



SIXTH EDITION

DIGITAL BUSINESS AND E-COMMERCE MANAGEMENT

STRATEGY, IMPLEMENTATION
AND PRACTICE

DAVE CHAFFEY

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Which strategies and actions are needed to develop and sustain a Digital Business?

How should we prioritise our investments in E-commerce and Digital Business?

What are the main changes that need to be made to an organisation to facilitate Digital Business?

The new edition of Dave Chaffey's bestselling book is your guide to answering these difficult questions. Written in an engaging and informative style, *Digital Business and E-Commerce Management* will equip you with the knowledge and skills to navigate today's fast-paced world of continuous technological development.

In this sixth edition of his bestselling book, leading authority Dave Chaffey brings together the most recent academic thinking and professional practice. Covering all aspects of e-business including strategy, digital marketing and supply chain management, *Digital Business and E-Commerce Management* gives you the benefit of:

- A structured approach to review, plan and implement e-commerce strategy for all types of organisation
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- Expanded coverage of creating integrated experiences for mobile and desktop devices
- Case studies and interviews showing how startups and large organisations have grown through creating effective digital business strategies
- A companion website at www.pearsoned.co.uk/chaffey, providing access to the latest digital business and e-commerce developments via Dave Chaffey's regularly updated Blog, twitter feed and updates to Dave's series of books. The website also provides the opportunity for self-assessment and access to extra case studies demonstrating digital business and e-commerce in action

Whether you're a student studying digital business and e-commerce, or a business manager, *Digital Business and E-Commerce Management* is the essential text to help you understand and apply digital technology, strategy and implementation.

Dave Chaffey is co-founder of e-commerce advice site SmartInsights.com and a consultant, trainer and visiting lecturer on digital marketing courses at Cranfield School of Management, University of Derby and Manchester Metropolitan University.



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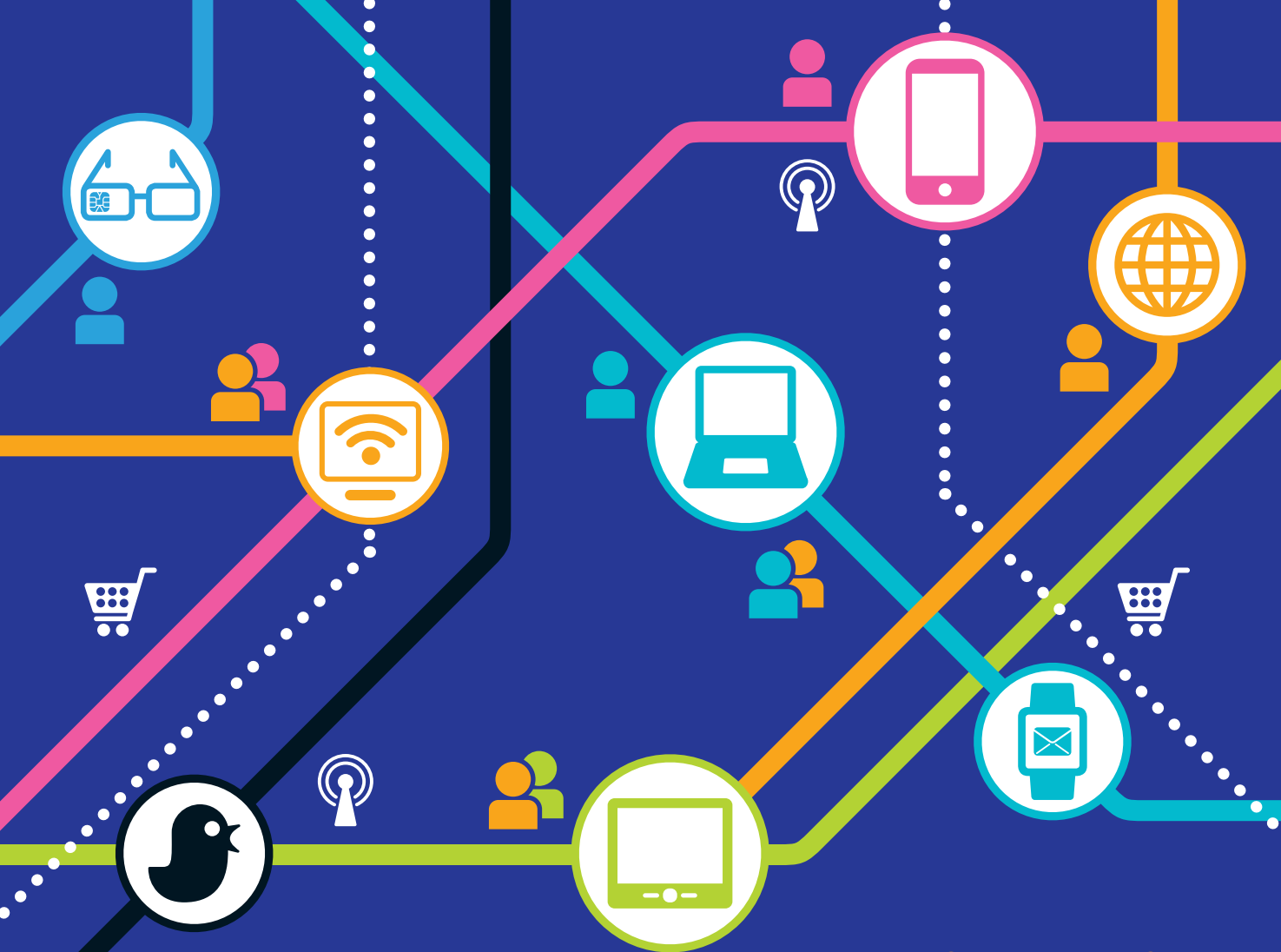
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Lecturer Resources

