the information in Table 5.6.1 on the next page outlining the steps to bake a cake, we can construct a diagram, labelling the nodes and adding duration times but leaving the rest blank (Figure 5.6.5).



Activity	Task	Estimated time taken to perform task (duration in minutes)
Turn on the oven	A	1
Find the cooking utensils and ingredients from the cupboard	B	4
Mix cake ingredients in a bowl	C	5
Put finished cake mix in a baking tin	D	3
Bake the cake	E	20
Wash up utensils and clean work surfaces	F	10
Put utensils and unused ingredients back in the cupboard (must be carried out before cooling and eating!)	G	7
Remove cake from the oven and leave to cool	H	10
Prepare the icing	I	2
Add the icing and serve	J	5

Table 5.6.1: Baking a cake

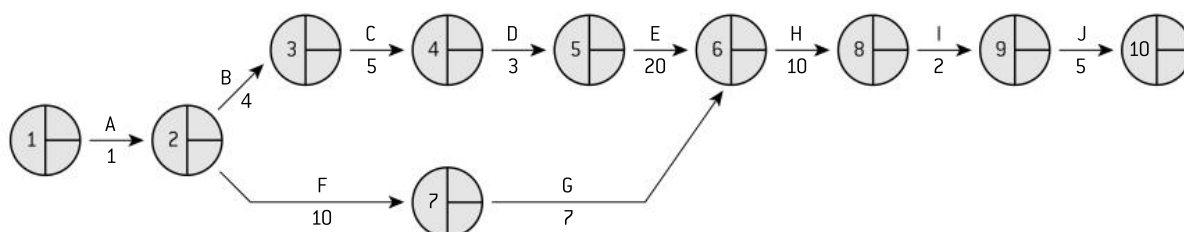


Figure 5.6.5: Planning the network

**Step 2:** the next step is to calculate the EST for each activity (Figure 5.6.6).

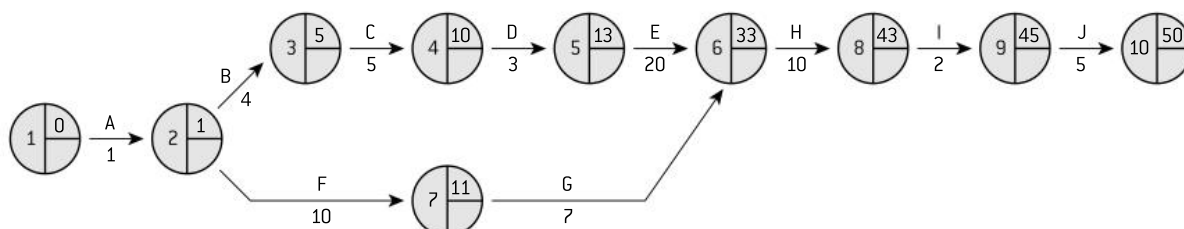


Figure 5.6.6: Adding ESTs to the network

This is a straightforward exercise except for node 6, where two arrows converge. The baking of the cake and the clean-up operation need to be completed before the cake is cooled for final preparation (otherwise we may be tempted not to wash up!).

At node 5, the EST of the baking is 13 minutes.

At node 6, the EST of putting away the utensils is 15 minutes.

Activity H, the cooling, can only begin after the cake has been baked, so the EST at node 6 must be  $13 + 20 = 33$  minutes. As a general rule when calculating ESTs, if two

arrows arrive at a node, the longest time taken is added to the previous EST.

**Step 3:** with the ESTs added, we are now ready to calculate the LFTs. We start calculating the LFTs from right to left in a process which is known as roll-back.

Given that activity J is the last activity, the LFT is the same as the EST of the next activity, which does not exist. This equals 50 minutes.

LFTs are then calculated by subtracting the durations from the last LFT.

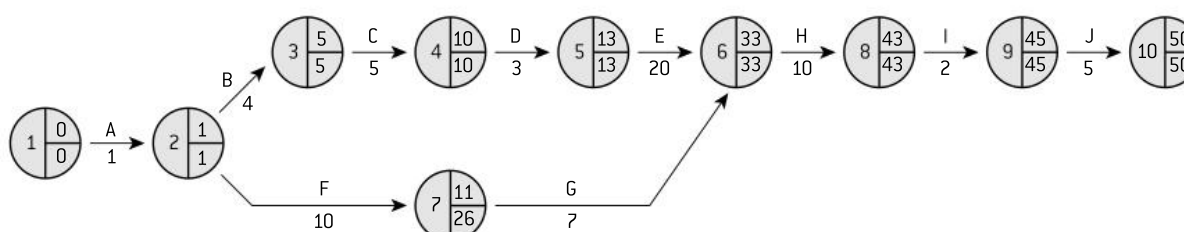


Figure 5.6.7: LFTs calculated

**Points to note**

From the network diagram and calculations, the estimated time of completion is 50 minutes. Without using a network diagram and simply adding up all the minutes of the tasks in sequence, we would assume the cake would be ready in 67 minutes; there has been a significant time saving of 17 minutes.

If the EST and LFT in a node are the same, then these activities are deemed to be critical. The latest finishing time of the previous activity is the same as the start of the next. Any delay will result in additional time being taken and, as a result, this will delay start times of following activities. If the network diagram was referring to a complex building project, these delays could lead to significant increases in costs and penalties for the construction firm.

In the above situation, activities where the EST and LFT in the same node are equal are called "critical", and lie on the critical path. The critical path is A, B, C, D, E, H, I, J.

On the other branch of the diagram, it is clear that for node 7, the EST and LFT are significantly different, giving the project manager an opportunity to examine some float time.

**Total float**

Total float is the longest an activity can be delayed from its own EST without delaying the project.

It is calculated by using the LFT (of that activity) minus the duration minus the EST (of that activity).

For activity F, the total float is  $26 - 10 - 1 = 15$  minutes.

For activity G, the total float is  $33 - 7 - 11 = 15$  minutes.

However, total float is not specific to an activity but to an uninterrupted path, and this has implications for how we can use this free time.

We cannot delay both F and G by 15 minutes as this will add time to our baking. To avoid this knock-on effect, we calculate the free float.

**Free float**

The free float is defined as the amount of delay possible on an activity without affecting the EST of following activities.

It is calculated by using the EST (next activity) minus the duration minus the EST (of that activity).

For activity F, the free float is  $11 - 10 - 1 = 0$  minutes.

For activity G, the free float is  $33 - 7 - 11 = 15$  minutes.

We conclude that activity F cannot be delayed without affecting the free time available to activity G. This information will be needed by project managers when considering how to use float time effectively by shifting workers or resources to ensure that critical activities are completed on time.

**Evaluating the value of a network in the management of projects**

We can identify a number of important benefits to managers from using a network diagram.

Managers can experiment and consider "what if?" scenarios without having to commit to spending vast amounts of time and money on projects that are later abandoned.

Potential delays in activities can be identified and pre-empted by using subcontractors if required, or by reallocating resources from activities where there is float time to activities where there is none.

Critical path analysis (CPA) computer programmes now exist which avoid the need to draft networks by hand, and changes can easily be incorporated before the final diagram is decided – for example if external factors (such as the weather for building projects) change without warning.

Issues to bear in mind include the following:

- Depending on the number of activities, some large-scale projects may not lend themselves well to a simple diagram and can become too complex. Additional managers may be required to supervise additional tasks, which will increase costs.
- The durations for each activity may need to be objectively assessed by an industry expert to see if they are realistic and achievable, given the labour and capital constraints of the firm.

**Gantt charts**

There are several different types of Gantt charts, and there are several online software packages that will create Gantt charts for you (such as Trello or Monday.com). A simple Gantt chart is shown in Figure 5.6.8 on the next page.

A Gantt chart, commonly used in project management to help with planning and the allocation of resources such as labour and materials, is one of the most popular and useful ways of showing activities (tasks or events) displayed against time.

From Figure 5.6.8, a business can see that it will need to allocate resources to complete the planning stage from December 2020 to the end of February 2021.

Research will begin at the start of February 2021 and finish sometime in mid-March. As there is some overlap between planning and research, the business will need to ensure that it has adequate resources to finish both these activities on time. Otherwise, the whole project completion will be delayed and there could be substantial financial penalties.

On the left of the chart is a list of the activities and along the top is a suitable time scale. A bar represents each activity; the position and length of the bar reflects the start date, duration, and end date of the activity. This allows you to see:

- what the various activities are
- when each activity begins and ends

- how long each activity is scheduled to last
- where activities overlap with other activities, and by how much
- the start and end date of the whole project.

To summarize, a Gantt chart shows you what must be done (the activities) and when (the schedule).



Task name	Q1 2021				Q2 2021			Q3 2021	
	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21
Planning									
Research									
Design									
Implementation									
Follow up									

Figure 5.6.8: An example of a Gantt chart

The Gantt chart is often drawn to accompany a network or critical path analysis to assist with planning.

In cooperation with your teacher, there is an opportunity to work together to plan your IB Business Management course over the two-year period. Or you may be in your final year of the Diploma or Career-related Programme and instead you can plan this final year.

You could include TOK and extended essay commitments.

You can plan for gathering articles for your internal assessment at various points in the academic year.

Ambitious students may wish to plan two or more courses using a Gantt chart. You could become an IB "hero" by planning a route through all the deadlines, mock examinations and other IB requirements.

It is interesting to note that given the introduction and growth of the "agile" approach to project management, especially in the software industry, simplified Gantt charts in the form of large pieces of blank paper and sticky Post-it notes are still very much in evidence. Not a computer in sight!



## Revision checklist

- The supply chain process highlights all the intermediaries involved in the production process, from the primary producer through to the customer.
- Local supply chains are regional, with intermediaries being geographically closer together. Global supply chains can stretch across countries.
- Production planning is concerned with how raw materials are used, and it is important to have sufficient quantities to ensure the smooth running of the production process.
- Two methods of stock utilization are just-in-case and just-in-time.
- Stock control charts can be used by an organization to help plan stock levels and work out when stock should be reordered.
- Organizations strive to make the most efficient use of their stock of raw materials, finished products and fixed capital.
- Labour productivity, capital productivity and operating leverage measures are all used to highlight the productivity rates of an organization. They illustrate how levels of efficiency can be improved if the organization is below full capacity utilization.
- Some production planning decisions include whether to buy in or make components or finished products.
- The decision to buy in or make is a complex one and should not be reduced to merely cost savings. There are many additional factors to consider, which are both quantitative and qualitative in nature. In some circumstances a trial period may be required before a confident final decision is made as to whether to buy in or make.



## Crisis management and contingency planning (HL only)

### Guiding questions


- What is the difference between crisis management and contingency planning?
- What are the factors that affect crisis management?
- How big an impact should contingency planning have on an organization?

### What is a crisis?

HL

Before we can discuss crisis management we need to understand what a crisis is.

#### IB Learner Profile

Balanced 

The term “crisis” is often overused. The Covid-19 pandemic represents the biggest economic and social crisis in recent memory. The impact on business and society has been profound and will continue for some time yet.

However, when we think of other crises which have impacted on a range of organizations, we could argue that a sense of proportion and balance is required.

Consider the following examples:

- In chapter 1.4 we looked at the stakeholder conflict at FC Barcelona. At the time of writing, events on and off the field have gone from bad to worse.
- Volkswagen has been punished for acting unethically with its fake, manipulated reporting around its car emissions and impact on the environment.

- In 2020, George Clooney – the famous American film star who has supported several human rights charities but who also serves on the board of directors for Nestlé – was “horrified” to learn that children as young as nine were picking coffee beans for his world-famous Nespresso brand.
- On 4 October 2021, Facebook had a serious outage which meant that the site was down for a few hours. Over \$6 billion was lost in shareholder value and advertising revenue.

Are these real crises, poor decision-making and management, or plain bad luck?

We should accept that organizations must be ready for any potential problem. Given the importance of brand value and positioning, and the influence of social media which can respond to a difficult situation with alarming speed, organizations must be alert to a possible crisis and respond at a moment’s notice.

Warren Buffett, one of the wealthiest and most famous business commentators in the world, wisely reminds us:

*“It can take 20 years to build a reputation but 5 minutes to lose it.”*

### The difference between crisis management and contingency planning (A02)

HL

#### Crisis management

“Crisis management” is a term believed to have been coined by US Secretary of Defence Robert McNamara, after the Cuban Missile Crisis of 1962, to describe a way of dealing with crises *as they occur* in real time, without having undertaken sufficient long-term strategic planning. It can of course be difficult to plan accurately for an unexpected event.

Crisis management assumes that because the actions of others cannot always be predicted or planned for, crises must be dealt with when they happen. Given the unpredictability of VUCA (see page 6) and changes in other external factors, this view is understandable.

#### Contingency planning

The process of contingency planning assumes that you can plan for a crisis before it occurs. This is the key difference between contingency planning and crisis management.

Contingency planning may be linked to other business decision-making or situational tools such as break-even analysis, force field analysis, critical path diagrams, and Gantt charts.

Contingency planning allows an organization to think about and prepare for the critical question of “What if?”

Several organizations have recently put contingency plans in place to deal with possible supply chain concerns given the Covid-19 pandemic, and have planned to hold higher levels of stock than they normally would.

We can expect that the same organizations will have similar contingency plans in place to anticipate changes in demand when there are unexpected changes in external factors. The Covid-19 pandemic has provided ample evidence of the need for an organization to have a back-up plan or plans.

#### Contingency plans in an era of unpredictable social media marketing

We noted in chapter 4.5 that social media marketing has become an integral part of the promotional element in the marketing mix. One potential issue with social media and the use of social media ambassadors/influencers/celebrities is that they can be unpredictable.

- What if the social media influencer posts inappropriate messages? How will the organization’s brand value be affected?
- Does the organization have a contingency plan for a celebrity who may be popular but unpredictable?

## The factors that affect effective crisis management (A02)

HL

### Speed

Technological change – especially the widespread use of mobile devices and the fast-moving nature of social media – have reduced the time within which organizations must deal with a crisis. The speed of response becomes critical.

Lee Iacocca, one of the most successful CEOs in US business history, had this to say on crisis management:

*"When you are in a crisis, there is no time to run a study. The prospect of a major crisis has a way of focusing your attention in a big hurry."*

Source: Trout and Rivkin (2009)

A public relations expert on the European rail industry had this to say:

*"When there was a crisis, we used to have 20 minutes before the news broke during which time, we could get a 'handle' on the situation and what to do next; today we may have 20 seconds."*

Source: McInnes (2012)

### Transparency

A theme which has run through this study guide is the increasing need for organizations to be as transparent as possible. When a crisis occurs, an organization will need to be honest and open even if the crisis does not affect the organization directly. An example will illustrate this point.

Being transparent and reactive would seem to be the way forward if an organization is faced with a crisis.

In our examples at the beginning of this chapter, George Clooney owned up immediately to the fact that he did not know that young children were being used to harvest coffee beans for Nestlé and vowed to act immediately.

After the internet outage on 4 October 2021, Mark Zuckerberg issued an apology as many organizations' social media accounts and passwords were tied to Facebook logins and they could not access their social media accounts to contact customers. Productivity for many organizations was lost. The apology was communicated on the same day. Facebook's share price responded positively, and a significant part of the shareholder value was recouped.

Volkswagen unfortunately adopted a different approach and tried to cover up their environmental deception. They faced one of the biggest ever corporate fines after a court case was conducted. Volkswagen's brand value and positioning may take years to recover. Winning back stakeholder trust will take time.

### Control and communication

By acting quickly and decisively, Apple, Facebook and Nestlé were able to exert some control regarding the media allegations and create an appropriate media response.

Interestingly, some organizations have outsourced the public relations function to deal with crises to specialist crisis management companies, who are likely to have more experience in methods used to respond appropriately.

The question for organizations that must deal with crisis management is how much control does the organization want to have, or should it be left up to specialists?

Of course, outsourcing the crisis management response will be expensive, but we are reminded of Warren Buffet's quote on page 29. Inevitably given the nature of social media, an organization may only get one chance to get it right.

## Impact of contingency planning for an organization/situation (A03)

HL

### The benefits of contingency planning

Contingency plans can be drawn up in several different areas of an organization including finance, human resource management and operations. This is especially important for identifying potential liquidity, HR management, staffing or manufacturing problems influenced by external factors that can change very quickly.

In chapter 5.6, we saw that organizations can use a range of planning tools to help with contingency planning, such as Gantt charts and critical path diagrams.

We also saw, through the eyes of Jack Trout, that the perception and positioning of the company or product is a defining factor in determining the success of the marketing effort. Contingency plans can be used to try to protect brand value in the eyes of stakeholders given VUCA.

An organization's response to accusations of misleading advertising, for example, needs to be swift and begin with an apology and the intention to redress any false claims. It is vital to have contingency plans in place.

In some industries, such as aviation or construction, contingency plans can save lives and ensure that a project stays on course, especially if there are thousands of different subcontractors or third parties involved in the operations process. In many large-scale projects, delays in completion can be very costly. Contingency planning could effectively help an organization to avoid financial penalties.

### McDonald's

No business management study guide would be complete without reference to this market leader in the casual dining industry (McDonald's do not use the term "fast food"). We have already looked at McDonald's in chapter 5.2 and their Speedee production system that was a disruptive approach to the production of burgers in the 1950s.

McDonald's is often maligned but we must acknowledge that it changed or "pivoted" when significant public opinion moved against it. After the 2004 documentary *Super Size Me*, McDonald's changed its menu to remove automatic upsizing of its combination meals. It has tried to introduce healthier options in its children's menus and happy meals.

Faced with the Covid-19 pandemic, and having already been successful with its drive-through delivery processes, McDonald's was one of the first organizations to react to the challenges of contactless delivery. In fact, it was able to turn this challenge into an opportunity and competitive advantage.



The following quote indicates the proactive approach McDonald's took when Covid-19 lockdowns were lifted:

*"McDonald's had decades of experience in [customer service, yet still] spent \$300 million just last year to acquire a technology company, Dynamic Yield, that powers menus that can 'quickly adjust based on trends and inventory, purchase history, and even the weather'."*

Source: Adapted from [www.inc.com/bill-murphyjr/mcdonalds-just-announced-a-big-change-in-plans-heres-key-takeaway.html](http://www.inc.com/bill-murphyjr/mcdonalds-just-announced-a-big-change-in-plans-heres-key-takeaway.html)

Even with one of the most recognizable brands on the planet, it seems that McDonald's still takes nothing for granted and plans for any eventuality where possible.



### The costs of contingency planning

Clearly the most obvious cost with drawing up contingency plans is that working capital funds, time and human resources are tied up in a planning group to solve problems which may not occur. The costs here could be considerable.

Secondly, how does an organization accurately measure the risks or probability of a crisis occurring, thereby impacting on the validity of the contingency plan? Does an organization use a scientific approach to contingency planning, involving the use of complex computer software, or does it rely on "gut feeling" or previous experience (as recommended by intuitive management)? This conflict of scientific versus intuitive decision-making lies at the heart of the question over whether contingency plans are worth making.

### Revision checklist

- There is a difference between crisis management and contingency planning. The former manages a crisis situation *after* it has occurred and the latter allows for the fact that a crisis *could* occur under different scenarios and tries to plan accordingly.
- Organizations can outsource the crisis management response to a third party. Evidence from case studies indicates that the speed and openness of the response to a crisis is as important as the communication involved in delivering a response.
- Contingency planning is a risk as the event accounted for may not happen. Significant financial resources can be committed to contingency planning without a possible return. The challenge for organizations is can they afford to take the risk?



## 5.8 Research and development (HL only)

### Guiding questions

- How important is research and development for an organization?
- Why is it important to develop goods and services that address customers' unmet needs (of which they may or may not be aware)?
- What is the role of Intellectual property protection, copyrights, patents, and trademarks?
- What is the role and importance of incremental innovation, innovation, and disruptive innovation?

### Importance of research and development for a business (AO3)

HL

Research and development (R&D) is commonly defined as the ability to create and develop new products and services. Successful R&D will lead to **innovation**, which is defined as the commercialization of new ideas. Innovation occurs when a new product or service is brought into the marketplace. A product which does not launch into the marketplace remains an invention.

Examples of the importance of R&D surround us daily. As we saw in chapter 4.1, James Dyson created 5,127 versions of his bagless vacuum cleaner before settling on the version that has become an innovative international market leader.

At this stage in the Covid-19 pandemic, we must acknowledge the determination and financial commitment of AstraZeneca, Pfizer and other pharmaceutical companies that have worked tirelessly to develop a vaccine. This

coordinated approach to problem-solving must be regarded as one of the most successful R&D examples in recent memory.

Given that the time frame to develop new medicines and gain government approval for them to be used is often many years, the work of companies like AstraZeneca and Pfizer to develop vaccines for Covid-19 is little short of miraculous.

### Successful R&D has several benefits to an organization

Increased revenue and market share is one of the benefits of R&D if it leads to increased sales. Lego's return to profitability from 2007 was achieved by a much greater focus on R&D. The company almost became insolvent in 2006. They had made some marketing and operational

management mistakes. Lego's response was to investigate and develop a new range of products which were much more customer focused. In Lego's own words:

*"We decided to focus our research on products to find out what customers wanted rather than the products we wanted customers to have."*

R&D, however, should not be restricted to just the creation of new products. It can apply to all functions of an organization. It is possible for R&D to include new production methods and/or customer service programmes. R&D could also include innovative ways of financing or structuring an organization. It can be applied to achieving new levels of quality assurance, hopefully leading to further opportunities for cost reduction and/or productivity gains through innovative approaches to operations management.

Finally, we have seen that product life cycles are becoming shorter. The process of change within markets can be rapid. As Lego discovered, R&D must have a strong commercial focus; new products should not be locked away in a laboratory where they might remain as an invention. An organization's survival may depend on its capacity to quickly bring an innovative product to market.

### **The costs of research and development**

R&D will take considerable time and involve human, non-human and financial resources. In economics we refer to the concept of opportunity costs. Or to put it another way, what

other alternatives will an organization give up if it invests heavily in R&D?

There will also be a significant impact on cash flow if an organization invests in R&D. A new product will take time to be accepted into the market. For R&D, in the short term, cash outflow will be considerable and cash inflow will be limited. Organizations will have to create cash flow forecasts.

There are risks involved with R&D, but this is true for the launch of any new product or service. As we saw in chapter 4.5, extension strategies are not guaranteed to be successful but must be undertaken if an organization wants to extend the product life cycle.