For password-protected online resources tailored to support the use of this textbook in teaching, please visit

www.pearsoned.co.uk/chaffey



Preface



In 1849, a group of settlers travelling west towards the promised land, California, entered a then unnamed valley. The valley presented a harsh environment with a barrier of mountains to the west making the way forward unclear. Some of the settlers lost their lives as they sought to find a route west before eventually reaching California and what was to become one of the most prosperous places on earth. As the group left the valley, one of the women in the group turned and said, 'Goodbye, Death Valley', and hence the valley got its name.

Today, flagship digital businesses with headquarters in California, such as eBay, Facebook and Google, are now leading global brands with turnovers of billions of dollars, yet this has happened in a few short years, less than 300 years after the first modern settlers arrived.

Likewise for other businesses, the road to digital business success is not straightforward and fraught with difficulties of selecting the correct strategic direction and surviving in an increasingly harsh competitive environment. Not all who follow the route survive. But whether it's the start-up businesses or an existing business, what they have in common is that those who prosper learn to optimise to take the right strategic decisions about digital technology, digital marketing and supply chain management.

This book is intended to equip current and future managers with some of the knowledge and practical skills to help them navigate their organisation towards digital business.

A key aim of this book is to identify and review the key management decisions required by organisations moving to digital business and consider the process by which these decisions can be taken. Key questions include: What approach to digital business strategy do we follow? How much do we need to invest in digital business? Which processes should be our digital business priorities? Should we adopt new business and revenue models? What are the main changes that need to be made to the organisation to facilitate digital business?

Given the broad scope of digital business, this book takes an integrative approach drawing on new and existing approaches and models from many disciplines, including information systems, strategy, marketing, supply chain management, operations and human resources management.

What is digital business management?

Digital business

how businesses apply digital technology and media to improve the competitiveness of their organisation through optimising internal processes with online and traditional channels to market and supply.

As we will see in Chapter 1, **digital business** is aimed at enhancing the competitiveness of an organisation by deploying innovative digital technologies throughout an organisation and beyond, through links to partners and customers and promotion through digital media. It does not simply involve using technology to automate existing processes, but is about digital transformation by applying technology to help change these processes to add value to the business and its customers. To be successful in managing digital business, a breadth of knowledge is needed of different business processes and activities from across the value chain, such as marketing and sales, through new product development, manufacturing and

Supply chain management (scm)

The coordination of all supply activities of an organisation from its suppliers and partners to its customers.

Value chain

A model for analysis of how supply chain activities can add value to products and services delivered to the customer.

inbound and outbound logistics. Organisations also need to manage the change required by new processes and technology through what have traditionally been support activities such as human resources management.

From this definition, it is apparent that digital business involves looking at how electronic communications can be used to enhance all aspects of an organisation's supply chain management. It also involves optimising an organisation's value chain, a related concept that describes the different value-adding activities that connect a company's supply side with its demand side. The digital business era also involves management of a network of interrelated value chains or value networks.

What is e-commerce management?

Value networks

The links between an organisation and its strategic and non-strategic partners that form its external value chain.

Electronic commerce (e-commerce)

All electronically mediated information exchanges between an organisation and its external stakeholders.

Buy-side e-commerce

E-commerce transactions between an organisation and its suppliers and other partners.

Sell-side e-commerce

E-commerce transactions between an organisation and its customers.

To set the scope of this book, in its title we reference both 'digital business' and 'e-commerce'. Both these terms are applied in a variety of ways; to some they mean the same, to others they are quite different. As explained in Chapter 1, what is most important is that they are applied consistently within organisations so that employees and external stakeholders are clear about how the organisation can exploit electronic communications. The distinction made in this book is to use electronic commerce (e-commerce) to refer to all types of electronic transactions between organisations and stakeholders, whether they are financial transactions or exchanges of information or other services. These e-commerce transactions are either buy-side e-commerce or sell-side e-commerce and the management issues involved with each aspect are considered separately in Part 2 of the book. 'Digital business' is applied as a broader term encompassing e-commerce but also including all electronic transactions within an organisation.

Management of e-commerce involves prioritising buy-side and sell-side activities and putting in place the plans and resources to deliver the identified benefits. These plans need to focus on management of the many risks to success, some of which you may have experienced when using e-commerce sites, from technical problems such as transactions that fail, sites that are difficult to use or are too slow, through to problems with customer service or fulfilment, which also indicate failure of management. Today, the social media or peer-to-peer interactions that occur between customers on company websites, blogs, communities and social networks have changed the dynamics of online commerce. Likewise, the frenzied consumer adoption of mobile technology platforms via mobile sites and mobile apps offers new platforms to interact with customers which must be evaluated and prioritised. Deciding which of the many emerging technologies and marketing approaches to prioritise and which to ignore is a challenge for all organisations!

How is this book structured?

Social media

A category of media focussing on participation and peer-to-peer communication between individuals, with sites providing the capability to develop user-generated content (ugc) and to exchange messages and comments between different users.

The overall structure of the book, shown in Figure P.1, follows a logical sequence: introducing the foundations of digital business concepts in Part 1; reviewing alternative strategic approaches and applications of digital business in Part 2; and how strategy can be implemented in Part 3. Within this overall structure, differences in how electronic communications are used to support different business processes are considered separately. This is achieved by distinguishing between how electronic communications are used, from buy-side e-commerce aspects of supply chain management in Chapters 6 and 7, to the marketing perspective of sell-side e-commerce in Chapters 8 and 9. Figure P.1 shows the emphasis of perspective for the particular chapters.

Mobile technology platforms

Devices and services used by consumers to interact with other consumers and companies including smartphones, tablets and wearable technology.

Mobile apps

A software application that is designed for use on a mobile phone or tablet, typically downloaded from an app store. Iphone apps are best known, but all smart phones support the use of apps which can provide users with information, entertainment or location-based services such as mapping.

Part 1: Introduction (Chapters 1–4)

Part 1 introduces digital business and e-commerce. It seeks to clarify basic terms and concepts by looking at different interpretations of terms and applications through case studies.

- **Chapter 1: Introduction to digital business and e-commerce.** Definition of the meaning and scope of digital business and e-commerce. Social media, social commerce and mobile apps are also introduced. Introduction to business use of the internet – what are the benefits and barriers to adoption and how widely used is it?
- **Chapter 2: Marketplace analysis for e-commerce.** Introduction to new business models and marketplace structures enabled by electronic communications.
- **Chapter 3: Managing digital business infrastructure.** Background on the hardware, software and telecommunications that need to be managed to achieve digital business.
- **Chapter 4: E-environment.** Describes the macro-environment of an organisation, which presents opportunities and constraints on strategy and implementation.