In the pharmaceutical industry, figures from the United States indicate that businesses looking to research and develop new medicines or life-saving drugs may invest up to 50% of their annual revenue in R&D.

Zara, the Spanish clothes manufacturer and retailer, spends very little on promotion. Instead, it uses R&D to identify new fashion opportunities given the shortening of product life cycles in the "fast fashion" industry.

Given that this investment is not guaranteed to repay itself quickly, if ever, we may now have some understanding of why the gross profit margins on some successfully tested and implemented pharmaceutical products may reach over 90%. High gross profit margins allow for organizations to recover investment into R&D, and of course also rewards and encourages future R&D.

## **Importance of developing goods/services to address customers' unmet needs (AO2)**

HL

We live in an era of new products and services that on first viewing may not have been considered valuable or even perceived as a need. Famously, when the idea of the motor car was first suggested many scoffed at the idea, with Henry Ford remarking that people wanted a "faster horse" rather than a car.

Many in the music industry believed that it would be impossible for organizations to successfully charge for the download of songs. Illegal streaming through sites such as Napster in early 2000 seemed to infer that a pay as you go pricing model for downloaded music was impossible. Steve Jobs and Apple disrupted this thinking with iTunes and laid the path for streaming sites such as Spotify and Tidal, which have become the industry norm.

When the iPad was released in 2010, many questioned exactly what it was for. The iPhone had disrupted the smartphone market in 2007 and Apple computers and laptops were hugely successful. Steve Jobs persisted and the tablet market is now firmly established in the marketplace.

Currently one of the newest needs for consumers that has not yet been fully met is that of plant-based meat products.

The Bill and Melinda Gates Foundation has invested significant capital into the idea of producing plant-based meats that can be used in burgers or other meals. It is argued that plant-based meat production has a reduced environmental impact and may also have health benefits.

Again, many initial customer reactions to plant-based meat products were skeptical. It was felt that this product was not needed and would never replace the meat equivalent. However, McDonald's, Burger King and KFC have launched plant-based burgers and many other casual dining restaurants are thinking of following suit.

The conclusion to be drawn is that for competitive reasons especially, creating new needs is of paramount importance even if initial customer confusion is evident.

We could argue that in the case of unmet needs which the customer may not know about or be aware of, successfully bringing these products into existence is the role of marketing. Marketing's role is to convince consumers that such goods are essential.

## **Intellectual property protection: copyrights, patents, and trademarks (AO2)**

HL

### **The role and importance of intellectual property rights**

R&D, invention and risk-taking by an entrepreneur will require some form of legal protection. This is referred to as the protection of intellectual property rights. Typically this will involve the use of patents, copyrights and trademarks.

To stress the importance of securing protection of intellectual property, we can consider that in 2021 piracy cost the gaming industry \$51 billion (although there is evidence that piracy may boost some game sales).

In the film industry, the illegal copying and downloading of films has become a major concern. The Pirate Bay is one of

the most famous illegal download sites which has avoided government regulation to shut it down. Working with paid-for streaming services such as Disney+, Netflix and Neon has allowed film companies to recoup some of these losses.

The film industry argues that illegal downloading threatens the economic sustainability of the whole industry, which has many stakeholders.

### Patents and copyright protection

Patents and copyright can both be used to protect intellectual property. In the case of patents, a company may be awarded the exclusive right to produce a product for up to 20 years, although the length of time can vary depending on the country.

It has been argued that patents protect the investment which many large companies undertake when researching and developing new products. In some cases these new products can have far-reaching consequences for a large number of stakeholders. The example of a potential anti-malaria vaccine is a notable and popular defence for patents.

*"The creation of an anti-malaria vaccine would be an enormous step forwards in improving the lives of millions of people in the sub-Saharan African belt where malaria is most prevalent. Large pharmaceutical firms would be willing to finance the enormous sums of capital required to find such an elusive vaccine if there was a guarantee that, if successful, they would have exclusive rights over production to allow them to recoup these substantial costs."*

Source: Adapted from an IB Business Management past exam paper

### Trademarks

Once a successful innovation has been established in the marketplace, a trademark or logo or brand name can act as a powerful differentiating tool, and these are fiercely protected by their owners. As we saw in chapter 4.2, they can add significant brand value and loyalty. Trademarks are an invaluable intangible asset, and for organizations with higher market share they can be a powerful barrier to entry for small firms.

## Incremental innovation, innovation, and disruptive innovation (AO2)

HL



### Incremental innovation

The term "incremental innovation" refers to a series of small improvements made to a company's existing products or services.

Generally, these improvements are low cost to help an organization refresh a product or service range. Incremental innovation could be part of an extension strategy designed to extend the life of a product and push through the maturity stage or arrest the decline stage of the product life cycle. Incremental innovation is used to maintain brand loyalty as customers may tire of an existing product or be influenced by a competitor.

One of the best examples of incremental innovation is that of the Apple iPod. When it was first launched in 2001, many customers did not really understand the product. The Sony Walkman and Discman were market leaders.

Then with the introduction of the iPhone in 2007, many felt that the iPod's days were limited. A classic "dog" in the BCG matrix. But every 12 to 24 months, the iPod will be given a minor refresh or update. Incremental innovations are these little tweaks and adjustments to an established product, and backed by good marketing they represent the classic extension strategy.

There may be considerable consumer skepticism as to the value of incremental innovation improvements. Each year when Apple releases a new version of its "star" product, the iPhone, there are inevitable groans from many stakeholders that despite the marketing hype, the new version is merely a cosmetic or minor change.

### Innovation

The US patent office under the leadership of Charles Duell remarked that:

*"Everything that can be invented has been invented."*

That was in 1899!

It would be fair to say that the US patent office was misinformed. Innovation continues to be a source of competitive advantage for many organizations.

Innovation in a business context refers to the successful commercialization of an invention. Successful commercialization means that it is brought to the market and achieves a significant level of sales. An invention which remains in the R&D stage only is not considered innovative.



### Factors affecting opportunities for innovation and creativity

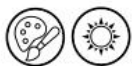
Innovation and creativity are very much intertwined. Innovative organizations need to be able to foster conditions that allow creativity and innovation to thrive.

An organization needs to give space to those charged with being "creative" and keep them away from unnecessary bureaucracy. Russell-Walling argues that for innovation to thrive, management must not apply the same standards of budget, constraints or discipline as they do for other departments.

A number of companies have developed innovative products and ideas through listening to customers and trying to respond to or anticipate changing market trends. It is a not so well-known fact that many of the most popular items on the McDonald's menu were created not by the company but suggested by customers and/or by franchisees.

Innovation will take time. In the history of the development of successful products, it is well known that iconic brands such as Post-it Notes and Coca-Cola were discovered by accident. These were happy (and very lucrative!) discoveries for the inventors concerned, but they should not be considered typical. Successful innovation requires patience, continuous product testing and many resources. Stakeholders must be wary of too much over-eager anticipation.

Once a product idea has been developed it will need to be communicated to the senior management, who will discuss what action to take. The innovative idea will need to be presented in such a way as not to baffle or embarrass. It is argued that engineers and ICT specialists who are at the forefront of the creative work may use excessive technical language and thus are not always the most appropriate people for this communication task.



## Rens

Rens combined creativity and innovation with the aim of establishing a USP. They created a sneaker made from recycled coffee and plastic in 2019. Linking innovation to environmental sustainability is another way to generate a circular business model.



Figure 5.8.1: A picture paints a thousand words



are innovations that make products and services more accessible and affordable, thereby making them available to a larger population."

To add clarity to this definition of disruptive innovation, we can note that an innovation is "disruptive" if the new product or service *changes* stakeholder (especially customer) behaviour, so that they are reluctant to return to more traditional methods of carrying out an activity. Incremental innovation may not alter behaviour but disruption does.

For example, Amazon's dominance of the e-commerce experience has changed the way that stakeholders view "bricks and mortar" retailing, especially those businesses that do not have an online presence. As we saw on page 111 with the advertising slogan "Browse in the mall – buy it on eBay", many consumers will now search online for a product before or after they visit the retail store. This process has been made easier with smartphones and cheaper internet data or free Wi-Fi.

The result of Amazon's disruption is that some businesses selling products in the same marketplace ceased trading. Toys R Us, Blockbuster, Borders, and many outlets of HMV are some of the more notable casualties.

## Disruptive innovation

The term "disruptive innovation" was first coined by Clayton M Christensen. The Christensen Institute describes it as follows:

*"Disruptive innovation describes a process by which a product or service initially takes root in simple applications at the bottom of a market – typically by being less expensive and more accessible – and then relentlessly moves upmarket, eventually displacing established competitors."*

The Institute also adds a note of caution:

*"Disruptive innovations are NOT breakthrough technologies that make good products better; rather they*

## IB Learner Profile

### Inquirers ?

Given that the Christensen Institute argues that disruptive innovation needs to be carefully defined, some examples are given in Table 5.8.1.

This list is not exhaustive, and you are encouraged to investigate your own examples. It is likely that by the time this study guide is published a new disruptor will have become established and other retail casualties will emerge.

The product or organization	Disruptive impact to change behaviour
Amazon	Changed the perception and ease of online retailing. Forced traditional retailers to examine their own business models.
Air conditioning unit	Allowed employees in Asia to work more productively than their Western competitors, especially in very humid environments.
Airbnb	Disrupted the accommodation/tourism/business travel market. The world's biggest hotel chain which does not own a single hotel.
Facebook	Social media market leader with Instagram and WhatsApp. Facebook has disrupted the way in which individuals and organizations connect with each other. Facebook has also disrupted the way in which users' data can be packaged and sold on to interested parties.
Napster	Disrupted the way recorded music is shared, but did so illegally. The origins of paid-for music streaming services, which now account for over 80% of all recorded music revenue streams.
The smartphone	Mobile communications disrupted banking services and the way organizations communicate with their customers. Smartphone apps are now the most important way to drive customer loyalty and brand value. Many households have removed traditional fixed-line telephones from their homes. The way in which stakeholders consume entertainment via traditional channels such as TV and radio is also being disrupted by the smartphone.
Uber	Disrupted the taxi and delivery service industries. The largest delivery service organization in the world that does not own a delivery vehicle.
Zoom	Before the Covid-19 pandemic, Zoom was a little-known, little-used video conferencing service. Now Zoom has grown to become a disruptor in organizing online meetings and the way that multinational organizations maintain a presence in global markets.

Table 5.8.1: Disruptors and their impact

For a different point of view, you are encouraged to read the online blog post “11 disruptive innovation examples (and why Uber and Tesla don’t make the cut)” on the OpenView blog. This blog post argues that Uber may not be disruptive. It also discusses why 3D printing and online education might yet become disruptive in the future.



It should also be noted that the time frame used to decide whether an innovation is incremental or disruptive is also subject to discussion. The internet in the late 1990s was clearly a disruption to many aspects of our lives. But it should be noted that the internet was being used by universities in the 1970s: it took at least 30 years to become the disruptive force it is now.

Perhaps we should add to our definition of disruptive innovation that in addition to changing behaviour, it should do this with the widest possible adoption across a range of cultures and regions.

### Revision checklist

- R&D, leading to innovation and meeting unmet needs, has become a critical organizational strategy, especially in saturated markets.
- To protect new innovations, organizations must seek out intellectual property protection such as copyrights, patents, and trademarks. If innovations were not protected, then the incentive for organizations to develop new products and services would be diminished.
- Incremental innovation is merely a modest change in a product or service. It can occur annually and may lead to some consumer skepticism if repeated too often.
- Disruption innovation changes consumer behaviour and can lead to the elimination of some organizations within a market that has been disrupted. Social media marketing through the smartphone, and Amazon and Alibaba with their online-retailing business models, are examples.



## Management information systems (HL only)

### Guiding questions

- How do marketing and operations management link together?
- What is the role of data and why is it important?
- What do we mean by data analytics, databases, data mining and big data?
- What is cybersecurity and cybercrime?
- What is the impact of “machine learning” such as artificial intelligence, on operations management?
- What are critical infrastructures and how do they impact on an organization’s management and storage of data?
- What is virtual reality and how can it be used to deliver value to an organization?
- How effective are customer loyalty programmes for organizations?
- Should data from management information systems be used to manage and monitor employees?
- To what extent should data mining be used to inform organizational decision-making?
- What are the benefits, risks, and ethical implications of using advanced computer technologies and technological innovation on business decision-making and stakeholders?

### Introduction

HL

*This final chapter contains new business content concerning operations management under the heading of management information systems (MIS). The use of big data, data analytics and mining, customer loyalty programmes, cybersecurity, and critical infrastructures are some of the topics which fall under the broader category of MIS.*

*Such has been the growth and use of data and technology in business operations, that this separate chapter has been provided to capture all of the most recent business content. However, given that changes are occurring in MIS you are advised to ensure that you keep up to date.*

*There is a long list of guiding questions for this chapter, so it is advisable that you study the chapter in the order of the topics given below and break it down into small “chunks”.*

## Marketing skills and the link to MIS

Table 5.9.1 has been adapted from an investigation carried out by Marketo – a marketing agency that conducts research into future marketing trends and the skills needed to identify and use the latest management information systems (MIS). Marketo publishes an annual report which looks at current and future marketing skills needed to develop new

marketing strategy driven by technological change and innovation. It communicates with a range of organizations and asks questions about current and future marketing needs, especially related to connecting with customers through digital marketing.

Two of the questions asked of the CEO (chief executive officer) or CMO (chief marketing officer) in the 2021 report were:

- What are the skills your marketing team has now in 2021?
- What are the skills that you think your marketing team will need by 2025?

Marketing skill	2021 (% of replies)	2025 (% of replies)	% change
Artificial intelligence/machine learning	6	60	54
Neuromarketing/buyer behaviour	8	52	44
Customer experience	35	66	31
Experiential marketing	15	39	24
Analytics, data and insights	52	71	29
Influencer marketing (social media)	21	33	12
Marketing technology	33	41	8
Public relations	44	15	–29
Social media marketing	66	34	–25

**Table 5.9.1:** Marketing skills needed in 2021 and 2025

Source: [www.marketo.com](http://www.marketo.com)

To summarize some of the main findings:

- The Marketo research confirms that marketing skills will become increasingly linked to information systems.
- Traditional marketing skills and social media will still be important (in 2021 Facebook still had around 2.9 billion active users), but the biggest changes will be in the use of artificial intelligence driving customer experience marketing, and neuromarketing.
- Their findings confirm that looking forward, marketing and information systems will become increasingly interlinked and may combine to become one discipline.
- Digital and mobile marketing will increasingly dominate marketing strategy.

## The role and importance of data collection for an organization

Before we begin our investigation and discussion into MIS, we should start with an overview of what exactly we mean by “data collection” and use examples to explain why it is important that data is collected. We will then move into the specific business content for this chapter.

Organizations have been using data for many years. As we have discussed in previous chapters, the collection of data helps organizations with current and future decision-making.

- In chapter 2.4, we saw that organizations will use labour turnover rates to measure worker absenteeism and retention.
- In chapter 3.4, we discussed how financial data is used to calculate profit and loss or identify the current financial position of an organization, among other financial ratios.
- In chapter 4.4, we looked at various market research methods to find primary and secondary data, which can be used to determine whether an organization should pursue a new marketing strategy.

- In chapters 5.3 and 5.6, we saw the use of productivity data in production planning. Organizations can use this data to calculate defect rates, and labour and capital productivity. Productivity data can also be used to measure continuous improvement and quality control as part of kaizen and TQM.

Changes in technology and the spread of the internet have increased the opportunities for organizations to collect data and process it rapidly. This is a significant reason behind the growth of MIS.

Some of the data sources that organizations use to influence their decision-making include:

- Customer loyalty programmes, such as store cards for clothes shops, created to reward customer loyalty. Air Miles is another classic example.
- Credit card information and electronic fund transfers. These include point-of-sale systems such as Apple Pay. They allow organizations to track information about customers’ purchases.
- Customer preferences revealed through their own social media posts or reactions to others’ social media posts, for example on Facebook, Instagram or TikTok.
- Customer preferences revealed through online searches using Google.
- Customer feedback provided through writing online reviews after a product has been purchased.
- Customer phone calls or live chats, including customer complaints or after-sales queries.

We should now understand the reasons behind the automated reply: “Your call is important to us.” There is a critical point here for your learning: organizations have always collected data, but with MIS the level of data collection and analysis has been taken to new levels to create new opportunities.

Data can be processed and analysed to investigate new revenue streams, identify possible future trends, and anticipate or even create new and unmet needs.

Fundamentally, unlike most of the market research we considered in chapter 4.4 – which is based on possible consumer responses, especially for primary data – MIS uses actual purchasing data. MIS reflects on *what has occurred rather than what might occur*. The accuracy, objectivity, relevance, and usefulness of this actual purchasing data for an organization and decision-making cannot be overstated.



Of course, we must note that there are growing concerns that the harvesting of this data has significant ethical and privacy implications. If you have watched the documentaries *The Social Dilemma* or *The Great Hack*, you will be aware that social media organizations and platforms have been very effective (if not always ethical) in collecting this data. Ongoing cognitive research on attention spans and the exploitation of young users' data has argued that MIS can have unwelcome side effects. We will return to this point at the end of this chapter.

### The impact of Moore's law on MIS

The efficiency, speed and use of MIS has been driven by the existence of Moore's law. This states that the number of transistors in a dense integrated circuit doubles around every two years. In short, it means that the processing of data can effectively occur at double the speed for half the cost every two years.

Moore's law explains why new technological products such as a smartphone can include more features and an increased memory size each year, and claim to be "faster" without increasing the price to the customer. In fact, there is an argument that the price of such devices should decrease!

Also given Moore's law, organizations are now able to process and analyse data at an exponential rate for only a modest increase in cost, and this trend will likely continue.

*We have now set the scene for the business content which follows and we will continue this MIS chapter by defining some of the important terms.*

## Data analytics, databases, cybersecurity, and cybercrime (AO1)

HL

A **database** organizes primary or secondary data into accessible formats to allow for further investigation and analysis under the broader term of data analytics.

**Data analytics** is the process of investigating databases and transforming them down into more manageable parts. The aim is to determine forecasts and trends so the data can be used in current or future decision-making. Analytics can also be used to identify unmet needs.

**Cybersecurity** is the process of protecting these vast amounts of data and databases. Cybersecurity is also designed to ensure privacy concerns are addressed, especially if the data is kept in the "cloud".

**Cybercrime** is the fraudulent use of data or databases by an individual or organization without the permission of the owner of the data.

## Big data (AO2)

HL

As the name implies, big data refers to the exponential growth in collecting increasingly large amounts of complex data.

We noted earlier in this chapter that organizations have always collected data principally from customer interactions. Big data takes the collection of this data to a new level and has effectively created a new language to explain it.

Big data can take many forms, arrives at great speed, and is complex and hard to manage. For these reasons, big data is referred to as having three Vs: Volume, Variety and Velocity. We could add a fourth: Value.

In the next section, we look at ways in which this big data is collected, processed, and stored so that it can be used in decision-making.

## The internet of things (AO2)

HL

We identified in chapter 5.8 that the smartphone is an example of a disruptive innovation. Smartphones via their connection to the internet can be used as communication and leisure devices, and they present many opportunities via apps to reach customers through marketing and distribution channels.

Smartphones are effectively microcomputers and they are a rich source of data for organizations. Each time a mobile application or smartphone is used, and a web page is clicked on or scrolled through, data is sent and received. These activities create new ways to increase data collection, then through artificial intelligence and algorithms they create new commercial opportunities. These data-driven

and intelligent technological devices are part of an era of "machine learning".

Smartphones are not the only "smart" devices. "Smart" versions of cars, refrigerators and TVs are just some examples of household devices grouped under the heading of "the internet of things", which refers to physical objects that can send and receive data. Remarkably, even the humble toilet is now part of the internet of things!

- Your car may indicate through an app or notification that it requires a service, or a component part needs changing. Your car can send a notification to your local garage where you last had the car serviced and book an appointment for you subject to your own calendar.

- Your refrigerator may be able to automatically order you cold drinks on a hot summer day and connect to your supermarket via a website link. The order is processed automatically, and products are delivered to your home and placed in a courier box so they are safe until you arrive home.
- Your TV and streaming services will recommend programmes for you to watch based on your viewing habits.
- Via speech recognition software, Siri can offer suggestions for restaurants you might wish to consider

in a particular geographic area. Alexa will reduce its volume or offer you new smart playlists based on your current musical tastes.

- Your “smart” toilet will measure your blood pressure, weight, oxygen levels and pulse, and send you weekly medical reports.

For some readers this list of smart devices actively sending and receiving data on your behalf and with your permission may seem like science fiction. However, all of these devices currently exist; they are part of the internet of things.

## Artificial intelligence (A02)

HL

In addition to sending and receiving data, artificial intelligence (AI) allows machines and software to learn from your interactions. For example:

- Your web search on Google will lead to new sources of information you had not considered.
- Your visit to Amazon, YouTube or TikTok will generate recommendations for further goods or videos, based on your browsing history.
- Your car may be able to drive itself (with you inside), and can offer you alternative routes to avoid traffic congestion on busy stretches of road.
- You may be offered support on a website through a bot (an online assistant) to guide you through the process of purchasing something new.

Although AI has been present for nearly 50 years, it is still a field in its infancy, and the opportunities it could

give rise to in the future are potentially endless (subject of course to the overriding issues of privacy and security). New ways of marketing through the seven Ps marketing mix come to mind.

Some of the AI ideas mentioned in this chapter are still subject to additional testing before they can be confidently launched into the marketplace. At the time of writing, self-driving cars are still some way off despite extensive simulations and research.

In some market segments and cultures, we must respect the fact that some consumers may prefer face-to-face customer interaction, especially in financial matters involving significant sums of money. We saw in chapter 4.5 that the banking system still offers opportunities for customers to talk to a financial adviser in a physical space, even though over 90% of banking transactions now occur online.

## Critical infrastructures (A02)

HL

### Artificial neural networks, data centres and cloud computing

To manage and make use of some of the opportunities that the internet of things, artificial intelligence and machine learning have created, organizations must find and utilize critical infrastructures. These critical infrastructures allow organizations to utilize big data to create value.

These critical infrastructures include artificial neural networks, data centres and cloud computing.

Artificial neural networks are computer systems that are capable of “learning”. They allow organizations to create algorithms to solve problems, and to create new databases from the explosion of data. The goal is to be able to predict purchasing decisions and identify possible unmet needs.

Amazon’s market leadership in the e-commerce space has been based on the harnessing of these neural networks. Some writers have coined the term “neuromarketing” to describe this. Amazon has already worked out which products you would like to purchase *before* you have chosen them, based on their recommendations created by these algorithms. It is almost as if the organization, or more accurately the algorithm, can work out what is going on inside your head.

#### Cloud computing and data centres

**Data centres** allow for data to be collected in one place.

**Cloud computing** allows organizations to keep this data

so that it is available to the organization and its decision-makers at any moment in any place, providing they have access to a device that can connect to the “cloud”.

The organization Cloudflare describes the following benefits of cloud computing:

*“The cloud enables users to access the same files and applications from almost any device, because the computing and storage takes place on servers in a data centre instead of locally on the user’s device. Therefore, a user can log in to their Instagram account on a new phone after their old phone breaks and still find their old account with all their photos, videos, and conversation history. It works the same way with cloud email providers like Gmail or Microsoft Office 365, and with cloud storage providers like Dropbox or Google Drive.*

*For businesses, switching to cloud computing removes some IT costs and overheads. For instance, they no longer need to update and maintain their own servers as the cloud vendor they are using will do that. This has a big impact for small businesses that may not have been able to afford their own internal infrastructure, but can outsource their infrastructure needs affordably via the cloud. The cloud can also make it easier for companies to operate internationally, because employees and customers can access the same files and applications from any location.”*

Source: [www.cloudflare.com/learning/cloud/what-is-the-cloud/](https://www.cloudflare.com/learning/cloud/what-is-the-cloud/)

## Virtual reality (A02)

HL

Virtual reality (VR) is an experience for the user that can be similar to or completely different from the real world, and it is created using advanced computer software and technology.

VR is having a profound effect on the way we can consume entertainment, such as immersive gaming where the player can actually compete in the virtual world. VR also has some potential to disrupt educational processes, for example in medical or military training. VR is influencing business communication and organizational structures, especially in multinational corporations (for example by making remote working and virtual meetings easier).

Organizations are still coming to terms with the benefits of VR. Some industries have seen VR as an opportunity to exploit a first mover advantage in their market segment.

- The real estate industry has developed new ways to add value to the customer experience, for example by giving virtual tours of houses during the Covid-19 pandemic.
- The tourism industry in New Zealand has found ways to provide virtual experiences of adventure activities to promote tourism destinations across the country.
- Some social enterprises have been looking at VR to help pursue ethical objectives. For example, using role playing and immersive experiences to help with cultural awareness education for newly arrived migrants. Another application is helping nervous air passengers by providing virtual simulations of plane flights to calm the nerves on take-off and landing. VR could also be used to help young drivers improve their driving skills in the virtual world before they drive in the physical world.

## Customer loyalty programmes (A03)

HL

Customer loyalty programmes (CLP) have been in existence for many years, but the growth of big data, online retailing and mobile communications have taken the role of CLPs to a new level of importance.

It would be unlikely in 2021 to find a large organization in a competitive market without a CLP or an application linked to a smartphone so that a future relationship can be maintained with a customer.

Organizations can purchase data from other organizations offering rewards to their customers, which can be used to identify and create new opportunities. Social media organizations can also offer this data service.

As stated before, Facebook's business model is not to provide social media opportunities, it is in fact selling

*customers' attention.* The more time that users spend on Facebook, the more data can be collected and sold on to other organizations – who can use it to identify potential commercial opportunities.

Through applications (apps) on smartphones and/or social media such as TikTok, smartphone usage data can be analysed and used to target specific customers with the intention of building customer loyalty.

The smartphone app sends and receives data, and the customer through their purchasing actions or browsing history will receive member benefits and notifications. These notifications can be turned off, but given the addictive nature of these apps and devices, it is likely that the temptation to be connected will prove too strong.

### HubSpot

In chapter 4.1, we indicated that the role of marketing is changing.

Finding customers through market research and above-the-line promotion is still an important factor in driving brand awareness and value, but what happens when you find customers? The challenge now is to keep them and stop them moving to your competitors. The new marketing mantra – given the increase in competition – is to retain your current customers.

Organizations can carry out CLPs by themselves. However, this will require time and training, and it will incur a significant cost. Many organizations choose to outsource this function as it can be quite technical in nature. There are now many online organizations which offer to take on the setting up, administering, and monitoring of a CLP.

HubSpot is one organization which offers this service.

HubSpot offer to provide a complete digital marketing package which includes, in the first instance:



- Customer relationship management software, which keeps track of every interaction with a customer online. This data is used to develop and deepen the relationship with the customer.
- The creation of blog and social media content relevant to the target market.
- The analysis of "clickthrough rates" from customer online searches to create algorithms or customer personas.
- Below-the-line promotions based on previous purchasing behaviour, increasing the number of data points.
- Data analytics and optimisation to track the success of the CLP and recommend changes to social media marketing if required.

There are strong links here to chapter 2.4, where we discussed scientific management theories such as Taylorism. You should revisit the main ideas from page 49 as scientific management is often misunderstood as a motivation theory.

Peter Drucker rated Frederick Taylor's work so highly that he compared Taylor's contribution to management theory with Darwin's contribution to the theory of evolution and Newtown's contribution to understanding the physical world. Drucker was a strong supporter of Taylor's methods to monitor and improve performance, and commented that:

*"If it cannot be measured, it cannot be managed."*

Big data and analytics have created many new ways to manage and monitor employee performance, which is now categorized as "Digital Taylorism".

The motivation behind scientific management is to use data to improve efficiency and productivity, and ultimately to improve the performance of the individual and the whole organization (something which Taylor himself referred to as creating a "bigger cake [or opportunity] for all").

Digital Taylorism takes advantage of the opportunities afforded by using complex databases and data analytics in ways that would have seemed unimaginable to Taylor when he prepared his first study in 1915.

For example, if an organization decides to change one element of the production process due to a quality control issue, then data about this change can be collected and analysed quickly. The objective is to see if the hoped-for quality improvements materialise and are sustainable. If not, a new change could be suggested.

If successful, then the organization could reward the employees who have taken part in this quality improvement process through a productivity or quality bonus.

The intention behind Digital Taylorism is to manage and encourage employees to improve their performance and skills. Digital Taylorism is not designed to be like "Big Brother" where mass surveillance of employees leads to an invasion of their privacy.

*The Economist* magazine, in its editorial in October 2021, argued that the benefits of Digital Taylorism can extend to a range of different stakeholders, including governments. Digital Taylorism can extend to the whole economy and improve quality of life in a similar way to how Taylorism was designed to increase the standard of living for everyone.

*"Big data has allowed us to track movements, restaurant bookings and card payments. The results are still rudimentary but as machine learning improves, the ability to observe the economy accurately will improve and speedily. Poor and late data can lead to policy errors that cost millions of jobs and trillions of dollars in lost output. Big data can lead to better public sector decision making and improvements in the quality of life."*

Source: "A real-time revolution will up-end the practice of macroeconomics", *The Economist*, 23 October 2021

However, some concerns have been expressed about Digital Taylorism as a method to manage and monitor employees, and not just over privacy and surveillance. Media articles have highlighted concerned employees at Amazon who have experienced what they see as unethical work practices due to the implementation of Digital Taylorism in their workplace. Employees who collect the items that have been ordered by customers online are given strict collection targets to meet, which puts them under constant pressure, with limited breaks for the restroom and lunch. Many report being exhausted.

To reference Herzberg, Amazon is not meeting the hygiene needs of the employees who are carrying out these essential tasks as part of Amazon's delivery service.

In chapter 5.6 we noted that each McDonald's in New Zealand has real-time electronic "scoreboards". These indicate the speed at which customers are served. If the drive-through serves at a pace faster than industry standards, then it is ranked higher. The scoreboards are updated every time a customer drives through. There could be motivating and demotivating factors at work here.

One could argue that this is a transparent process which allows the top performing franchises to be recognized for their speed of service. However, it could be viewed as being more of a "stick" approach to motivation, and may force lower-performing franchises to rush the customer experience so that they can move up the scoreboard. There may be quality control concerns here.

Digital Taylorism is a controversial issue. The managing and monitoring of employees has always been subject to much debate. With MIS, there are now many more ways to collect data on employee productivity and performance, and this raises privacy concerns. Being open and transparent with the findings of the data collected may alleviate some of these concerns but will not eliminate them.

## The use of data mining to inform decision-making (A03)

### Data mining

There is considerable debate about the use or misuse of data mining. Big data and data mining have the potential to disrupt the way in which we undertake and evaluate market research, with a significant impact on decision-making.

Huge amounts of data can now be analysed and curated to generate new ideas. This has led to organizations being able to make more accurate decisions and predict future trends with a greater degree of confidence. Consumers have seen the benefits, with more tailor-made marketing and products, streamlined services and (sometimes) lower prices. Data mining has probably led to the creation of more niche markets and satisfied more unmet needs.

As organizations use big data to drive decision-making and strategy, it is tempting to argue that the customer, through their physical and online actions, has a much greater input into what is produced, how it is produced and for whom it is produced. These are the three most important questions for an economy to solve. Data mining has had a major impact on economic decision-making. But we must accept that there have been opportunity costs and ethical issues.

Organizations that collect data are often legally able to sell the results of this data collection for many years. They must be transparent to their customers and indicate how, when and where their data will be used.

Customers will normally agree to organizations using this data when they sign up for the loyalty programme or store card, by “accepting” any terms and conditions. Membership benefits and privileges will encourage them to do so.



### Ethical concerns

The use of “cookies” or trackers to record our online activity, for which we have mostly given permission, has raised ethical concerns. Data mining has led to a constant barrage of notifications on our mobile devices which disrupts and influences our attention spans.

Sleeping patterns have been disrupted and there is a feeling that we are constantly wired to our devices. It is estimated

that a 15-year-old spends up to five hours a day on their smartphone. The term “on demand” seems to have been created for this new reality of constantly being connected. Is this the fault of data mining or is it the responsibility of the user to turn these devices off? How much of this new era of data mining is ethical?

One of the startling conclusions from *The Great Hack* documentary is that Facebook could have up to 500 data points (or characteristics) on any one individual. Most people can probably think of around 10 great characteristics (or data points) for their best friend. By this measure, Facebook will know more about your best friend than you do!

## The benefits and risks of innovations and MIS on decision-making and stakeholders (A03)

HL

Many governments prepare a census every five to ten years to identify and analyse changes in population and demographic trends. Organizations will do this perhaps every three months to see if their human resource management needs and workforce planning are appropriate.

With big data and data mining these processes can be carried out much more easily now that information is a few clicks away, making decision-making more accurate. As *The Economist* argued on the previous page, MIS can help with planning throughout society.

It is likely that big data will be part of the organizational landscape for some time to come. In 2021, an incredible 2.5 quintillion bytes of data were created every day; 90% of the world’s data was created between 2019 and 2021 alone. This is a staggering figure and the volume of data is expected to double every two years. It is hard to imagine the amount of new data that will be created by, say, 2028.

At the time of writing, Facebook is looking to create a virtual world connecting entertainment, office work and socialising.

It is called the “metaverse”. If this is successful, then the integration of leisure activities, professional responsibilities and social life will be complete. Facebook will be able to increase its influence and link in all the technologies we discussed on pages 145–147, such as neural networks, artificial intelligence, and machine learning. The quantity and quality of data from this potential metaverse could be disruptive in our daily lives.

To conclude, it is important to develop a sense of balance and proportion. Data and MIS are increasingly important. However, what will we do with all of this information? The critical conclusion could be not what the story is today but what happens next.

The following quote from *Data First Marketing* by Miller, Lim and Scott is revealing:

*“In marketing and life, data is not useful on its own: it’s the story that data can tell us that is important. The danger for us is when we start with the story and then try to fit the data to match.”*

### Thankyou

Thankyou is an organization driven by ethical objectives, sustainability and the use of MIS to impact on stakeholders.

This study guide began with the aims of the Business Management course, and it is fitting that we end with an organization that is trying to meet the aims of the IB mission through its actions and management of its information systems. This organization has linked its mission statement to being a change agent and believes strongly in the concepts of change, creativity, ethical behaviour, and sustainability.

Thankyou is an Australian social enterprise that was created by Daniel Flynn in 2008 when he was 19 years old. Flynn was appalled to find, when carrying out secondary research, that large parts of the developing world’s population did not have access to safe drinking water.

Flynn decided to create a bottled water company, with 100% of the profits going to regions that do not have safe drinking water. Today 100% of their profits are donated to help end poverty.

So began a journey which is creatively told through their website at <https://thankyou.co/about>.

Flynn knew that he was going to compete with established soft drink manufacturers who had significant brand advantages over Thankyou, but he was not deterred. One stroke of luck for the organization was that “Thankyou” as a company name was not trademarked. (It is now!) The name of the company gave them a competitive opportunity and reinforced their commitment to their stakeholders to act responsibly.

Thankyou has been completely transparent in its operations, embracing the opportunities afforded by MIS as far as possible.

When you purchase one of Thankyou’s products you receive a personal code on the bottle or container, which allows you to track the impact of the revenue you have given and the impact on the stakeholders who benefited.

Thankyou’s products are not tested on animals, and they are vegan friendly and dermatologically safe. Their hand lotions and shampoos contain no SLS, SLES, EDTA or parabens. There are no synthetic fragrances, animal derivatives, mineral oils or artificial colours.





Thankyou's products are priced considerably higher than their competitors' even though they operate in the mass market. In 2016, Flynn wrote a biography called *You Have The Power to Change Stuff* which was printed in landscape even though the cover and title were in portrait. It was one of the first of its kind. When first selling the book, Flynn asked purchasers to pay what they wanted to pay for it. There was originally no retail price and any donations were given to good causes.

This is an organization which truly tries to be creative, ethical, and sustainable, and lives its mission daily.



**Figure 5.9.1:** Daniel Flynn's book, printed in landscape orientation

There are many more aspects to this company which you should research for yourself. Thankyou would be an excellent company to build a business research project

upon (chapter 6.3), or to follow as part of an HL student's preparation for Paper 3 which focuses on social enterprises.

In 2020, after realising that their efforts to improve the lives of others were not having the desired impact through selling bottled water, Thankyou dropped the product.

Flynn's observation was that the bottle's environmental impact was too great. Thankyou dropped its founding product from its portfolio, even though it had helped to raise millions of dollars to provide safe drinking water. Thankyou indicated that bottled water was a "silly product", but it had raised awareness of the issues around accessing safe drinking water. They did not wish to be associated with a product which they viewed as "greenwashing". The bottled water had performed its task to raise awareness of an important issue but it was time to move on.

By his own admission, Daniel Flynn was an "average student" at school who did not study business or the IB Diploma. He left school early.

When he created Thankyou, Flynn had a dream but no business plan. Yet he succeeded through resilience and sheer hard work. He also learned from his mistakes and admitted there were many of those in the early days of the organization.

Flynn takes little credit for his own success and argues that the secret to successful business is to have a great team and ask the right questions!

## Your challenge

You have now come to the end of your business management journey and can focus on looking at your final examinations and the internal assessment, which are the topics of the next unit.

You have used this study guide to identify, explain and evaluate business concepts, content, and contexts. You have a business management toolkit at your side ready for use. You are now ready to become a change agent!

### Revision checklist

- Management information systems using big data, data analytics and developing technology such as the internet of things, neural networks and virtual reality are shaping the future of data collection, decision-making, marketing and operations.
- Arguably, the critical competitive factor in the future for organizations is not researching and obtaining data but how it is mined, stored, and integrated into all business functions. Managing information systems will be important for future success.
- Big data is now being applied to human resource management, leadership, and motivation. If an ethical holistic position is taken, big data can be used to improve the lives of all stakeholders.
- There are still ongoing challenges, however, relating to privacy, protection, and the unwanted intrusion of artificial intelligence into our everyday lives via mobile and smartphone technology.



# External assessment guidance for SL/HL Papers 1 and 2

## Introduction to unit 6

We have now covered the business content for the Business Management syllabus for standard level (SL) and higher level (HL), applied the four Business Management concepts, and where relevant linked to the Business Management toolkit. The knowledge and skills that you have gained by working through the five units and applying the toolkit will be considerable. The challenge now is for you to put this to good use. At the end of your academic year, the final examination will include both internal and external assessment. Your final examination will determine your final grade as part of your overall IB Diploma Programme or Career-related Programme.

In the longer term, it is hoped that the knowledge and skills you have acquired will enable you to become a change agent and make a real difference in the lives of stakeholders through your actions. This is the overriding aim of the IB mission, which was discussed in the “Study guide essentials” chapter at the start of the book, and of course the example of Thankyou in chapter 5.9 may have inspired you. This is a social enterprise which embodies the very concepts and mission that the IB wishes to promote.

There are four parts to unit 6:

- Chapter 6.1 will focus on Papers 1 and 2 for SL and HL (external assessment). Paper 1 will be common for SL and HL. The structure of Paper 2 for both levels will be similar, but HL students can expect to be assessed on a wider range of topics given that there are HL-only parts of the syllabus.
- Chapter 6.2 is for HL students only and will focus on Paper 3. SL students are encouraged to read through this material as there is additional information on social enterprises, which form part of the business content for chapter 1.2. There is also some guidance on choosing a social enterprise as the subject of the internal assessment (the business research project).
- Chapter 6.3 will focus on the business research project, which is an internal assessment for both SL and HL.
- Chapter 6.4 will provide examination/revision techniques, methods and advice. It will include a range of examination questions and suggested approaches/answers from various sections of the Business Management syllabus for both SL and HL.

Advice and guidance around the best way to tackle questions will be given rather than model answers. In business management, there is no such thing as a “model” or “perfect” answer. Also, as we will argue in this unit, it can be a risky technique for you to go into an examination with a pre-prepared answer, thinking that you will be able to reproduce that answer and achieve high marks.

Finally, there will be advice and guidance to help you avoid some of the errors which past students have made in previous examinations. These are given to support you, to encourage you not to make the same mistakes, and to help ensure that you maximize the number of marks in the final examination across all papers for SL and HL.

## SL/HL Paper 1 – a new approach to assessing the case study paper

For nearly 20 years, Paper 1 for both SL and HL was based on a case study that was sent to IB schools approximately three months before the final examination in May or November. From 2024 onwards, this will no longer be the case. The case study will not be pre-seen.

Instead, three months before the final May or November examination, the IB will send a “pre-released statement” to your school. Your Business Management teacher will share it with you.

On the day of the final examination for Paper 1, you will receive a case study paper with new stimulus material and several questions. The paper will be identical for SL and HL students.

### SL/HL Paper 1: the pre-released statement

Part 1 of Paper 1 will be in the form of a pre-released statement. It is not designed to give you an insight into the business content and questions that will be in the final examination. It will be deliberately broad in scope.

The pre-released statement could contain information and terminology that is not in the Business Management syllabus. Business management is in a state of constant change. Over time there will be new ways of communicating, new developments in marketing, new sources of finance

and technological innovations. The pre-released statement is designed to make the material in the Paper 1 case study relevant and up to date given anticipated changes in future business management content.

An example of a pre-released statement is given below and the IB have given permission to use this content.

### Pre-released statement exemplar – part 1

*“The upcoming case study is related to:*

- *precision agriculture*
- *the use of drones*
- *software and hardware development and sales.*

*Candidates do not need to have comprehensive or exhaustive knowledge of these topics but rather some basic familiarity.*

*Additional terminology that candidates may want to know includes:*

- *a patch (a software patch)*
- *aerial mapping*
- *cloud-based licensed software*
- *consultant*

- hardware
- licensing agreement
- multi-spectral camera
- project manager/project management
- software
- software development."

Here are the additional IB instructions which accompany this pre-released statement:

*"Students are to spend a maximum of five hours researching these topics and learning the terminology. Topics in this statement build on those contained in the syllabus. The primary aim is to assess candidates' knowledge around important contemporary business topics that could not have been anticipated when the guide was written."*

### **Pre-released statement exemplar – part 2**

The second part of the pre-released statement will be the first 200 words of the case study.

An example of the first 200 words is given below with the IB instructions.

*"The following page contains the first two paragraphs of the case study. Candidates should familiarize themselves with the context of the case study before the examination. In the examination, candidates will be given the full version, including these first two paragraphs."*

*Mapping Tech Ltd (MT)*, founded in 2010, is owned by Jackie Beasley. *MT* originally wrote software to help farmers use drones for aerial mapping, which allows for precision agriculture. With the information gathered from aerial mapping, farmers can determine which areas of their farms need more (or less) human attention. For example, precision agriculture allows determination of areas that need more (or less) fertilizer or which types of fertilizer to use. Through precision agriculture, farmers can increase yields, reduce costs and reduce the environmental impact of farming. Later, *MT* began to manufacture hardware related to precision agriculture.

Jackie founded *MT* when studying computer science at the University of Nebraska (UN), located in Lincoln, Nebraska, USA. One major focus of UN is the use of drones for precision agriculture. Jackie saw the benefits of aerial mapping as well as the positive impact that precision agriculture has on the environment. The world population was growing. Humans' total ecological footprint is high. She believed that precision agriculture could increase the food supply and reduce environmental impact. With her expertise in software mapping, Jackie felt a responsibility to advance precision agriculture."

### **SL/HL Paper 1 preparation**

The advice and guidance in this section will be speculative – the first examinations for Paper 1 will be nearly two years

away when this study guide is first published in 2022. It should also be noted that each IB World School will have their own way of preparing students for the final examinations. However, the following preparatory steps could be used by all students:

- A useful way to start would be to re-read the pre-release and define the terms which are not in the *Business Management Guide*.
- This could be carried out in study groups to share the workload and to confirm a common understanding of some terms which may be unfamiliar and/or industry buzzwords.
- In these study groups, it would be sensible to research some organizations that are already operating in the industry or market that is the focus of the pre-release. A group SWOT or STEEPLE analysis of firms currently operating in this market could be a good starting point.

The following points are very important:

- It is the expectation that you will spend only five hours on the preparation for Paper 1. You should be guided by your teacher's knowledge and experience, but the five hours will be useful to build confidence and knowledge of the industry that will be the focus of your final examination.
- *Your final examination answers must be in context.* This means that they must relate to the organization in the case study paper and not to the one you have prepared in advance of the examination. Context is king!

As an examiner with over 20 years' experience, it can be disheartening to see a candidate write at length on an example which bears no relation to the business context of the case study.

For emphasis we will reiterate this point. For Paper 1:

**There should be no prepared answers and your responses must be applied to the business in the stimulus material.**

This point can also be extended to Papers 2 and 3.

### **A word of caution over using pre-prepared packages for Paper 1**

Over the last few examination sessions, pre-prepared case study packages for Paper 1 have become more available.

Commercial organizations have prepared and marketed "ready-made" study packs with attractive-sounding promises such as "100 possible questions for the IB Business Management SL and HL case study paper with 100 possible answers". These study packs are popular with students and teachers alike.

However, apart from being at odds with the IB learner profile, using pre-prepared packs leads to students walking into the final examination room with "rote" or prepared answers. These prepared answers do not score highly and of course they may be totally inaccurate given that you will not know the full context of the case study until the day of the examination.

## Guidance for answering AO1, AO2, AO3 and AO4 questions on Papers 1 and 2

On a more positive note, let us look at some strategies to help you achieve higher marks by focusing on the assessment objectives. These strategies can be applied for both SL/HL Paper 1 and Paper 2.

This section links to the advice on command terms in the "Study guide essentials" chapter (pages 3–5). In this section we tried to look at each of the assessment objectives (AOs) which link to the business content used in the Business Management syllabus to guide the depth of study.

We will now use these same AOs to guide you regarding how much you should write in response to a particular examination question.

### AO1 questions

**Questions include the command words:** define, describe, identify, outline, state

**Maximum mark available:** 2 marks

**Example questions:**

- Define niche market.
- Identify two characteristics of democratic leadership.

**Possible responses:**

If you only provide a partial definition, such as: A niche market is a small market, this will get 1 mark.

The following is a 2-mark answer:

A niche market is a small segment of a larger market with a specific customer need being satisfied which cannot be catered for by the mass market.

### AO2 questions

**Questions include the command words:** explain, comment, apply

**Example question:**

Explain one cost and one benefit to company X of conducting primary research via focus groups. [4]

**Maximum marks available:**

AO2 questions could be worth up to 4 marks when asking for one cost and one benefit to an organization featured in the stimulus. In rare cases where two costs and one benefit are asked for, the maximum mark would be 6.

For the example question above, 2 marks for each cost or benefit with application (context) to company X. (If the answer is theoretical and could be applied to any organization, then the candidate can only gain 1 mark for a cost and 1 mark for a benefit.)

**Possible responses and guidance:**

Let's assume that company X is a producer of running shoes made from coffee grounds, such as Rens (discussed on page 142). The following is a 2-mark answer:

One benefit of conducting primary market research via a focus group is that the data will be up to date and accurate. One cost is that it is time-consuming to set up a focus group.

The following is also a 2-mark answer:

One benefit to Rens of conducting primary market research via focus groups is that the data will be up to date and accurate. One cost to Rens is that it is time-consuming to set up focus groups.

*Why two marks only?*

The name of the company has been mentioned and we saw earlier that application to the organization is required.

The issue is that *mentioning the name of the company is not sufficient application*. For full application, your cost and benefit must apply to the product, market, or industry in the question.

Consider the following answer:

Rens produce a running shoe using recycled coffee grounds. One benefit of primary data is that they will be able to access up to date and accurate information on a potential new product/shoe range to gauge customer reactions. Focus groups would be suitable. The cost to Rens is that given the running shoe made from coffee grounds is new, it might be difficult to find suitable respondents who can accurately comment in a focus group meeting and provide worthwhile feedback.

This answer is longer, but it is fully applied. Rens is mentioned, and the focus group answer is explained in context.

**Key revision point:** for AO2 answers in Paper 1 and Paper 2, especially those worth 4 (or more) marks, your answer must identify, explain, or apply to the organization in the question.

Mentioning the name of the organization is not sufficient for 4 marks, *however good the theoretical response*. Such a theoretical response would get a maximum of 2 out of 4 marks.

### AO3 questions

**Questions include the command words:** examine, evaluate, discuss, recommend, to what extent

**Maximum mark available:** 10 marks

**Example questions based on the case study material:**

- Recommend whether the management should choose strategic option 1 or option 2.
- Discuss whether the organization should remain privately owned or should become a publicly listed company.
- Evaluate the two options to motivate the workforce.
- To what extent is the liquidity of the organization a concern?

**Guidance:**

In Papers 1 and 2 for SL and HL, these evaluative questions carry the highest marks. They are more difficult questions as they require knowledge of business content, application to the business in the case study, analysis of both sides of the argument, and a conclusion or judgment.

AO3 questions are marked differently to AO1 and AO2 questions and use mark bands. An example mark band for an AO3 question is given in the *Business Management Guide*.

The examiner will read your answer and then they must decide which mark band it belongs in. Remember that mark bands are used by the examiner to mark your answer. They are not a revision tool as such, but we can use them to deduce some important revision tips and strategies to help you increase your chances of getting a higher mark.

- Answers which are one-sided will not score high marks if there are no counter-arguments. For an analysis to score highly, there need to be arguments in favour and arguments against. Please see chapter 6.4 for some examples of this.
- Answers which only mention the name of the company will not score high marks. If this is the case, then the analysis is seen as generic. The analysis could be applied to any organization and not only the one featured in the case study or stimulus.
- Answers which are not substantiated will lose marks. "Not substantiated" means that the analysis and the conclusion imply different things, or in the conclusion you introduce new ideas which have not been analysed elsewhere. A response which is one-sided and not substantiated will not score more than 6 marks.

### A04 questions

**Questions include the command words:** construct, calculate, draw, plot

**Marks available:** probably a maximum of 6 marks overall in Paper 2, and 4 marks overall in Paper 1 – but individual questions could be worth 1–2 marks.

#### Example questions:

- Construct a breakeven chart.
- Draw a line of best fit.
- Comment on your results.
- Calculate total contribution.

#### Guidance:

Students have experienced some issues in past examinations with drawing a suitable breakeven chart. Breakeven questions are popular for both SL and HL. This is especially true in Paper 2 section A, where all quantitative questions are compulsory. An example of a breakeven question within the new SL/HL Paper 2 is given in chapter 6.4.

Unfortunately, when answering breakeven questions, students frequently lose marks by:

- Not using the graph paper provided and not labelling the axes appropriately.
- Not being able to draw a straight line for TR, TC, TFC or TVC.
- not being able to draw an appropriate scale on the graph paper. Breakeven charts need accurately drawn scales so the diagram is neither too large nor too small, so that examiners can check the final breakeven point is correct.

For A04 questions always show your working and write as clearly as you can, especially for "calculate" questions. Even if your final answer is incorrect, partial marks can be given for appropriate working out.

For example, if you incorrectly calculate contribution and then use this incorrect figure to calculate the breakeven point, you will only lose 1 mark if you have made one mistake (even though both the contribution and breakeven point figures will be incorrect). This process is sometimes known as the "own figure rule" or "carry through rule" in marking.

## Paper 2 for SL and HL

These guidelines are taken from the *Business Management Guide*.

For Paper 2, SL and HL students will sit a different examination paper. However, they will look similar as for each level, students will receive an examination booklet from which they read the questions, and they then write their answers to sets of questions based on short case studies or stimulus material.

Section A in Paper 2 will contain more quantitative questions that require shorter answers. Section B questions will assess qualitative skills such as explanations and discussions, although there could be minor calculation questions for a maximum of 2 marks.

An important difference from previous Paper 2 questions is that the case study or data stimulus will be split into parts. You should answer the question after reading each stimulus part rather than reading the whole stimulus.

### Section A

In the first section of Paper 2, HL students will have three structured questions and will be expected to answer them all.

For SL students there will be two structured questions which must both be answered.

- Each question is subdivided into parts. These parts will cover AO1, AO2 and AO4, but not AO3.
- At least 6 marks will be linked to quantitative content.
- Each question is marked out of 10.

### Section B

In the second section of Paper 2, there are two questions for both SL and HL students. Students will only have to answer one of these questions.

- The questions are subdivided into parts and may cover AO1, AO2, AO3 or AO4.
- The AO3 part will be marked out of 10.
- Each whole question in section B is marked out of 20.

For an example of both section A and section B with suggested answers, see pages 166–173.

## 6.2

# External assessment guidance for HL Paper 3 (HL only)

## Introduction to Paper 3

HL

The Business Management HL-only Paper 3 is a new external paper to be assessed for the first time in May 2024.

The paper has been developed to assess a number of important areas of your learning:

- The use of appropriate business management tools and theories within the business context of a social enterprise.
- The ability to understand and synthesize a variety of data/stimulus material.
- Your abilities as a strategic problem solver and change agent.

Paper 3 clearly links to the IB mission statement and the aims of the Business Management course. As this is an important aspect of Paper 3, here is a reminder of the IB mission statement and the aims of the course:

*"The International Baccalaureate® aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect."*

*The aims of the business management course are to enable students to:*

1. *develop as confident, creative, and compassionate business leaders, entrepreneurs, social entrepreneurs and as change agents*
2. *foster an informed understanding of ethical and sustainable business practices*
3. *explore the connections between individuals, business, and society*
4. *engage with decision-making as a process and skill."*

*Source: Business Management Guide*

An example of Paper 3 and the stimulus material is given in the following pages. Paper 3 will be based on a fictitious social enterprise. The stimulus material will comprise a variety of different items, which could be excerpts of emails, memos, social media posts, newspaper articles and so on.

There are three questions which need to be answered:

- AO1 question for 2 marks
- AO2 question for 6 marks
- AO3 question for 17 marks

There are a total of 25 marks for this paper.

## Introduction to the stimulus – The Power Light produced by Light Through Darkness

HL



### The solar-powered radio and torch with a back-up power supply

The Power Light is produced by a social enterprise called Light Through Darkness, with financial support from a number of NGOs in regions with a high probability of natural disasters occurring.

#### Product description

This solar-powered radio and torch is produced by a social enterprise and supported by a number of NGOs. The Power Light uses solar power to:

- provide households with a powerful torch
- provide stakeholders in developing countries with a back-up power supply
- provide a radio to spread information about weather patterns or imminent natural disasters.

When charged, even in countries with limited sunlight, Power Light provides an immediate power/light back-up when power is cut off.

### Additional information

#### Resource A

#### Light Through Darkness – The Power Light – memo to NGOs

After a decade of research and development (R&D), Light Through Darkness is proud to announce the introduction into global markets of the Power Light. This solar-powered torch will make a significant, potentially lifesaving difference to the lives of families and communities in regions where natural disasters are unfortunately all too common.

Given the extensive R&D costs involved in creating the Power Light, Light Through Darkness will need additional finance from NGOs to subsidize the cost of the Power Light to make it accessible to low- to mid-income families in those areas affected.

The Power Light will still retail for over \$400 but the benefits to individual households will be sustainable, as the unit is expected to have a useful life of 15 years.

### Resource B

**Screenshot from a global online retailer indicating the forecast prices of the Power Light and competing torches**

Type of torch	\$	Useful life in years
The Power Light	480*	15
Market-leading torch produced by global market leader but not solar powered	280	10
Own-brand torch from global online retailer provided by adventure tourism company and solar powered	200	8
Basic survival torch and battery pack with useful life of 5 years from online retailer; not solar powered	142	5

\* Price after subsidy from NGOs

### Resource C

#### Celebrity Instagram

Instagram post from a popular celebrity who has become a brand ambassador/influencer for Light Through Darkness

between filming action adventure films, one of which is being shot in one of the natural disaster zones. This celebrity has been unpredictable in their social media and his on-set behaviour has been a cause for concern.

*"Hey guys – strongly suggest that you purchase the Power Light. We just had a major storm and power was out for six hours and is not reliable. Am only able to send this tweet thanks to my back-up power supply. The Power Light rocks!"*

Reply to the celebrity post from a follower on Instagram:

*"Thanks for this. I tried to purchase one and there is no stock of Power Light anywhere in my town and no expected deliveries. What's happening?"*

### Resource D

#### From Global Weather Trend Forecast 2021

Natural disasters are going to become more common. Shifting weather patterns and increasing global temperatures indicate that extreme weather will become the norm rather than the exception. These trends not only have implications for weather patterns. Countries in affected areas must ensure that they are prepared and have contingency plans in place to ensure that water, power and communication channels are protected.

## Questions based on the stimulus material

HL

Paper 3 has a social entrepreneurial focus with three questions worth 2, 6 and 17 marks. The questions in each examination will follow a similar structure to the ones below.

- Identify and describe a human need which needs to be satisfied. [2]
- Explain potential organizational challenges facing the social entrepreneur. [6]
- Using the information in the case study and your knowledge of business management tools and theories, discuss a possible course of action for the social enterprise to remain sustainable over the next five years. [17]

As we saw in chapter 6.1, when answering explain (AO2) and evaluation (AO3) questions, *the context of the business is critical*.

For Paper 3, your responses must be applied to the social enterprise in the stimulus. Answers that are generic (they can be applied to any business) will not score highly.

You will not know this business context/social enterprise until you are told to begin the examination, so prepared answers will not be possible. There are two main reasons for this:

- There are many different needs and stakeholders which could be part of the case study, and there are an unlimited number of challenges.
- The stimulus will also be written to include a multitude of possible future courses of action.

Below are example Paper 3 questions based on the Power Light stimulus material.

### The AO1 question

- (a) Identify and describe a human need that the Power Light satisfies. [2]

#### Possible response:

A human need is the access to power/light, especially in an emergency. The Power Light provides this for several stakeholders. Maslow's hierarchy of needs indicates that safety needs are important for motivation. The Power Light provides this.

#### Comment on the response:

The response identifies and explains a need relevant to the Power Light. The reference to Maslow is not required as it does not feature in the question, but it can be used as this is a theory of needs. Please note that the answer is brief as the question is AO1.

### The AO2 question

- (b) Explain two potential challenges facing Light Through Darkness. [6]

#### Suggested approach to answering this question:

You could explain two of the following challenges:

- The price of the Power Light is much higher than competitors' lights, even with the subsidy.
- What is the best way for the social enterprise to communicate the USP to stakeholders who may not fully understand the product?
- The distribution part of the marketing mix for the Power Light seems to be a challenge given the reply to the celebrity post on social media.

- Should an innovative and technological product be promoted by an unpredictable social media influencer?
- Does Light Through Darkness need to look at other promotional methods?

The challenges facing Light Through Darkness are mostly linked to marketing, but given the involvement of the NGOs to subsidize it, there could be financial challenges. There is evidence of competition from the stimulus material, but what of future competition?

Note that the challenges refer to the social enterprise and not the product itself.

For AO2 questions in Paper 3:

- 1 mark is awarded for identifying a challenge.
- 1 mark is awarded for explaining it.
- An additional mark is given for application of each challenge to the social enterprise, up to a maximum of two challenges.

This would give a maximum of 6 marks for question (b).

### The AO3 question

- (c) Using the information in the case study, and your knowledge of business tools and content, discuss a possible course of action to ensure the social enterprise remains sustainable in five years. [17]

#### Suggested approach to answering this question:

The following is a possible approach to answering this question by using and referring to the mark bands in the *Business Management Guide*. A "model" answer is not given – as we said earlier in chapter 6.1, a "perfect" answer does not exist. The important element to consider here is the marking criteria, as this question is worth 17/25 marks. The suggestions below can help you plan a response.

#### The assessment criteria

##### Criterion D – Planning your answer

Given the high marks available for the evaluative question, you are encouraged to *plan your response before you begin*. There will be space in the exam booklet for this planning, and rough notes and sketches are encouraged.

The planning will not be marked as part of the final answer. But note that there are up to 3 marks for "sequencing of ideas". Your answer to the evaluative question should have a logical flow of ideas, and planning can help with this.

The initial planning should involve re-reading the whole stimulus material, and identifying challenges facing the organization and possible plans of action to keep Light Through Darkness sustainable over the next five years.

For any strategic plan of action, a brief SWOT analysis could be a good starting point. It could be included as one of the business tools to be used in the decision-making process. Bear in mind that the stimulus will be 800 words or less, so a full SWOT analysis will not be possible.

##### Criterion A – Using the case study stimulus material

The mark band for criterion A indicates that up to 4 marks are available for using all of the stimulus material. Given the importance of planning too, you should ensure that you read the resources again. This will also allow your answers to be

in context – applied to Light Through Darkness and not just any organization.

Criterion A also is looking at your ability to understand and "synthesize" data. This means that you are able to analyse the data carefully, and break it down into more understandable parts so that you can apply this to your answer. "Synthesize" in this sense indicates that you can bring all of the available data together so that you can make conclusions and possible recommendations.

Synthesis is in effect another form of evaluation. It is a critical skill for entrepreneurs to have. As a change agent you need to be able to understand and judge data and information which may be given to you in a variety of forms.

##### Criterion B – Appropriate business management tools and theories

The AO3 question is sufficiently broad to allow for a multitude of responses with a strategic focus. There is no definitive plan of action that any one organization should follow, and hence there are many business management tools and theories that you could use. The key word to remember here is "*appropriate*".

We noted above that a SWOT analysis may be a useful situational tool to begin thinking of a strategic plan. In addition, business tools such as the Ansoff matrix, BCG matrix, Porter's generic strategies, or differentiation and extension strategies could be used to help discuss an appropriate plan of action for the social enterprise.

However, a force field analysis or a STEEPLE analysis may not be appropriate given that these rely on more detailed stimulus and require more in-depth analysis.

##### Criterion C – Evaluation

This criterion has the most marks attached to it as the (c) question is looking to assess AO3, ie evaluation.

Given time constraints (the examination is 75 minutes), the mark band is looking for an answer which is "synoptic". Synoptic means that you are discussing a plan of action which can impact on the whole social enterprise and its various departments such as finance, marketing, human resource management and operations.

Not all of these departments will be covered in the stimulus material. For higher marks, under criterion C you need to look at the possible trade-offs between the ones which are mentioned.

For example, the case study material for the Power Light suggests there are possible trade-offs between the need for a carefully planned and costed marketing strategy, the financial position of the social enterprise, and the need to reduce the final price to consumers. The key departments are finance and marketing, with a suggestion of operations given the issue of distribution channels.

We can speculate that as Light Through Darkness requires the support of an NGO to subsidize the Power Light, their financial position is not strong. Cash flow may also be an issue as this is effectively a start-up.

If you can think about these interrelated issues for a social enterprise, and identify and discuss them with the use of business management tools and theories and the stimulus material, you will be meeting the needs of a synoptic response and likely achieve a high mark for criterion C.

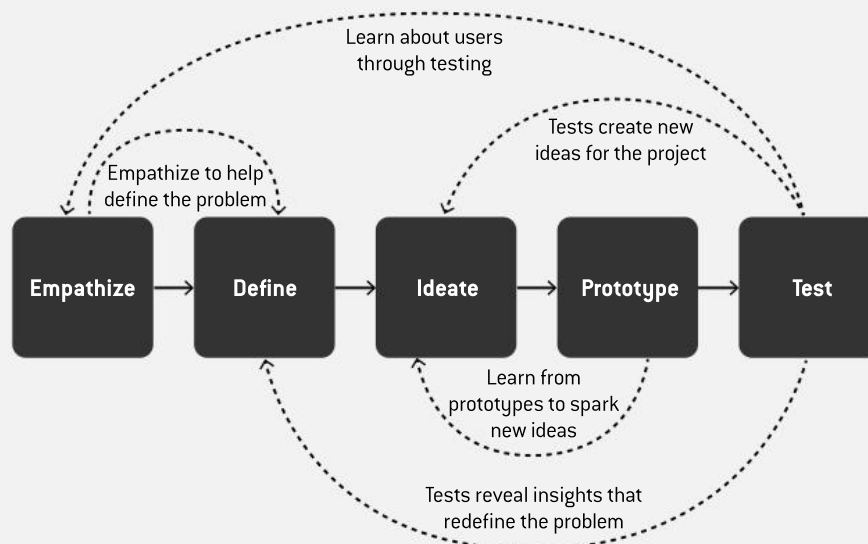


Figure 6.2.1: Design thinking process

The intention here is not to add new content to your knowledge of business management, but the suggestions that follow might help you to think about the questions and possible responses for Paper 3.

### Option 1: Using the design thinking framework

#### IB Learner Profile

Caring 

One way of studying for Paper 3 is to consider the design thinking framework.

As you can see from Figure 6.2.1, the design thinking framework has five stages and is used by some organizations to think about the decision-making process and come up with creative solutions.

We could apply the design thinking framework to Light Through Darkness and the Power Light:

- Empathize – understanding the human need which has to be satisfied. The Power Light provides reassurance and meets safety needs when a natural disaster has occurred.
- Define – defining the problem to be solved. Light Through Darkness has several marketing and financial challenges.
- Ideate – creating and discussing the merits of particular ideas. Given the challenges, there are several possible strategic plans of action available to the social enterprise. These will be justified by reference to appropriate business management tools and theories.

Not all of the stages of the design thinking framework will apply. You will not be able to prototype or test, but it is a different way to think about the objectives, challenges and decision-making processes of a social enterprise given that at its core, the mission is to maximize its impact on a range of stakeholders.

### Option 2: Follow a social enterprise

A second preparation method for Paper 3 is for you to “shadow” or follow a social enterprise. You could contact a social enterprise in your local community either in person or via the internet.

We have mentioned several examples throughout this study guide of social enterprises that you could also choose to follow, including Thankyou (chapter 5.9) and Who gives a cr\*p? (chapter 1.2).

There is the opportunity to combine preparation for Paper 3 with your research for the business research project if you choose a social enterprise!

Remember that no prepared answers are allowed in Paper 3, and material from a real-life organization should not be used in your answers to Paper 3. But following a social enterprise is an excellent way to see how they meet needs, face challenges, or are planning strategic courses of action. This could be undertaken via secondary research. A visit to a social enterprise's website would be a great place to start.

You could also carry out primary research by contacting a social enterprise and inviting them into your IB school in person to discuss their mission, impact and challenges. This would be an excellent learning opportunity for your whole class. Your teacher could help you organize this.

This interview opportunity could also provide you with some primary data for your internal assessment – the business research project – which we refer to in chapter 6.3.



## Internal assessment – the business research project

### Introduction to internal assessment for SL/HL Business Management

This chapter will provide you with an overview of the internal assessment for Business Management, with some strategies to help you complete it. There is a lot of information to cover. It is essential that you have access to pages 51–58 of the *Business Management Guide* as this goes into even greater depth, including all of the mark bands which will be used by your teacher to give you a final mark.

The internal assessment is the same for SL and HL students, and it is now called “the business research project”. It is expected to take up to 20 hours of study time. As it is common to both SL and HL, you are likely to be given class time to prepare.

This chapter includes a summary of the key points from pages 51–58 of the *Business Management Guide*, including:

- the purpose of the business research project and contribution to your final mark
- requirements of the business research project
- the importance of collecting supporting documents
- the structure of the research project.

Using a “research proposal” planning tool, we will then provide you with some guidance about how the business research project can be planned.

This research proposal is not marked as part of the business research project, but it could be used as a planning tool to help you with the following:

- The choice of an organization and an appropriate business concept to use.
- The selection of appropriate business content (theories) and tools.

You could share the research proposal with your teacher or a fellow student to receive feedback on your progress.

At the time of writing, finished examples of the new business research project are not available. Also, you should bear in mind that your teacher and IB school will have their own timetable and process to support you in this internal assessment.

There is no “right” way to approach the project, but if you follow the advice and guidance given below then you will maximize your chances of a great mark!

### The purpose of the business research project and contribution to your final mark

The following is adapted from pages 51–52 of the *Business Management Guide*:

- The business research project enables you to demonstrate the application of your skills and knowledge (in business management) and to pursue your personal interests.
- The internal assessment requirements at SL and HL are the same. You are expected to produce a business research project about a real issue or problem facing a particular organization using a conceptual lens.
- The business research project contributes 30% of the final mark in the SL course and 20% in the HL course.

### Guidance on starting the business research project

Clearly there is a need to choose an area of the Business Management course which gives you the opportunity to demonstrate your knowledge of the subject, and in an area that has some connection to your life. In the research proposal example given below, it may come as no surprise that the author has chosen the coffee industry! There will be links to business content such as differentiation and the creation of a USP.

#### Requirements and structure of the report

The following is adapted from pages 53 and 55 of the *Business Management Guide*:

- Select a real business issue or problem for your business research project that relates to any part of the Business Management syllabus.
- Provide a research question that could either be forward looking (such as considering a future strategic move) or backward looking (such as reflecting on the success of a previous strategic move).

- Use just one of the four key concepts as a lens through which to analyse the project.
- Base your research on primary and/or secondary research selected for its suitability, breadth, and depth.
- The report must not exceed 1,800 words and should have the following elements: *introduction*, *main body*, and *conclusion*.
- You must fully reference all additional sources of information such as textbooks and class notes, and include them in a bibliography, but these will not be accepted as supporting documents.

#### The importance of collecting supporting documents

The IB guidelines state that the supporting documents must not be more than three years old prior to you submitting the business research project. Supporting material can include either one video or one audio file (such as a podcast) if it

can be properly checked and referenced by your teacher. Your teacher will need to view or listen to the content to see how you used these data sources in your analysis, and also to check for authenticity.

Including YouTube or TikTok videos may be a problem as they could be removed from the internet by the creator or person/organization that shared them.

Primary supporting documents for the business research project can include:

- Face to face and online interviews, with a copy of the questions and summary of the results.
- Focus group discussions, with a summary of the questions and findings. For privacy reasons there is no need to record the whole discussion.
- Online surveys, using providers such as Google Forms or SurveyMonkey, although note that these organizations may charge for data collection and presentation.

Secondary sources for the project can include:

- Articles from the local, national, or international media.
- Published business accounts from publicly listed companies.
- Extracts from organizations' websites, including mission statements.
- Journal publications from universities or libraries.
- Government publications and other statistics.

You must select three to five supporting documents. Note that a textbook cannot be one of these.

### Guidance on the research process

Researching and selecting documents for the business research project will be a trial-and-error process. It may be sensible to carry out the research on your organization or even two organizations *before* you have found a research question, concept or even decided on business content. This will allow you to evaluate whether enough appropriate data will be available.

In the author's experience, it is usually the quality of the research which should drive the research question, concept and content, rather than the other way round. You can also adapt the research question as new information or data comes to light. The research process will mean that you will be investigating articles throughout your course. Your teacher will give you milestones or checkpoints so that you can plan accordingly.

The choice of organization will determine the extent to which data is available, and you may have to make several decisions. For example, if you choose a famous fast-food brand to view through the concept of sustainability, there may be significant amounts of secondary data which could prove overwhelming to analyse. However, obtaining primary data such as an interview with the CEO might be very difficult, especially if the organization is multinational and operates across multiple regions and time zones.

Alternatively, if you choose a social enterprise as the focus of your business research project, obtaining primary data may be much easier through an interview or Zoom meeting, especially if it is a local social enterprise. But secondary

data may prove more difficult to search for and collect as some social enterprises struggle to get attention in the mainstream media.

As we saw in chapter 4.4, primary data collection gives authentic and organization-specific data but is difficult to set up. Secondary data collection is more accessible by searching the internet, but its accuracy and authenticity to your research question may be reduced.

It is a good idea to research at least a couple of organizations that you are interested in and see which one offers an appropriate business concept and content.

### The choice of an organization and an appropriate business concept

Earlier we indicated that choosing a social enterprise could be useful. By their nature, social enterprises are driven by their impact and contribution to a community. This aspect will allow the application of concepts such as sustainability and ethics.

It is important to remember that you must apply *one concept only*.

The organization is one that you should have a connection with as a stakeholder. A family business could be a possibility, but remember that the data collected should be both primary and secondary. There may be some confidentiality concerns around analysing a family business using primary data.

### The selection of appropriate business content (theories) and tools

On pages 56–58 of the *Business Management Guide* there is information about how parts of the business report will be marked. It is recommended that you ask your teacher for a copy.

The marking criteria can be summarized under the following seven criteria:

- A: choice and application of a key concept
- B: the use of supporting documents
- C: the selection and application of tools and theories
- D: analysis and evaluation
- E: conclusions
- F: structure
- G: presentation

Criterion C includes reference to the tools and theories used. A relevant tool is one which you can understand and apply data to from your research. For example, a SWOT analysis could be used to identify the possible strengths, weakness, opportunities and threats to an organization after a focus group activity has taken place.

A secondary source of data in the external environment might allow a student to create a STEEPLE analysis or a BCG matrix, or to consider possible growth strategies with the use of the Ansoff matrix.

For example, if an article identifies that an organization wishes to differentiate itself from a market leader, you could argue that an appropriate business tool could be the Ansoff matrix or Porter's generic strategies.

## Example of a research proposal to help plan the business research project

So far we have seen that:

- planning your business research project is critical
- you should have an idea of which business concept you want to apply
- you should begin by researching supporting documents for your chosen organization
- you should identify relevant business tools and theories to support your analysis.

The following ideas are merely a suggestion to help you plan, but your research proposal could be shared with a fellow student or your teacher to help ensure you are on the right track for the investigation.

### Considering questions to investigate

First, think of some research questions that interest you, based on a personal connection, and link each one to a concept. Here are two of the author's examples:

- Starbucks vs Storyville (ethical concept): how can a little-known ethical coffee company continue to compete with its multinational "big brother"?
- Havana Coffee vs Starbucks (sustainability concept): how and why did Starbucks struggle to compete in the New Zealand premium coffee market? How can they overcome these problems?

### Choosing a question

Next, pick one of these questions to investigate further. Explain why it interests you – what is the personal connection? Why is the organization worth investigating? The author decided to focus on Starbucks and Storyville – here is the story behind that choice.

In 1997, the author was able to visit Pike Place in Seattle, the location where the original Starbucks coffee store opened in 1971. Starbucks was becoming a market leader in premium coffee and espresso in the United States. Storyville had not yet been created.

By 2015, the Pike Place Starbucks coffee house was still in operation and it had effectively become a tourist destination. On a second visit to Pike Place, the author noticed that a very stylish coffee roaster and café was empty. They were just around the corner from the famous Starbucks store. This café was called Storyville.

Storyville had a compelling mission statement. They wanted to sell coffee to support the end of human trafficking, especially of young children, and to raise awareness of slavery. In some of their trading months they donated 100% of their profits to this cause.



Figure 6.3.1: The Storyville logo

The mission, coffee, people, service and physical evidence of Storyville were inspiring, and the coffee being sold was not premium priced.

Storyville's marketing mix compared to Starbucks could not be more different, even though they were operating in the same industry in the same location. This marketing mix involving the seven Ps for both organizations was presented on page 112.

The ethical aspect of Storyville's business operation is their mission and desired impact. They have donated hundreds of thousands of dollars to support efforts to end the illegal trafficking of young children.

Starbucks has also made an ethical commitment by selling Fairtrade coffee. This movement attempts to give coffee bean growers in the developing world a bigger share of the gross profit margin on a typical cup of coffee. Starbucks pays above market prices for its coffee beans from over 30 countries.

### Identifying key elements

Finally, create a table to briefly note down key elements of the business research project: your chosen concept, possible business content to cover, and primary and secondary data sources. Here is the author's example based on an investigation into Starbucks and Storyville.

Element of the business research project	Reason for choice with explanation
Business concept	Ethics, as this concept links to both organizations as part of their production process.
Possible business content	Corporate social responsibility, marketing, pricing and differentiation, ethical objectives.
Primary data sources	Contact Starbucks in home country (New Zealand) to ask for an interview; email/Zoom invitation to Storyville.
Secondary data sources	Websites and social media platforms for both. Articles on Storyville from US business journal.
Links to other Business Management concepts	Sustainability, as Storyville is a B Corporation – could develop this further as this is also driving Starbucks' mission.

Table 6.3.1: Business research project – planning

### Concluding comments on the research proposal and business research project

The research proposal described above is only a suggestion. However, by creating a planning document you are giving yourself a chance to identify the important elements of the business research project and provide justification for your choices. As the *Business Management Guide* indicates, the business research project should have some connection to your life and interests.

This research proposal should always be a working document and have a degree of flexibility as the research process and the collection of documents begins and

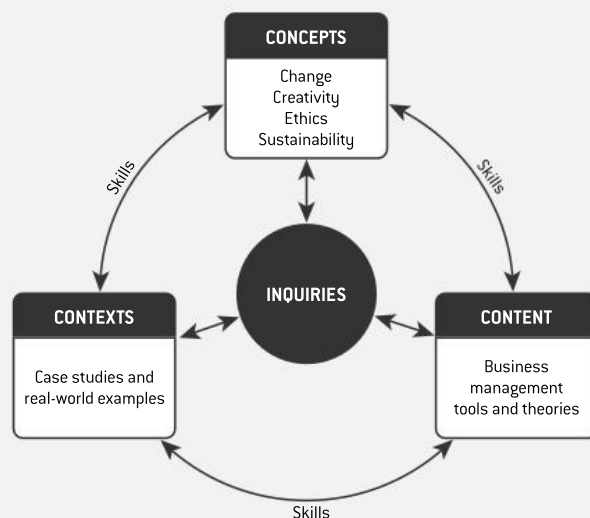
continues. You will need to adjust this proposal at various times during your course.

The proposal above indicates that there are still choices to be made or alternative paths to consider. Your initial research may discover that a particular concept is not appropriate, or you may change your business content and the tools and theories that you will need to use. This is a natural part of the research process.

The quality of, and final mark for, your business research project will be determined by the following:

- The relevance of your research question to the organization, and whether it addresses a problem to be solved.
- Application of one business concept.
- Appropriate use of the Business Management toolkit with clear links to the research question.
- The range of supporting documents.
- The depth of your analysis of the supporting documents.
- A justified conclusion consistent with the evidence presented, which answers the research question.
- An appropriate structure (introduction, main body, and conclusion).
- Good presentation, with elements such as an accurate table of contents, appropriate headings, numbered pages, and clear referencing.

The business research project is an excellent opportunity to build your knowledge of an organization and link together your understanding of business content and tools and theories. In submitting this internal assessment, you will be demonstrating your commitment to the IB teaching and learning philosophy given in Figure 6.3.2, which is taken from the *Business Management Guide*. This diagram represents another milestone in your journey as a change agent.



**Figure 6.3.2:** The relationship between inquiries, concepts, content and contexts in business management

Source: *Business Management Guide*

## 6.4 Revision strategies and examination preparation for SL/HL Paper 2

Chapters 6.1 to 6.3 have covered material relating to the external and internal assessments. For this final chapter, we focus on further specific revision guidance and preparation for SL/HL Paper 2. The emphasis here is on *guidance rather than providing model answers to questions*.

We will highlight approaches to help you increase the chances of obtaining a good mark. The guidance provided here aims to help you avoid some of the mistakes that students have made in previous examinations.

Let us start by summarizing the key learning points for the assessment objectives:

- The assessment objectives (AO1–AO4) indicate the type of question and the length of response needed.
- AO1 questions require brief definitions or a brief description of business content.
- AO2 questions ask for the identification *and* explanation of business content (knowledge) and then, using stimulus material, provide an opportunity to apply this content to a particular organization. You could also be asked to comment on a set of financial results.

- AO3 questions require a more analytical and deeper approach. For an AO3 question you will need to discuss possible solutions to a particular problem that an organization is facing. You should explain both the advantages and disadvantages of a solution – there are probably several solutions – and then come up with a conclusion/answer which is “substantiated”. Your conclusion needs to provide an answer to the question posed and select a particular course of action.
- AO4 questions are calculation, construction, or comment questions with mostly quantitative parts. For example, you could show how you worked out the break-even point or margin of safety. For AO4 questions, you may also be asked to interpret a financial ratio or draw up a profit and loss account or cash flow forecast.

The final part of this chapter brings all of these key learning points together using examples of IB questions which have been created and adapted to meet the new examination structure for SL/HL Paper 2. For many students, understandably, this is the critical part of the study guide. However, before we get to these questions, we should begin with some revision strategies.

## Revision strategies – business management content

Revision is an individual activity. You will probably have developed your own ways of preparing for business examinations in previous years. The objective here is to fine tune the strategies you have developed.

### Asking questions: an inquiry approach

One useful method to see if you have retained a topic is to ask yourself some questions about it. This is known as an inquiry approach to learning business content.

Let us take the example of marketing. This is a popular topic to study and one which is common to SL and HL (apart from some pricing methods which are HL only). There will normally be some content on marketing in your final examination, either as an AO2 or AO3 question.

We will focus on the seven Ps marketing mix and assume that you have spent 40 minutes studying this topic.

*Before and after* you have studied this topic, you need to ask yourself some important questions:

- Can I define the marketing mix?
- Can I explain the marketing mix?

If the answer to both questions is yes – both before and after studying – then congratulations.

But do ask yourself a further question:

- Can I clearly analyse and/or evaluate the marketing mix?

In the author's experience as a Business Management teacher and examiner, students can explain each of the seven Ps, for example, but very few can analyse and evaluate a marketing mix.

An explanation requires knowledge of the marketing mix and an understanding of each element which makes up the seven parts.

An evaluation of a marketing mix requires a deeper analysis and could be linked to some of the following questions. These are more demanding than AO2 questions.

- Is the pricing method appropriate to the positioning of the product?
- Is the current distribution channel the most effective method to increase sales to the target market?
- To what extent does physical evidence and/or people in the marketing mix contribute to the success of the service offered by the organization?

The last question is based on a previous examination question. "To what extent" is an AO3 command term that asks you to measure the effectiveness of a particular aspect of marketing. This will require excellent use of the stimulus, balanced analysis and a substantiated conclusion.

An inquiry approach to revision is a good way to help you revise by asking questions and linking these to the assessment objectives.

### Chunking

Educational research into retaining information has shown that revision should be carried out in short intervals (chunks) with breaks in-between. For example, a revision session of 40 minutes on marketing should be followed by a 10 to 15-minute break to allow for the "absorption" of marketing theory so that you can retain this information.

At the end of the day, review the material you have covered to see if it has been moved to your long-term memory. If so, this means that you have been able to learn this material and will be able to recall it more easily in future.

Repeat this practice of learning and reviewing and you will discover that the time taken to review your learning and recall the information you learned previously will reduce. You will be able to recall more of the business content in less time.

Cognitive research has shown that our short-term memories are very limited in capacity. Trying to learn everything about marketing in one go just before an examination will use up all of your short-term memory, leaving no space for the other business content.

Therefore, it is critical that you revise for the final examinations in small chunks. Chunking is an effective way to learn business management.

- Writing notes and reviewing older material before you learn new material is a good way to move business content into your long-term memory.
- Try to group your knowledge of business management by topic area, such as market research or pricing methods.
- The use of flash cards – with essential notes, terms and theories to remind yourself of the key points of a topic – is also an effective way to move material into your long-term memory. Use different colours for different topics on these cards.
- A good way to remember business content is to add diagrams or drawings to spider diagrams and notes. Combining images and text is a powerful way to learn business content.
- Go for a walk after a period of study and repeat to yourself the key learning of the day. The phrase "if you can't say it then you don't know it" is relevant here, and another indication of whether your business knowledge has moved to your long-term memory.
- Use real-world business examples or stories to remind yourself of important business content and terms, such as an example from your local or national newspaper.
- Once you have studied marketing, for example, you may wish to link this topic to operations management or finance. It is good practice to link business content from one part of the Business Management syllabus to another. You are effectively combining the chunks into even larger chunks which will remain in your long-term memory.

## Linking business content to contexts and concepts

Remember that for your external examinations you will be asked to answer questions about the organization in the stimulus, which will be fictitious. The point here though is to

help you remember business content and tools so they can be committed to your long-term memory and potentially be used for an examination question.

In chapter 6.3, Figure 6.3.2 was used to explain how you can link your learning of business content, contexts, and concepts.

The examples (or business contexts) in Table 6.4.1 have appeared in this study guide. This table shows some ways

that you could link your learning of business content to the real-world examples given in this guide.

You are encouraged to find your own examples. The more links you make, the deeper your knowledge of business management will be.

Organization	Business content links (chapter number in brackets)	Most relevant business concepts
Uber Eats	Business model (1.1) Gig economy (2.1) Distribution channels (4.5) Incremental innovation (5.8)	Creativity and change
Amazon	Supply chains (5.6) Disruption (5.8) Big data (5.9)	Creativity and change
Netflix	STEEPLE analysis, market leadership (4.1) Entry into international markets (4.6)	Sustainability and creativity
Starbucks	Differentiation (4.2) Premium pricing (4.5) Supply chains (5.6)	Sustainability and ethics
Facebook	Market leadership (4.1) Data mining and analytics (5.9)	Creativity and ethics
Enron	Final accounts (3.4)	Ethics

Table 6.4.1: Linking business content to real-world examples



## Checking understanding of the Business Management toolkit and descriptive statistics

We have arrived at the part of this chapter where we will look at some previous examination questions with suggested answers.

The material covered in these questions is suitable for both SL and HL students unless designated as HL only.

First we will review the Business Management toolkit.

### The Business Management toolkit

It is important for you to be able to define the Business Management tools.

- Can you explain how you use these tools?
- Can you explain how they could be used to help an organization with decision-making?
- Are they decision-making, planning and/or situational tools?

The following tools are relevant to both SL and HL:

- SWOT analysis
- Ansoff matrix

- STEEPL analysis
- BCG matrix
- Business plans
- Decision trees
- Descriptive statistics
- Circular business models

The following are HL-only tools:

- Force field analysis
- Hofstede's cultural dimensions
- Porter's generic strategies
- Contribution as a decision-making tool
- Critical path analysis
- Networks and Gantt charts
- Simple linear regression, including the difference between causation and correlation



If you are unsure about the use of these tools and their importance to decision-making, please refer to Table 0.7 on pages 14–15.

### Prior knowledge of descriptive statistics

Descriptive statistics will have been covered in your mathematical course which is part of your IB package. The questions below aim to show how this knowledge can be applied to business management as part of an inquiry approach.

The following are review questions on presenting data, the use of the mean, median and mode as part of a topic called statistical inference, and other potential applications to business management. In particular, they are about how these descriptive statistics could be used in understanding business performance.

These questions offer a way to check your prior knowledge of how these topics can be applied to business management. Parts (e), (f) and (g) are considerably more difficult and may require some additional explanation from your teacher.

- Why is it important to display data collected from market research?
- Explain why bar charts are useful in presenting data.
- Explain two problems when using a pie chart to present data.
- Explain how pictograms can be useful in representing certain types of quantitative data.
- What is the standard deviation of a set of variables, and how can we use this measure in our understanding of business management?
- You are given the following sets of data. For each, decide how you would choose to present the data so it is clear and easy to understand.
  - The sales figures for a soft-drink company over the last 10 years.
  - Data to show the number of industrial accidents and injuries in large businesses over the past 2 years.
  - The gender ratio in your current class.
  - The number of different nationalities present in your school.
  - The income/wage levels of 10 different occupations.
- A senior manager in a record store, *Rare Retro*, is looking at the sales figures of three music departments. He is trying to decide which department is doing the “best”. Assume that the current external environment has affected all three departments in the same way.

Department	2021	2022	2023
Jazz	1.2	1.8	2
Rock	2	2.4	2.1
Alternative (introduced in 2020)	0.2	0.4	0.8
<b>Total</b>	3.4	4.6	4.9

Table 6.4.2: Sale figures (\$ million)

Each department manager claims that they are doing the “best”. The senior manager needs advice.

- The Jazz supervisor says that his department has had the biggest increase in sales.
- The supervisor of the Rock department argues that her department still contributes the most to sales.
- The head of the Alternative department argues that since his range was only released in 2020, his department has had the largest percentage increase in sales.

Advise the senior manager as to who you think is doing the “best”.



### Question for reflection

Why does this exercise reveal that it can be difficult to interpret sales data and decide who or what is doing the “best”, ie to measure business performance?

### Suggested answers

You will probably have covered in your mathematics or statistics courses the reasons behind the selection of an appropriate method of presentation for a particular set of data. These methods include the use of bar charts or graphs, line graphs, pie charts, histograms and pictograms.

Suggested answers are given for question (e) onwards as they have a much stronger link to business management than the first four questions.

- Standard deviation is a measure of dispersion or how close variables are grouped together around a mean value. Variables with a low standard deviation are closely tied to the mean. A set of variables with a high standard deviation imply that the values are not closely tied to the mean and have wide variability. For business management there are a number of uses of standard deviation, including sampling when carrying out market research or seeing if there are quality control issues in production. For example, in sampling, standard deviation can be used to see if different samples taken from the same population or group of customers have similar means and limited variation. This will give us confidence in interpreting our market research results. If the standard deviation from different samples from the same population begins to decrease or increase, this may be an indication that our sampling is not providing consistent results and we may need to revisit our sampling methods.
- (i) Sales figures for an organization are usually represented by line graphs. In common with other time series data where a variable such as sales is measured over time, a line graph can easily show trends either upward (rising) or downward (falling). Careful consideration must be given to the scale used for the sales data on the graph. If an inappropriate scale is used, the line graph may appear too flat (its scale is too wide) or too steep (its scale is too narrow). The latter may give a more dramatic look to the data and could easily lead to misinterpretation. Statisticians sometimes refer to this distortion effect through inappropriate scaling as the “gee-whiz effect”.

- (ii) If the intention is to highlight the fact that the number of industrial accidents is too high, then a pictogram with an image of an injured person may be more emotive and effective in communicating the message.
- (iii) The gender ratio could be represented with a pie chart, bar graph or pictogram.
- (iv) The number of different nationalities in your IB World School may be over 50. A pie chart would be too confusing given that there would be over 50 segments and the need for a good deal of labelling. Consider using a simple table instead.
- (v) The income levels of 10 different occupations would best be presented by a series of bar graphs or charts with an appropriate scale. The height of each bar would clearly show the differences between the occupations. However, some clever logarithmic scaling would be required if the intention is to compare the income of a UK Premier League football player with that of, say, an IB teacher!
- (g) This inquiry into who is doing the "best" has been used by the author in his own business classes to try to ascertain the degree to which students can analyse

data, draw conclusions and make judgments based only on the information present. It looks deceptively straightforward on paper and students who have attempted this have generally blurted out answers based purely on the size of the numbers present without really engaging in deep thinking.

A great start to this exercise is to challenge the question. What does the question mean by "doing the best"? Or, perhaps more perceptively, what could "doing the best" actually mean? If alternative criteria are applied to the given data, it is possible to argue that each department is doing the best.

In absolute terms, the Jazz department has the biggest overall increase in sales of 0.8 million (from 1.2 million to 2 million).

In relative terms, the Alternative department has achieved the biggest percentage increase in sales, from 0.2 million to 0.8 million (a 300% increase).

In terms of contribution to overall sales, however, Rock still contributes the biggest share to total sales.

Hence by using alternative criteria – absolute change, relative change and contribution to overall sales – each department manager could claim that his or her department is "doing the best".

## Sample questions

See pages 169–173 for suggested answers and guidance.

### Section A questions

#### Question 1: Static Force

*Static Force (SF)* produces disposable watches. It has a USP and strong brand awareness in the watch market for offering very low prices. However, with online competition growing, *SF* is experiencing falling sales. The CEO of *SF* is considering launching a new watch produced from recyclable materials and selling this at a much higher price. The CEO is looking to set the price of this new watch at \$160. *SF*'s watches are usually priced between \$42 and \$84.

The financial information on the new watch is given here:

Maximum production capacity of new watch	88,000 watches
Direct cost of new watch	\$40
Price of the new watch	\$160
Fixed costs to produce the new watch	\$6 million

- (a) Define the term *brand awareness*. [2]
- (b) (i) Construct a breakeven chart for the new watch (show all your working). [4]
- (ii) Calculate the margin of safety. [2]
- (c) Explain **one** advantage to *SF* of introducing the new watch. [2]

#### Question 2: Flip Shoes (some HL-only content)

*Flip Shoes (FS)* produces shoes for musical performers and actors, thereby focusing mostly on the entertainment industry. The business uses batch production and operates in

a niche market. With the creation of more TV and film series, *FS*'s sales have grown dramatically and its market share is increasing. The business has a small number of managers and limited workspace. The management have noted that the business is currently experiencing diseconomies of scale.

The years and mean sales per month for *FS* are given here:

Year	Mean sales of shoes per month
2014	100
2015	140
2016	280
2017	320
2018	600
2019	724
2020	800
2021	1020

- (a) Describe **one** feature of batch production. [2]
- (b) (i) Describe how the mean sales per month of shoes for *FS* could have been calculated. [1]
- (ii) Using graph paper, plot the mean sales of *FS* per year since 2014. (Show your labelling clearly.) [2]
- (iii) On the graph, construct a line of best fit through the mean sales data obtained from (b) (ii). (HL only) [1]
- (iv) On the graph, extrapolate a value for mean sales in 2022 and 2023 from the line of best fit. (HL only) [2]
- (c) Explain **one** diseconomy of scale that *FS* could experience. [2]

**Summary points for section A questions**

These points relate to questions which involve a diagram or working to be shown.

- Practice drawing and labelling break-even charts or scatter diagrams with lines of best fit.
- Show all working to gain partial marks even if one part of the answer is incorrect.
- The own figure rule applies to all quantitative questions. If your final answer is incorrect but you show clear working so it is possible to see that you only made one error, then you will only lose 1 mark if this error is "carried through" to other questions.

**Section B questions****Question 1: Coco Delight (some HL-only content)**

*Coco Delight (CD)* produces a range of luxury chocolate bars that are sold and manufactured in New Zealand. *CD* has created an overseas supply chain where all ingredients are transported to New Zealand.

- (a) Describe **one** feature of a supply chain. (HL only) [2]

*CD* is aware that overseas suppliers have been using palm oil. Given the growing concerns about climate change, *CD* has decided to produce a new ethical chocolate bar which uses only one quarter of the palm oil used in its other chocolate bars. These new ethical chocolate bars will be considerably more expensive than the chocolate bars in *CD*'s current range, and will be priced using a premium pricing method. Part of the profits from the sales of the new bar will be used to finance the planting of new palm oil trees to reduce the impact on the environment.

- (b) Explain **one** advantage and **one** disadvantage of *CD* using a premium pricing method for the new ethical chocolate bar. (HL only) [4]

*CD* is considering exporting these ethical chocolate bars to consumers in new overseas markets. They have identified three possible target countries: X, Y and Z. *CD* carried out

market research with a random sample of 500 consumers in each of the three countries. The results of this research are given in the table below. The new ethical chocolate bar is to be launched in 2024.

Possible target country	Percentage of respondents who would <b>try</b> the new ethical chocolate bar	Percentage of respondents who would <b>possibly try</b> the new ethical chocolate bar	Percentage of respondents who would <b>not try</b> the new ethical chocolate bar
X	60	32	8
Y	42	38	20
Z	28	62	10

- (c) (i) Comment on the market research results above. [2]  
(ii) Explain **one** benefit to *CD* of collecting market research using random samples. [2]

*CD* has employed a market research company to review the current and future economic situation in each of the three countries where it wants to launch the new ethical chocolate bar. The bar is expected to have a higher price than those of its competitors in all three countries. No ethical chocolate bars are produced by these competitors.

The market research company:

- Estimated a probability of success for *CD* entering each market based on the experiences of other sweet manufacturers. The probability figures are based on data which is six years old.
- Carried out an extensive STEEPLE analysis for each country.

A summary of the results is given in the table below.

- (d) Using the data provided, recommend to *CD* which target country it should launch the new ethical chocolate bar in. (HL only) [10]

Target country	Economic conditions in 2024	Economic conditions in 2028	Probability of success	STEEPLE analysis summary
X	Stable	Worsening	0.4	Favourable to business
Y	Improving	Stable	0.58	No clear trend but limited technology
Z	Declining	Strongly improving	0.79	Concerns especially about political stability in the future

**Question 2: Quick Scoot (some HL-only content)**

*Quick Scoot (QS)* produce a portfolio of electric scooters (or e-scooters) which are unlocked by a mobile phone application. The three different e-scooters produced are called Alpha, Beta and Gamma.

Users of the e-scooters pay a small fee per kilometre travelled. *QS* has significant brand loyalty and has found that consumer demand for scooters has grown, especially in busy cities where transport options are limited. *QS* is a product-orientated business.

- (a) Describe **one** feature of a product-orientated business. [2]

An increase in congestion has meant that several competitors have entered the market at a rapid rate. Through secondary market research, *QS* has found that competition has intensified. Total profits for all three e-scooters which *QS* offers has fallen in 2020. *QS*'s newly appointed CEO thinks that each e-scooter should be separated into a profit centre.

E-scooter	Profit in 2018 (\$m)	Profit in 2020 (\$m)	Future competition from other e-scooter manufacturers
Alpha	8	6	Increasing, but Alpha has strong brand loyalty
Beta	4	−2 (but making a contribution)	Stable but likely to increase
Gamma	2	−0.8 (but making no contribution to fixed costs)	Intensifying as more young people use e-scooters in cities
<b>Total</b>	14	3.2	

- (b) Explain **one** advantage and **one** disadvantage to QS for converting the three e-scooters into profit centres in 2020. (HL only)

[4]

QS is considering introducing a new e-scooter called "Delta". It is a cheaper version targeted at students or those on low incomes. Production of the new e-scooter could be outsourced to a neighbouring country with much lower wage rates and material costs. However, there may be language/cultural barriers involved in communicating with the outsourced company, as well as quality control concerns. Some of QS's management think that Delta offers the only chance for QS to maintain its profitability.

- (c) Explain **one** cost and **one** benefit of outsourcing production of the possible new e-scooter, Delta, to a neighbouring country.

[4]

Delta is introduced but the financial situation for QS continues to deteriorate. By 2022, the market for e-scooters has become saturated. QS has very limited working capital to support all four scooters beyond providing some limited above-the-line promotion.

The CEO has constructed a Boston Consulting Group (BCG) matrix of all four e-scooters with the aim that one e-scooter should be removed from the portfolio.

- (d) With reference to the Boston Consulting Group matrix and other data provided, recommend to QS which e-scooter should be withdrawn so as to remain profitable.

[10]

Scooter	Target customer	Current market share	Market growth
Alpha	Adult men	High	High
Beta	Adult women	Medium	Medium to low
Gamma	18–30-year-old men and women	Declining	Declining
Delta	Students	Medium	Possibly high

### Question 3: Space Manufacturing

Space Manufacturing (SM) is a private limited company which manufactures component parts and tools for a government space programme. SM has a new four-year contract. The government launches satellites into orbit using the parts SM has produced. SM has limited productive capacity. The government is SM's only customer.

SM needs a new manufacturing facility to increase capacity, and this will cost \$40 million. Expected profit from the new facility is given in the table below.

Year	1	2	3	4
Forecast annual profit in thousands of dollars	8	12	16	16

The government will purchase this manufacturing facility from SM at the end of the fourth year for \$2.4 million, and it is looking to renegotiate the contract with SM as the space programme is expected to grow.

- (a) Describe **one** advantage of being a private limited company.
- (b) (i) For the new manufacturing facility, calculate the payback period, showing your working.
- (ii) Calculate the average rate of return, showing your working.
- (iii) Comment on your answers to parts (i) and (ii).
- (c) Explain **one** advantage to SM of only having the government as its customer.

[2]

[2]

[2]

[2]

[2]

### Question 4: Gen Z

Gen Z is an internet start-up business owned by Zack.

Gen Z offers market research services and produces creative market research reports. It sells these reports to organizations (clients) looking for data to help with decision-making. Its most popular reports include information on how to target customers more effectively with social media.

These market research reports are highly valued by clients and can cost thousands of dollars to purchase. The reports are produced by coders who are highly skilled but require constant on-the-job and off-the-job training, as technology employed by social media changes frequently.

- (a) Identify **two** problems that a start-up business may face.

[2]

Zack has a laissez faire leadership style. Coders are empowered to make decisions and take risks. They are also regularly praised for the impact that their reports have on their clients' decision-making. However, Zack thinks the coders are taking too long to produce reports. Gen Z also needs to find new revenue streams as profits are low.

- (b) Explain **one** benefit and **one** cost to Gen Z of a laissez faire leadership style.

[4]

Gen Z's marketing mix is unique. They rely only on word-of-mouth promotion through social media. Their reports are priced higher than those of their competitors, and the building in which they operate and meet clients is untidy and resembles a university "fraternity" rather than a professional working space. There are game consoles and couches for afternoon naps.

Some clients have commented on social media that although the market research reports are creative, the physical evidence of *Gen Z*'s premises is poor and is impacting on *Gen Z*'s positioning.

Labour turnover at *Gen Z* is high by industry standards as other internet start-ups have offered higher salaries.

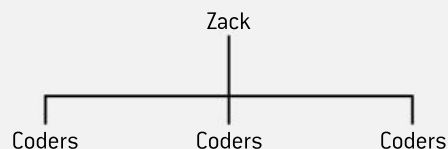
- (c) Explain any **two** elements of the marketing mix of *Gen Z*.

[4]

Zack has spoken to an old friend – Eduardo – and admits that *Gen Z* needs to be more professional. They also require new external sources of finance. Zack has considered offering him a partnership. Eduardo has experience of running larger technological companies and is interested, but has indicated that he has two conditions if he provides the source of finance required by *Gen Z*.

- Eduardo would like to introduce a profit-related pay system for *Gen Z* coders.

- Eduardo insists that Zack adopts an autocratic leadership style and adds an additional layer of senior management to *Gen Z*. The current organizational chart is shown below.



Social media speculation has begun, and the coders are angry and are threatening to quit. Zack is concerned. He has invested so much money into their training and does not want to lose them. However, he realizes that Eduardo's capital and guidance could be crucial for *Gen Z*'s economic sustainability over the next five years.

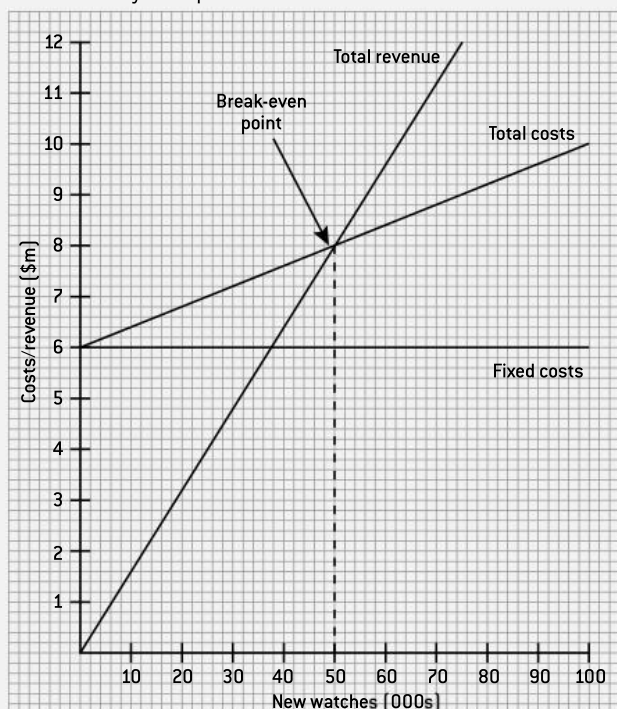
- (d) Using the information from the stimulus, recommend whether Zack should offer Eduardo a partnership at *Gen Z*.

[10]

## Guidance and suggested answers

### Section A question 1: Static Force

- (a) A common error which students make is that they provide examiners with what has become known as a tautological answer, where they repeat the question in the answer. For example, *brand awareness occurs when an organization tries to make its brand available/accessible/aware to consumers*. The answer merely repeats the content in the question and will achieve 0 marks. Check your understanding of brand awareness on page 104.
- (b) (i) You should note the use of the scale, clear labelling, the identification of the break-even point and straight lines. The answer given has supporting calculations. There is also no need to draw the total variable cost curve unless directed by the question.



### Break-even chart:

- Break-even point is  $6,000,000 / (\text{contribution})$ .
- Contribution of the new watch is  $\$160 - \$40 = \$120$ .
- Break-even point =  $6,000,000 / 120 = 50,000$  watches.

Marks will be awarded as follows:

**[1]** for appropriately labelled axes.

**[1]** for an accurately drawn and labelled TR curve.

**[1]** for an accurately drawn and labelled FC curve.

**[1]** for an accurately drawn and labelled TC curve.

Please refer to the additional guidance for drawing break-even charts on page 154.

- (ii) Margin of safety is commonly expressed as units/quantity and not as a numerical value on its own. Remember to always show clear working. If your final answer is incorrect, you could still earn partial marks from an examiner if they can follow your working.

Margin of safety = maximum production capacity (88,000 watches) – break-even point (50,000 watches) = 38,000 watches.

**[1]** mark will be awarded if the answer demonstrates how to calculate the margin of safety but makes a mathematical error.

**[2]** marks will be awarded if the answer demonstrates how to calculate the margin of safety and produces the correct answer.

- (c) The new watch will create a new market opportunity for *SF* at a time of falling sales due to growing online competition. This market opportunity could lead to a new positioning of *SF* watches in a higher price bracket and increased sales.

The new watch will allow *SF* to use up some of its spare capacity as the current margin of safety is 38,000 watches, and possibly in the future it will allow the new watch to be produced more cheaply thus lowering its high retail price.

**[1]** mark will be awarded for a theoretical advantage with an additional **[1]** for application to *SF*, which may include reference to the margin of safety – own figure rule (OFR) applies. (This means that you will be given partial marks if you show all of your working but make one error and then carry this one error through to the rest of your calculations. So if the examiner can follow your working and you make one error then the OFR rule will be applied and you will only lose one mark even though your final answer may be totally different from the correct answer.)

## Section A question 2: Flip Shoes

- (a) Please note that unlike the command terms “identify” and “state”, “describe” requires slightly longer answers. Also note that students often confuse a *feature* with an *advantage*.

Features of batch production:

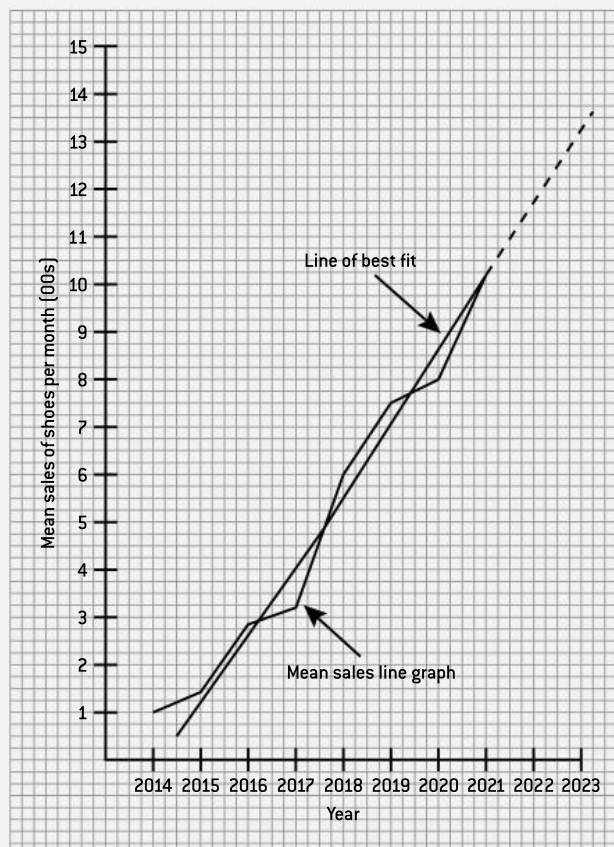
- It involves producing a group of identical products. Products are made as specified groups or amounts, within a given time frame.
- Customers are offered customized products but using a range of standardized options.
- This method of production requires careful planning, as the components for the products need to be interchangeable.

*Other relevant features will be accepted.*

**[1]** mark will be awarded for a partial description with an additional **[1]** for a full description.

- (b) (i) The mean sales per month could have been calculated by adding the total sales for the year and dividing by 12.

**[1]** mark will be awarded for a correct answer.



- (ii) See the graph below. The “rules” which apply to break-even charts also apply here: choosing a suitable scale, labelling correctly, using a pencil and a ruler, and using the graph paper provided.

**[2]** marks will be awarded if both axes are labelled, sales data are plotted, and the line graph is drawn.

**[1]** mark will be awarded if one of the above elements is missing.

- (iii) **[1]** mark will be awarded for a correct line of best fit drawn. (The line of best fit should go through the mean value of the mean sales data, which is 4.98 or 498.)

- (iv) From the graph the extrapolated value of mean sales for 2022 is 11.7 or 1170 shoes, while for 2023 it is 13.3 or 1330 shoes.

**[1]** mark will be awarded for each correct extrapolated value up to a maximum of **[2]**.

**Guidance:** please note that in both (iii) and (iv) the own figure rule applies. Examiners will know that lines of best fit and extrapolated values will never be identical. Hence if you can plot the mean values in part (ii) clearly, achieving full marks on (iii) and (iv) will come down to accuracy and attention to detail.

- (c) A possible diseconomy of scale occurs when the unit costs of production increase over the long run. Sales at *FS* are growing at a dramatic rate and with a small number of managers and limited workspace, coordination and communication challenges may lead to rising unit costs as the scale of production of shoes increases.

**[1]** mark will be awarded for a theoretical response which may include an explanation of a diseconomy of scale, with an additional **[1]** for application to *FS*.

## Section B question 1: Coco Delight

- (a) A supply chain illustrates the full production process of a product, from the extraction of raw materials through manufacturing and eventually to distribution so that it reaches the end user.

**[1]** mark will be awarded for a partial description (part of the supply chain process) with an additional **[1]** to include a full description encompassing at least two aspects of the process as illustrated above.

- (b) An ethical bar will be a new venture for *CD*, and if consumers are influenced by ethical and environmental considerations in their purchasing habits then a premium pricing method (with some of the profits being used to ensure sustainability of the crops) will be an advantage as there does not seem to be much competition.

However, given that *CD*'s current range is priced lower, a premium pricing strategy may confuse existing customers and affect the positioning of *CD*.

*Any other relevant response will be accepted.*

**Guidance:** please note that the application to *CD* goes beyond just using the name of the organization. A good practice to show application is to quote parts of the stimulus to show that you are using the case study to illustrate your point.

**[1]** mark will be awarded for a relevant advantage/disadvantage with an additional **[1]** mark for application to *CD* and the new ethical chocolate bar.

Award up to a maximum of **[2]** for each advantage and each disadvantage.

- (c) (i) The results indicate that country X has the highest number of respondents who would try, or possibly try, the new ethical chocolate bar at 92% and the lowest negative response at 8%.  
Country Y has a high level of response rate at 80% for both try and possibly try, but has the highest response rate of those who would not try the ethical chocolate bar at 20%.  
Country Z has a low negative response (10%) and a high positive result (90% for those who would try or possibly try). These results are close to those of country X.

The market research strongly supports launching in countries X and Z.

**[1]** mark will be awarded for each correct comment in context up to a maximum of **[2]**.

**Guidance:** please note that "comment", which is an AO2 command term, expects you to highlight a possible trend or explain the data in some way. You are not expected to discuss trends or extrapolate further.

- (ii) Random samples are unbiased as respondents are equally likely to be chosen in the research process. *CD* will obtain unbiased responses regarding their new brand. These customer responses to questions about their new chocolate bar will help *CD* with more realistic future sales, cash flow and profit projections.

**[1]** mark will be awarded for a theoretical response such as reduced bias, with an additional **[1]** for application to *CD*.

- (d) **Guidance:** the following is just one suggested response and is not intended as a model answer.

*CD* have three target countries and will be using a combination of their own market research and information from a market research agency. As the launch of the bar is a new venture for *CD*, all decisions about which country to launch it in must be taken with reference to the market research undertaken by *CD* and the market research agency.

Country X seems a strong candidate. Market research indicating that 60% of respondents would try the new bar is the most favourable of the three countries. The economy seems stable, but the probability of success based on the experience of other companies is the lowest. The STEEPLE analysis suggests that the business will be met by a favourable attitude if it launches its product into country X.

Country Y has a stable economy, but as there is no clear trend in the STEEPLE analysis and limited technology, it must therefore be viewed as a less favourable proposition. Market research is also less favourable than for country X. Country Y has the highest rate of respondents who would not try the new product.

Country Z clearly represents the biggest challenge and potentially the biggest opportunity for *CD*. Market research is not conclusive, and the STEEPLE analysis raises concerns for the future. Information is lacking about the impact of the declining economy in the short term.

These forecasts alone are not sufficient to base a judgment on. More information would be required around the cultural

preferences/barriers and consumer confidence and also the inevitable reaction by competitors. This is a new ethical chocolate bar and it is expected that competitors will analyse *CD*'s success before making a decision, but competition is likely. The probability of success for the bar also has to be treated with some caution. Country X seems the safest bet with country Z a close second. The company's attitude to risk will be important in determining the final decision.

The mark will be determined by the application of the mark band.

Please note the constant reference to the stimulus. Also note that there is balanced analysis. This means that a point made in favour of a particular country is contrasted with a point against it.

Remember, when answering these Paper 2 AO3 questions:

- re-read through the whole stimulus again
- plan your answer before you begin.

### Section B question 2: Quick Scoot

- (a) A product-orientated business focuses on the production virtues of the product(s), emphasizing its features, functions, qualities and reliability, rather than meeting specific customer or market needs.

**[1]** mark will be awarded for a partial description, which may include reference to not being influenced by customer or market needs, with an additional **[1]** where the description includes reference to production characteristics.

Profit centres allow for greater autonomy away from higher management in terms of tactical decision-making. For Beta and Gamma, this may provide motivation to focus on solving their own financial difficulties in 2024 and allow Alpha to develop its brand loyalty.

- (b) Profit centres can breed competition between managers which could be motivating, but *QS* runs the risk of the managers pursuing their individual goals rather than collectively following the overall *QS* strategic direction and improving the financial position for the whole company. Beta and Gamma may focus on cost minimization, which, while useful to return both centres to profitability, may undermine Alpha's brand value.

**[1]** mark will be awarded for a theoretical advantage/disadvantage with an additional **[1]** for application to *QS*. Award up to a maximum of **[2]** for each advantage and each disadvantage.

- (c) The financial situation for *QS* continues to deteriorate and the market is becoming saturated. To reduce costs and be in a stronger position to reduce price, *QS* may wish to outsource to a neighbouring country. If the profit centres remain, then managers will be able to focus on marketing and financial strategies to increase contribution and profitability in Alpha.

However, the disadvantages are linked to the production process, with issues relating to quality concerns and language/cultural barriers. *QS* cannot afford production disruption or further mistakes as the market is becoming increasingly competitive.

**[1]** mark will be awarded for an appropriate theoretical cost/benefit and an additional **[1]** for application to *QS*. Award up to a maximum of **[2]** for each cost and each benefit.

- (d) A BCG matrix based on the stimulus may be useful here to plan your response. It will also demonstrate that you know how to use this Business Management tool.

Scooter	Current market share	Future market growth	BCG classification
Alpha	High	High	Star
Beta	Medium	Medium to low	Cash cow
Gamma	Declining	Declining	Dog
Delta	Medium	Possibly high	Problem child

Alpha should be retained given its position within the BCG. It would also be foolish to remove Delta as its production is still in the early stages of its product life cycle.

The analysis would seem to boil down to keeping either Beta or Gamma.

- For Beta, its target market is adult women. This market also overlaps with Gamma's target customer. As a cash cow, Beta will still generate sales, possibly through brand loyalty, and it does make a contribution to fixed costs that is bigger than Gamma's.
- For Gamma, competition is likely to intensify. It has declining market share and future growth, but it could block outside competitors from entering until Delta establishes itself in a growing market.

However, as the financial situation is beginning to deteriorate, it would seem appropriate to withdraw Gamma and use any outstanding funds to support Delta especially as it is still new.

**Guidance:** use of Business Management tools in your answer for an AO3 question is expected. The question states "with reference to the Boston Consulting Group matrix", hence it is advisable to use this and try to apply the data from the stimulus material. Again, planning your answer will be critical.

Notice the language used in the response above. It is tentative. If your analysis had suggested that Beta should be withdrawn, and this is appropriate given the stimulus material and your balanced analysis, then this should be in your conclusion. As we have said on several occasions, for these types of questions there are no model or "correct" answers. The quality of the analysis in effect drives the mark and not the final answer.

### Section B question 3: Space Manufacturing

- (a) One advantage of being a private limited company is that the organization can keep control of the decision-making as the number of potential owners of the business is limited. Private limited companies do not have to publish a full set of financial accounts to external stakeholders apart from those which are sent to the government for taxation purposes.

**[1]** mark will be awarded for a partial answer with a second mark for some additional development.

- (b) (i) The payback period is 3 years and 3 months. See if you can provide the working.

**[1]** mark will be awarded for the correct answer with an additional mark for working shown.

- (ii) Calculating the average rate of return must consider that the manufacturing facility will be sold to the government at the end of the fourth year for \$2.4 million.

Hence the total revenue for this facility is  $8 + 12 + 16 + 16 + 2.4 = \$54.4$  million.

The initial cost is \$40 million, therefore the total profit over the four years is \$14.4 million.

Average profit =  $14.4 \div 4 = \$3.6$  million.

Average rate of return =  $(3.6 \div 40) \times 100 = 9\%$ .

**[1]** mark will be awarded for the correct answer with an additional mark for working shown.

- (iii) The comments should highlight a trend or provide some explanation behind the figures. They should be brief as this is an AO2 question.

You could comment that the payback period is expected to be 3 years and 3 months, and this is within the 4-year contract period. This gives *SM* 9 months to find a new customer.

There are no industry averages to compare with the ARR of 9%, but given the contract is offered by the government and is fixed for four years, we could comment that this manufacturing facility is a low-risk strategy and potentially a good return.

**[1]** mark will be awarded for a comment that is relevant to the results and an extra mark for developing this with some explanation.

- (c) The advantage of having one customer, which is the government, is that the risk of the organization not being able to pay *SM* is limited. Having one customer also allows *SM* to build a significant relationship with them, and when the contract finishes they would be well placed to bid for future contracts, especially as the space programme continues to grow.

**[1]** mark will be awarded for any appropriate theoretical advantage with an additional mark for application to *SM* and the government being their only customer.

### Section B question 4: Gen Z

- (a) Review the problems of being a start-up on page 21.
- (b) The application here is given in the stimulus. The coders are empowered to make decisions and take risks. This is an advantage for the coders and Zack, but the question focuses on *Gen Z*. Hence the answer must consider the benefits to *Gen Z*, such as increased motivation. You could add in a motivation theory to support your answer; this is not a requirement of the question, but it does reinforce your theoretical part of an AO2 answer.

Again, the application for the costs of a laissez faire leadership style is given in the stimulus. We can assume that because the reports are taking too long to produce and profits are low, costs at *Gen Z* are rising. The laissez faire leadership style might be the reason why *Gen Z* is not as profitable as it should be. There is also some other evidence from the stimulus that labour turnover at *Gen Z* is increasing. Higher labour turnover will also increase recruitment costs.

- (c) The stimulus indicates that there are five potential elements in the marketing mix at *Gen Z* which could be explained. Check that you can find all five (some are more subtle than others), but remember to keep

your answer to only two elements and apply these to *Gen Z*. There are no additional marks if you explain more. The five elements you could write about are:

- Price
- Product
- Promotion
- Physical evidence
- People

(d) Observant readers will probably think that the inspiration for *Gen Z* and Zack is Facebook. This is not the case, although there are parallels to many internet start-ups which the author has investigated. In 2015 he visited one in Silicon Valley. The name of this organization we visited as a school group will remain a secret, but we quickly discovered the following:

- A very loose management structure with no offices – all open-plan workspaces with seemingly no hierarchy. First names were used for everybody, including the CEO.
- A free bar serving drinks, and free coffee and snacks.
- Pets were encouraged in the workplace and sat under most desks.
- Two games rooms, with table tennis and other tactile gaming opportunities, and of course unlimited internet game play.
- No dress code, with no one wearing suits or ties.

(Before you carry out research on this mystery company looking for an internship, please be aware that in 2015 this company received a huge number of applications for the few roles they could offer.)

This organization was not Google. In fact, as we discovered this organization carries out market research for Google! This was a bit of a revelation to our group, who had not assumed that the world's most successful search engine organization would "pay" a subcontractor to carry out market research on themselves as a kind of meta Google.

Perhaps it is not surprising though that this organization was founded by a former Google employee.

Films such as *The Social Network*, with its excellent retelling of the creation and growth of Facebook, have captivated young entrepreneurs all dreaming of being the "next big thing".

However, the reality for many internet start-ups, as we learned from our visit, is that with low cash reserves and increasing competition, creating a sustainable internet start-up business is very difficult even with an innovative business idea.

At the time of writing, Twitter has yet to realize profits. Some parts of the Alphabet organization (Google) are making losses despite high revenue growth. TikTok seems to have lasted longer than many predicted but the challenges for internet start-ups remain. They include but are not limited to:

- How do we increase revenue after the growth phase of the product life cycle ends?
- How do we recruit the very best and creative employees and reward them with competitive salaries?
- How do we maintain the mission and vision of the organization we founded without diluting control to external finance opportunities?
- How do we remain sustainable in five years given the rapid pace of change?

For the final evaluative question, you could put yourself in Zack's shoes. What would you do? An inquiry approach works well here.

- Creating a partnership with Eduardo will spread the risk, and it will provide fresh capital and ideas. He also has experience of managing a larger organization.
- If Zack decides to offer a partnership to Eduardo, then the organizational culture at *Gen Z* will have to change, especially to meet one of his conditions.
- Will labour turnover increase if an autocratic leadership style is introduced?
- Zack must train a new group of coders. How much will this add to costs?
- Will *Gen Z* lose the creative advantage that their market research reports created?
- How do you change a culture from *laissez faire* to autocratic?

These are not the questions to answer in the final examination. But perhaps even before you begin writing your answer to the longer AO3 questions, this inquiry approach will help to keep your answer in context, consider both positives and negatives, and provide some opportunities to consider a final solution. Your planning along with some familiarity with the mark bands will help you to maximize your chance of gaining a great final mark.

Case study questions such as AO3 questions really examine your knowledge of business content. These questions will also assess whether you can link different parts of the Business Management syllabus together. Taking *Gen Z* as our example, we considered leadership issues, financial issues, marketing, human resource management and remuneration.

These AO3 questions also assess whether you can apply this knowledge into a business context which may be unfamiliar to you.

Examiners who prepare examination questions are invariably Business Management teachers, and the inspiration for their questions and case study stimuli will come from real-life business examples. This is a critical reason for you to keep up to date with the latest business developments and trends. You will not answer a question on Facebook in the examination, but you could be asked to consider the issues at a fictitious internet start-up which might look like a well-known one!

# References and further reading

- Anderson, C. 2006. *The Long Tail: Why the future of business is selling less of more*. Hyperion.
- Ansoff, H.I. 1965. *Corporate Strategy*. McGraw Hill.
- Braungart, M. and McDonough, W. 2002. *Cradle to Cradle: Remaking the way we make things*. North Point Press.
- Chan Kim, W. and Mauborgne, R. 2005. *Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant*. Harvard Business School Publishing Corporation.
- Dearden, C. and Foster, M. 1992. *Organizational Decision Making*. Pearson Education.
- Drucker, P. 1966. "How to prosper in the new economy." *Forbes Magazine*. 16 May 1998.
- Drucker, P. 1993. *Managing for the Future*. Routledge.
- Friedman, M. 2020. *Capitalism and Freedom*. University of Chicago Press.
- Friedman, T. 2007. *The World is Flat: A brief history of the twenty-first century*. Picador.
- Gabriel, V. 1998 (2nd edn). *Management of Business for GCE A Level and LCC 1*. .
- Gillespie, A. 2001. *Oxford Revision Guide*. Oxford University Press.
- Handy, C. 1976. *Understanding Organisations*. Penguin.
- Handy, C. 1978. *Gods of Management: The changing work of organisations*. Souvenir Press.
- Handy, C. 1994. *The Empty Raincoat: Making sense of the future*. Hutchinson.
- Hashemi, S. and Hashemi, B. 2003. *Anyone Can Do It: Building Coffee Republic from our kitchen table*. Wiley.
- Henderson, M., Thompson, D. and Henderson, S. 2006. *Leading Through Values: Linking company culture to business strategy*. Harper Collins.
- Herzberg, F. 2003. "One More Time: How do you motivate employees?" *Harvard Business Review*.
- Marcousé, I. et al. 2006 (5th edn). *The Complete A-Z Business Studies Handbook*. Hodder & Stoughton.
- McInnes, W. 2012. *Culture Shock: A handbook for 21st century business*. Wiley.
- Miller, J.D. and Lim, J. 2020. *Data-First Marketing: How to compete and win in the age of analytics*. Wiley.
- Poundstone, W. 2012. *Are You Smart Enough to Work at Google?* Oneworld.
- Powell, J. 1991. *Quantitative Decision-Making*. Longman.
- Reeves, R. 1960. *Reality in Advertising*. Knopf.
- Robertson, D. and Breen, B. 2013. *Brick by Brick: How LEGO rewrote the rules of innovation and conquered the global toy industry*. Crown Publishing Group.
- Rogers, E. 1962. *Diffusion of Innovations*. Free Press of Glencoe.
- Rosenberg, K. and Daly, H. 1993. *Foundations of Behavioral Research: A basic approach*. Harcourt College Publishers.
- Russell-Walling, E. 2007. *50 Management Ideas You Really Need to Know*. Quercus.
- Semler, R. 1993. *Maverick! The success story behind the world's most unusual workplace*. Warner Books.
- Shuen, A. 2008. *Web 2.0: A Strategy Guide: Business thinking and strategies behind successful Web 2.0 implementations*. O'Reilly Media.
- Trout, J. 2001. *Big Brands, Big Trouble: Lessons learned the hard way*. John Wiley & Sons.
- Trout, J. and Ries, A. 2001 (2nd edn). *Positioning: The battle for your mind*. McGraw Hill Education.
- Trout, J. and Rivkin, S. 2008 (2nd edn). *Differentiate or Die: Survival in our era of killer competition*. Wiley.
- Trout, J. and Rivkin, S. 2009. *Repositioning: Marketing in an era of competition, change and crisis*. McGraw Hill Education.

# Index

- 360-degree feedback 52
- above-the-line promotion 106, 107
- absorption costing 15, 86
- academic journals 99
- accidental sampling 100
- accounting, triple bottom line 10, 115–16
- accounts 20, 69–72
  - accruals 6
  - balance sheet 70
  - depreciation 70–1
  - intangible assets 70
  - profit and loss account 70
  - purpose of accounts to stakeholders 69
  - see also* assets; finance
- accruals 6
- acid test (quick) ratio 74
- acquired needs theory, McClelland's 50
- acquisitions *see* mergers and acquisitions
- Adams, John 50
- administration process, pre-bankruptcy 77
- agile operations 6
- agile/pivot 5
- AI *see* artificial intelligence
- air conditioning units 142
- Airbnb 142
- Ākina 24
- Alibaba 130
- Allbirds 23
- Alphabet 44, 68
- Amazon (company)
  - Digital Taylorism 148
  - disruptive innovation 142
  - neuromarketing 146
  - price positioning 93
  - retail stores 110
  - supply chain 129
- Anderson, Chris 35
- angel investors 65
- Ansoff matrix 14, 17–18
- Apollo-type organizational culture 57
- Apple
  - iPad 140
  - iPod 141
  - niche and mass markets 92
  - organizational culture 58
  - outsourcing 36
- appraisal 52
- apps 145, 147
- arbitration 62
- ARR *see* average rate of return
- artificial intelligence (AI) 146
- artificial neural networks 146
- assessment guidance
  - assessment objectives 4
  - business research project 159–62
  - case study paper 151–2
  - HL Paper 3 155–8
  - SL/HL Papers 1 and 2 151–4
  - see also* examination preparation assets
    - fixed assets 63
    - intangible assets 70
    - sale of assets 64
- Athena-type organizational culture 57
- autocratic leadership 47, 48, 57
- average rate of return (ARR) 81, 82
- B Corp certification 11, 25
- balance sheet 70
- banking systems 110
- bankruptcy 77
- Barcelona, FC 31
- batch production 117, 118
- Beane, Billy 46–7
- Beck, Harry 12
- below-the-line promotion 106
- benchmarking 121
- Bezos, Jeff 92
- big data 145, 148
- Bill and Melinda Gates Foundation 140
- Boston Consulting Group (BCG) matrix 14, 86, 102–3
- bottled water industry 149–50
- branding 70, 104
  - brand awareness 104
  - brand development 104
  - brand loyalty 104
  - brand value 104
- Branson, Richard 23, 92
- break-even analysis 124–8
  - break-even point 127
  - break-even quantity 125–6, 127
  - contribution 124, 128
  - graphical and quantitative analysis 127
  - limitations of 128
  - margin of safety 126, 127
  - target profit output 126
- brewing industry 113
- Brexit, impact of 114
- broadcast media 107
- budgets 84–6
  - absorption costing 86
  - constructing a budget 85
  - cost and profit centres 84–5
  - variance analysis 85–6
- bureaucracy 41
- business
  - buzzwords/jargon 8, 59
  - concepts 9–13
  - corporate social responsibility 29
  - definition of 20
  - entrepreneurship 21
  - for-profit social enterprises 24–5
  - growth and evolution 32–5
  - mission statements 27
  - multinational companies 36–7
  - nature of 20
  - objectives of 27–30
  - sectors 20–1
  - starting up a business 21–2
  - terminology 5–7
  - types of 22–7
  - vision statements 27
  - see also* companies; organizations; stakeholders
  - business angels 65
  - business content, linking to real-world examples 164
  - business etiquette 59
  - Business Management course, aims of 2
  - Business Management toolkit 13–19, 164
  - business models 5
  - business plans 14, 21–2
  - business research project, assessment guidance 159–62
  - buzzwords/jargon 8, 59
  - capacity utilization 132
  - capital expenditure 63
  - capital productivity 132
  - cash flow 77–81
    - cash flow forecasts 78
    - liquidity position 80
    - problem-solving strategies 80–1
    - profit comparison 78
    - relationship between investment, profit and cash flow 79, 104
    - working capital 79–80
  - centralization 41
  - certified B corporations 11, 25
  - chain of command 41
    - change business concept 9–10
    - resistance to change in the workplace 39–41
  - channels of distribution 109
  - charities 26
  - childcare services 39
  - China, Taylorism in 51, 54
  - Christensen Institute 142
  - chunking (revision strategy) 163
  - circular business models 14
  - circular economy model 116
  - click and collect service 39
  - Clooney, George 137, 138
  - closures of workplace 62
  - cloud computing 146
  - CLPs *see* customer loyalty programmes
  - clustering 34
  - codes of conduct 11
  - coffee farmers 130
  - coffee industry 26, 97, 111–12, 161
    - global market 1
    - supply chain 130
  - Coffee Republic 21–2
  - collective bargaining 61
  - command terms 3–5
  - communication 58–60, 138
    - barriers to 59–60
    - formal/informal communication 58–9

- new technologies 60
- companies
  - certified B corporations 11, 25
  - financial reporting 76
  - newsletters 107
  - see also* business...; organizations
- competitions, promotional techniques 107
- competitive pricing 106
- conciliation 62
- conflict in the workplace
  - conflict resolution 61–2
  - sources of 61
- conglomerates 34
- consumer cooperatives 26
- contingency planning 137–9
  - benefits of 138
  - costs of 139
  - crisis management comparison 137
- continuous improvement (kaizen) 119
- contracts
  - changes to 61
  - zero-hours contracts 39
- contribution 124
  - contribution per unit 128
  - total contribution 124, 128
- contribution costing 15
- contribution pricing 106
- convenience sampling 100
- cooperatives 26
- copyright protection 141
- corporate culture *see* organizational culture
- corporate social responsibility (CSR) 29
- correlation, market research data 95
- cost centres 84, 85
- cost leadership 18, 19
- cost-plus pricing 105
- cost to buy (CTB) 133
- cost to make (CTM) 133
- costs
  - direct costs 67
  - fixed costs 67, 86
  - indirect costs 67
  - overhead costs 67, 86
  - variable costs 67
- coupons 107
- Covid-19 pandemic 38, 109, 110, 130, 137
  - and contingency planning 138, 139
  - and innovation 139
- CQ *see* cultural intelligence research
- cradle-to-cradle design and manufacturing 120
- creativity 11–13, 141
  - business plans 22
  - organizational structure 44–5
- creditor days ratio 75–6
- crisis management 137–9
  - contingency planning comparison 137
  - factors 138
- critical infrastructures 146
- critical path analysis 15, 133–5
- crowdfunding 65
- CSR *see* corporate social responsibility
- CTB *see* cost to buy
- CTM *see* cost to make
- cultural dimensions, Hofstede's 15, 19
- cultural intelligence (CQ) research 110
- currency fluctuations 114
- current ratio 74
- customer loyalty programmes (CLPs) 93, 147
- customers
  - addressing customers' unmet needs 140
  - employee–customer relationship 109–10
- cybercrime 145
- cybersecurity 145
- cyclical variations, sales forecasts 96
- data analytics 145
- data centres 146
- data collection
  - Facebook 147, 149
  - role and importance of 144–5
- data mining 148–9
- databases 145
- debt/equity ratio analysis 66
- debtor days ratio 75–6
- decentralization 42
- Deci, Edward L. 50
- decision-making
  - break-even analysis 128
  - budgets and variances 86
  - business types 23
  - data mining 148–9
  - data sources 144
  - innovation 149–50
  - tools 14, 15
- decision trees 14, 18
- defect rate 132
- delaying 42
- delegation 41
- Deming, Edwards W. 120
- democratic leadership 47, 48
- demographic changes 38
- demotivation 52
- depreciation 70–1
- descriptive statistics 14, 165–6
- design thinking framework/process 6, 158
- differentiation strategies 18, 19, 93
- diffusion of innovations model 6
- Digital Taylorism 148
- Dionysus-type organizational culture 57
- direct costs 67
- disabled people, employment rate 25
- diseconomies of scale 33
- Disney 68
- disruption of industries, and change 9–10
- disruptive innovation 142
- distribution channels 109
- drinking water, access to 149
- Drucker, Peter 48, 49
- dynamic pricing 93, 105
- e-commerce 7, 142, 146
- earliest start time (EST), network diagrams 133, 134, 135
- economies of scale 32
- efficiency ratios 75–7
  - creditor days ratio 75–6
  - debtor days ratio 75–6
  - gearing ratio 76
  - insolvency versus bankruptcy 77
  - stock turnover ratio 75
- elasticities, price 106
- election polls 97–8
- email 60
- employees
  - Digital Taylorism 148
  - employee–customer relationship 109–10
  - gig economy 39
  - industrial/employee relations 60–2
  - insecure work 39
  - labour turnover 51–2
  - monitoring of 148
  - see also* motivation
- employers, conflict in the workplace 61–2
- empowerment 53, 54
- Enron 7, 69, 76
- enterprise 6
- entrepreneurship 21, 92
- environmental sustainability 116
- environmentally-friendly products 93, 149–50
- equity theory, Adams' 50
- EST *see* earliest start time
- ethical issues
  - business concept 10–11
  - data mining 149
  - Enron documentary 69
  - market research 98
- ethical objectives 28, 29
- Ethiopia, cooperative movement 26
- European market 114
- examination preparation
  - descriptive statistics 165–6
  - sample questions/suggested answers 166–73
  - see also* assessment guidance
- extension strategies 103–4
- external environment 6
- extrapolation, market research data 96
- Facebook
  - crisis management 137, 138
  - data collection 147, 149
  - disruptive innovation 142
  - market share 88, 89
- Fairtrade coffee 97, 130, 161
- fashion industry 140
- FC Barcelona 31
- FFA *see* force field analysis
- film industry
  - budgets 85
  - investment, profit and cash flow 79
  - revenue streams 68
- films, study resources 7–8, 46–7, 69
- final accounts 69–72
- finance 20, 63–86
  - accruals 6
  - bankruptcy 77

- budgets 84–6
- business types 23
- capital expenditure 63
- cash flow 77–81
- cost considerations 66
- costs and revenues 67–8
- debt/equity ratio analysis 66
- efficiency ratios 75–7
- ethical behaviour 11, 69
- external sources of 64–5
- financial ratios 73–5
- insolvency 77
- internal sources of 64
- investment appraisal 81–4
- liquidity ratios 74
- profitability ratios 73–4
- purpose of funds 65–6
- revenue expenditure 63
- role of 63
- short- and long-term 65–6
- sources of 64–6
- time factors 65–6
- see also* accounts
- financial reporting 76
- financial rewards 53–4
- first mover advantage 7
- fixed assets 63
- fixed costs 67, 86
- flexi-time 38–9
- flow production (mass production) 117, 118
- Flynn, Daniel 149, 150
- focus groups 98
- for-profit social enterprises 24–5
- force field analysis (FFA) 15, 39–40
- formative appraisal 52
- franchises 34–5, 36, 113
- free float, network diagrams 135
- games market 91
- Gantt charts 13, 15, 135–6
- gearing ratio 76
- generic strategies, Porter's 15, 18
- gig economy 39
- global supply chains 129
- globalization 7
- go slows (industrial action) 61
- going concerns 6
- goodwill 70
- Google
  - organizational culture 58
  - organizational restructuring 44
  - revenue streams 67–8
- government publications 99
- grab sampling 100
- gross profit margin 73, 74
- growth 32–5
  - diseconomies of scale 33
  - economies of scale 32
  - internal growth 33
  - large versus small organizations 33–5
- hairdressing salons 110–11
- Handy, Charles
  - organizational culture 56–7
  - shamrock organizations 45
- HCL Technologies, organizational structure 44–5
- Herzberg, Frederick 49, 50
- hi-fidelity (hi-fi) industry 92
- hierarchy of needs, Maslow's 50
- hierarchy, organizational structure 41, 42
- Hofstede, Geert 15, 19
- horizontal mergers 33–4
- HubSpot 147
- human resource (HR) management 20, 38–62
  - communication 58–60
  - ethical behaviour 11
  - force field analysis 15, 39–40
  - HR planning, internal and external factors 38–9
  - industrial/employee relations 60–2
  - leadership and management 46–8
  - motivation and demotivation 49–55
  - organizational culture 55–8
  - organizational structure 41–6
  - resistance to change in the workplace 39–41
  - role of 38
- hygiene factors, Herzberg's 50, 51
- IA *see* investment appraisal
- Iacocca, Lee 138
- IB learner profile and attributes 2–3
- ICT 60
  - see also* management information systems; smartphones
- Ikea 36, 116
- immigration 38
- incremental innovation 141
- individualism, national cultures 19
- Indosole 25
- induction 54
- indulgence versus restraint, national cultures 19
- industrial/employee relations 60–2
  - arbitration and conciliation 62
  - employee and employer approaches 61–2
  - sources of conflict 61
- information systems *see* management information systems
- information systems
- initial public offerings (IPOs) 23
- innovation 139, 141–2
  - benefits/risks of 149
  - diffusion of innovations model 6
  - disruptive innovation 142
  - incremental innovation 141
- insolvency 77
- insourcing 123
- intangible assets 70
- intellectual property rights 140–1
- Interbrand 70
- interest rates 66
- international marketing 112–14
  - entering international markets 113
  - opportunities/threats 113–14
- international quality standards 122
- internet 7–8, 107
- internet of things (IoT) 145–6
- interviews, market research 98
- intuitive management 46–7
- investment appraisal (IA) 81–4
  - average rate of return 81, 82
  - net present value 83–4
  - payback period 81, 82
- investment/investors
  - angel investors 65
  - relationship between investment, profit and cash flow 79, 104
- IoT *see* internet of things
- iPad, Apple 140
- iPod, Apple 141
- IPOs *see* initial public offerings
- Japan, matrix system 45
- jargon 8, 59
- JIC *see* just-in-case
- JIT *see* just-in-time
- job enlargement 53
- job enrichment 53, 54
- job production 117, 118
- job rotation 53
- Jobs, Steve 7, 56, 58, 140
- joint ventures 33, 113
- just-in-case (JIC) 131
- just-in-time (JIT) 120, 131
- kaizen (continuous improvement) 119
- Kickstarter 65
- Kotler, Philip 92
- labour mobility 38
- labour productivity 132
- labour turnover 51–2
- laissez-faire leadership 47, 48, 57
- latest finish time (LFT), network diagrams 133, 134, 135
- leadership 13, 46–8
  - anti-management style 57
  - autocratic leadership 47, 48, 57
  - creative leadership 12
  - democratic leadership 47, 48
  - laissez-faire leadership 47, 48, 57
  - and management 47
  - paternalistic leadership 48, 57
  - situational leadership 48
- lean production 118–22
  - impact of 121
  - just-in-case 131
  - just-in-time 120, 131
  - kaizen (continuous improvement) 119
- Lego 23
- LFT *see* latest finish time
- licensing 113
- line of best fit, market research data 95
- line extensions, products 93
- liquidity position 80
- liquidity ratios 74

- loans 64, 66
- local supply chains 129
- location 122–4
  - insourcing 123
  - offshoring 123
  - outsourcing 123
  - reasons for a specific location of production 122
  - reshoring 123
  - subcontracting 123
- lockouts 62
- London Underground map 12
- loss leader pricing 105
- M&As *see* mergers and acquisitions
- McClelland, David 50
- McDonald's
  - contingency planning 138–9
  - corporate social responsibility 29
  - delivery service 94
  - Digital Taylorism 148
  - innovation 141
  - "Speedee" production method 8, 117
- magazines 107
- management information systems (MIS) 143–50
  - artificial intelligence 146
  - artificial neural networks 146
  - big data 145, 148
  - cloud computing 146
  - critical infrastructures 146
  - customer loyalty programmes 147
  - cybersecurity 145
  - data analytics 145
  - data collection 144–5
  - data mining 148–9
  - databases 145
  - Digital Taylorism 148
  - innovation 149
  - internet of things 145–6
  - and marketing skills 144
  - monitoring of employees 148
  - Moore's law 145
  - Thankyou 149–50
  - virtual reality 147
- management/managers 46–8
  - Digital Taylorism 148
  - functions of 47
  - and leadership 47
  - monitoring of employees 148
  - scientific and intuitive management 46–7, 49, 51, 148
- manufacturing *see* production
- margin of safety 126, 127
- mark-up pricing 105
- market analyses 99
- market growth 88–9
- market leaders 89
- market orientation 87
- market research 97–100
  - cost and accuracy of 98
  - data collection 94–6, 98
  - ethical issues 98
  - objectivity and relevance 98
  - primary research 98
  - purpose of 97
  - qualitative and quantitative research 99
  - sampling methods 99–100
  - secondary research 99
  - simple linear regression analysis 94–6
  - using specialist market research companies 98
- market segmentation 91
- market share 88, 89
- marketing 20, 87–97
  - creativity 12
  - ethical behaviour 11
  - film industry 79
  - games market 91
  - international marketing 112–14
  - management information systems 144
  - market growth 88–9
  - market leaders 89
  - market orientation versus product orientation 87
  - market share 88, 89
  - "neuromarketing" 146
  - sales forecasting 94–7
  - social media marketing 88, 108, 137
- marketing mix, seven Ps of 100–12
  - branding 104
  - development of 101
  - overview 101
  - people 109–10
  - physical evidence 110–11
  - place 109
  - price 105–6
  - processes 110
  - product 101–4
  - promotion 106–8
  - Starbucks/Storyville comparison 111–12
- marketing planning 90–4
  - differentiation strategies 93
  - market segmentation 91
  - niche market/mass market comparison 92
  - product positioning 91–2
  - role of 90
  - targeting 91
  - unique selling point 92
- masculinity, national cultures 19
- Maslow, Abraham 50
- mass customization 117, 118
- mass marketing 92
- mass production 117
- matching principle (accruals) 6
- matrix structure 42, 45
- media articles, market research 99
- mergers and acquisitions (M&As) 33–4, 113
- Messi, Lionel 31
- microfinance providers 63, 65
- Microsoft 89
- MIS *see* management information systems
- mission statements 25, 27
- MNCs *see* multinational companies
- mobile phones 60
  - see also* smartphones
- Moneyball (film) 46–7
- Moore's law 145
- motivation 49–55
  - acquired needs theory, McClelland's 50
  - appraisal 52
  - equity theory, Adams' 50
  - financial rewards 53–4
  - hierarchy of needs, Maslow's 50
  - hygiene factors 50, 51
  - labour turnover 51–2
  - mastery, purpose and autonomy theory, Pink's 49
  - motivators 50
  - non-financial rewards 53–4
  - recruitment methods 52–3
  - self-determination theory, Deci and Ryan's 50
  - Taylorism 49, 51, 54
  - teamwork 53, 54
  - theories 49–51
  - training 54–5
  - two-factor theory, Herzberg's 49, 50
- motivators, Herzberg's 50
- multinational companies (MNCs) 36–7
  - host country impact of 36
- music streaming services 88, 89, 102, 140
- Musk, Elon 92
- Napster 142
- national cultures 19
- national quality standards 122
- Nespresso 97, 137
- Nestlé 70
- net present value (NPV) 83–4
- Netflix 17
- network diagrams 133–5
- new technologies 60, 89
- newsletters, company 107
- newspapers 99, 107
- NGOs *see* non-governmental organizations
- niche markets 92
- Nike 29
- no-strike agreements 62
- Nokia 130
- non-financial rewards 53–4
- non-governmental organizations (NGOs) 26, 70
- non-profit social enterprises 26
- NPV *see* net present value
- Oakland Athletics baseball team 46–7
- observations, market research 98
- offshoring 123
- on/off the job training 54–5
- online content, market research 99
- online meetings 60
- operating leverage 132
- operations management 20, 115–28
  - break-even analysis 124–8
  - circular economy model 116

- ethical behaviour 11
- lean production 118–22
- location 122–4
- operations methods 117–18
- production of goods and services 115
- quality management 118–22
- sustainability 115–16
- organic growth 113
- organizational culture 12–13, 55–8
  - culture clashes 57–8
  - film resources 7
  - Handy's categories of 56–7
  - Pixar 55–6
- organizational structure 41–6
  - appropriateness of 43–5
  - changes in 45
  - creative structures 44–5
  - organizational charts 42–3
  - terminology 41–2
- organizations
  - agility of 5
  - B Corporations 11, 25
  - bureaucracy in business context 41
  - centralization 41
  - chain of command 41
  - codes of conduct 11
  - corporate social responsibility 29
  - decentralization 42
  - delaying 42
  - delegation 41
  - diseconomies of scale 33
  - economies of scale 32
  - for-profit social enterprises 24–5
  - growth of 33–5
  - large versus small organizations 33–5
  - levels of hierarchy 41, 42
  - matrix structure 42, 45
  - multinational companies 36–7
  - non-profit social enterprises 26
  - private and public sectors 22, 25–6
  - size of 33–5
  - small is beautiful/profitable 35
  - span of control 41
  - see also* business...; companies
- outsourcing 36, 123, 130
- overdrafts 64
- overhead costs 67, 86
- overtime bans 61
- overtrading 7
- partnerships 23
- patents 141
- paternalistic leadership 48, 57
- payback period 81, 82
- payment mechanisms 110
- PDCA (Plan, Do, Check, Act) cycle 120
- PDI *see* power distance index
- penetration pricing 105
- people, marketing mix 109–10
- personal funds 64
- pharmaceutical companies 139
- physical evidence, marketing mix 110–11
- Pink, Daniel 49
- Pixar 55–6
- place, marketing mix 109
  - see also* location
- planning
  - business plans 14, 21–2
  - contingency planning 137–9
  - Gantt charts 13, 15, 135–6
  - HR planning 38–9
  - STEEPLE analysis 14, 17, 43, 114
  - SWOT analysis 14, 16–17, 43
  - see also* marketing planning; production
- point-of-sale material 107
- pop-ups 5, 10
- Porter, Michael 15, 18
- position maps 91–2
- positioning 19
- power distance index (PDI) 19
- predatory pricing 105
- premium pricing 105
- price
  - competitive pricing 106
  - contribution pricing 106
  - cost-plus pricing 105
  - differentiation strategies 93
  - dynamic pricing 93, 105
  - elasticity of demand 106
  - loss leader pricing 105
  - mark-up pricing 105
  - penetration pricing 105
  - predatory pricing 105
  - premium pricing 105
  - surge pricing 93, 94
  - target price 126
- primary market research 98
- primary sector 20
- private limited companies 23–4
- private sector 22
- processes, marketing mix 110
- product differentiation 93
- product life cycle 101–4
  - extension strategies 103–4
- product orientation 87
- product portfolio 102, 103
- product positioning 91–2
- production 20
  - batch production 117, 118
  - cradle-to-cradle design and manufacturing 120
  - flow production 117, 118
  - job production 117, 118
  - mass production 117
- production planning 129–36
  - capacity utilization 132
  - capital productivity 132
  - cost to buy and cost to make 133
  - critical path analysis 133–5
  - defect rate 132
  - just-in-time and just-in-case 131
  - labour productivity 132
- network diagrams 133–5
- operating leverage 132
- productivity rate 132
- stock control 131
- supply chain process 129–30
- productivity rate 132
- profit 28, 127
  - cash flow comparison 78
  - gross profit margin 73, 74
  - profit before interest and tax 70
  - profit margin 73, 74
  - relationship between investment, profit and cash flow 79, 104
  - retained profit 64
  - target profit output 126
  - terminology changes 70
- profit centres 85
- profit and loss account 70
- profitability ratios 73–4
- promotion 106–8
  - above-the-line promotion 106, 107
  - below-the-line promotion 106
  - social media marketing 108
  - through-the-line promotion 106–7
- public relations 107
- public sector 22, 25–6
- publicly traded companies 23–4
- qualitative research 99
- quality management 118–22
  - benchmarking 121
  - quality assurance 120
  - quality circles 121
  - quality control 120
  - quality standards 122
  - total quality management 120, 121
- quantitative research 99
- quaternary sector 21
- quota sampling 100
- R&D *see* research and development
- random sampling 99
- Ray-Ban 89
- Recreational Equipment Inc. (REI) 26
- recruitment 52–3
  - internal versus external recruitment 53
- redundancies 61
- Reeves, Rosser 93
- REI *see* Recreational Equipment Inc.
- Rens 142
- reputation damage 29
- research and development (R&D) 139–43
  - addressing customers' unmet needs 140
  - benefits/costs of 139–40
  - innovation 139, 141–2
  - intellectual property rights 140–1
- research process, guidance on 160
- research proposal, example of 161–2
- reshoring 123, 130

- restraint versus indulgence, national cultures 19
- retail sector
  - click and collect service 39
  - pop-ups 5, 10
  - shopping malls 111
- retained profits 64
- return on capital employed (ROCE) 73–4
- revenue
  - definition 67
  - revenue streams 67–8
- revenue expenditure 63
- revision strategies
  - chunking 163
  - inquiry approach 163
- ride-sharing industry 37, 93–4, 142
- risk 5, 20
- ROCE *see* return on capital employed
- Rogers, Everett, diffusion of innovations model 6
- Rowntree 70
- Ryan, Richard M. 50
- sale of assets 64
- sale of shares 64
- sales forecasting 15, 94–7
  - benefits/limitations of 96
  - correlation 95
  - cyclical variations 96
  - extrapolation 96
  - seasonal variations 96
  - simple linear regression analysis 94–6
- sales promotions 107
- sample questions/suggested answers 166–73
- sampling methods 99–100
- scientific management 46–7, 49, 51, 148
- SDGs *see* UN Sustainable Development Goals
- seasonal variations, sales forecasts 96
- secondary market research 99
- secondary sector 20
- self-appraisal 52
- self-determination theory, Deci and Ryan's 50
- Semco 12, 44
- Semler, Ricardo 44
- shamrock organizations 45
- shareholder value 28
- shareholders 27
- shares 64
- shopping malls 111
- simple linear regression 15, 94–6
- single-union agreements 62
- situational leadership 48
- situational tools 13, 14, 15
- SMART aim 96
- smartphones 60, 142, 145, 147
- social enterprises 6, 158
  - for-profit social enterprises 24–5
  - non-profit social enterprises 26
  - Thankyou 149–50
- social media 10, 53, 60, 88, 108
- social media marketing 88, 108, 137
- socially-responsible products 93, 149–50
- soft drinks industry 149
- sole traders 23, 35
- space tourism 92
- span of control 41
- special offers 107
- "Speedee" production method 8, 117
- Spotify 88
- stakeholders 27, 30–1
  - conflict between 31
  - financial ratios 76
  - and innovation 149–50
  - internal and external stakeholders 30
  - resistance to change in the workplace 40
  - stakeholder interest 30
- Starbucks
  - environmental sustainability 116
  - marketing mix 111–12
  - research proposal example 161
  - SWOT analysis 16
- start-ups 28, 65, 87
- statistics, descriptive 14, 165–6
- STEEPLE analysis 14, 17, 43, 114
- stock control 131
- stock turnover ratio 75
- Storyville 111–12, 161
- straight line depreciation 71, 72
- strategic alliances 113
- strategies 28–9
  - cash flow problems 80–1
  - extension strategies 103–4
  - generic strategies, Porter's 15, 18
  - strategic alliances 33
- streaming services, music 88, 89, 102, 140
- strike action 61
- study resources 7–8
- subcontracting 123
- Subway 36, 113
- summative appraisal 52
- supply chain process 129–30
- surge pricing 93, 94
- surveys 98
- sustainability
  - business concept 10
  - environmental sustainability 116
  - Indosole mission statement 25
  - operations management 115–16
  - UN Sustainable Development Goals 25
- SWOT analysis 14, 16–17, 43
- tactical objectives 28–9
- takeovers 33–4
- target markets 91
- target price 126
- target profit output 126
- tax avoidance 37
- taxi industry 37, 93–4, 142
- Taylor, Frederick Winslow 49, 51, 54, 148
- teamwork 53, 54
- TED Talks 8
- tertiary sector 21
- Thankyou 149–50
- through-the-line promotion 106–7
- time value of money 83–4
- total contribution 124, 128
- total float, network diagrams 135
- total quality management (TQM) 120, 121
- Toyota 13
- trade credit 64
- trade unions 61, 62
- trademarks 141
- training 54–5
- transparency 6, 11, 138
- triple bottom line 10, 115–16
- Trout, Jack 91, 93
- Twitter 23
- UAE (United Arab Emirates), shopping mall 111
- Uber 37, 94, 142
- UN Sustainable Development Goals (SDGs) 25
- uncertainty avoidance, national cultures 19
- unions 61, 62
- unique selling point (USP) 19, 92
- units of production depreciation 71–2
- variable costs 67
- variable pricing 93
- variance analysis 85–6
- venture capitalists 65
- vertical mergers 34
- video conferencing 60
- video resources 7, 8
- Virgin Group 23
- virtual reality (VR) 147
- vision statements 27
- Volkswagen 138
- VUCA (volatility, uncertainty, complexity and ambiguity) 6
- Walmart 93
- Who Gives a Cr\*p 25
- Wikipedia 99
- Will&Able 25
- word-of-mouth 107
- work, insecurity of 39
- work-to-rule 61
- working capital 79–80
- workplace
  - conflict in the workplace 61–2
  - resistance to change 39–41
- workplace closures 62
- YouTube, study resources 8, 49
- Zara 140
- zero-hours contracts 39
- Zeus-type organizational culture 57
- Zoom 142
- Zuckerberg, Mark 89, 138