Part 2: Strategy and applications (Chapters 5–9)

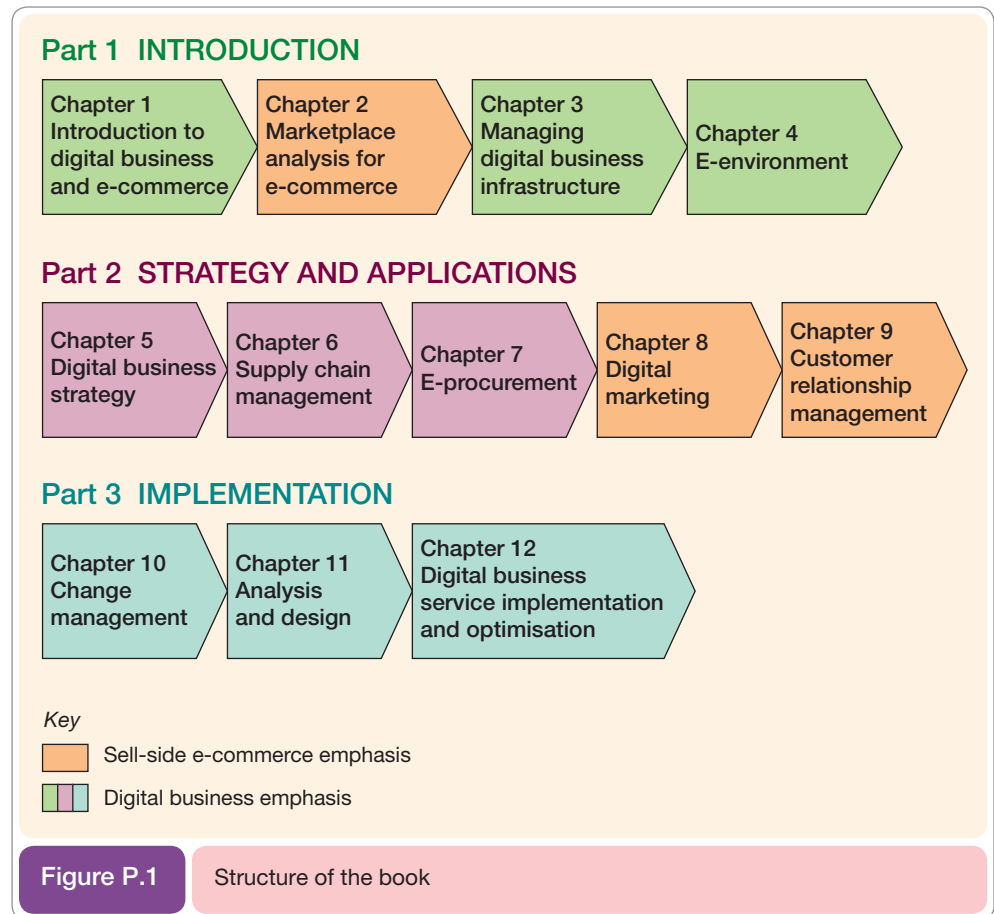
In Part 2 of the book, approaches to developing digital business strategy and applications are reviewed for the organisation as a whole (Chapter 5) and with an emphasis on buy-side e-commerce (Chapters 6 and 7) and sell-side e-commerce (Chapters 8 and 9).

- **Chapter 5: Digital business strategy.** Approaches to developing digital business strategy. Differences from traditional strategic approaches. Relation to IS strategy.
- **Chapter 6: Supply chain management.** A supply chain perspective on strategy with examples of how technology can be applied to increase supply chain and value chain efficiency.
- **Chapter 7: E-procurement.** Evaluation of the benefits and practical issues of adopting e-procurement.
- **Chapter 8: Digital marketing.** A sell-side e-commerce perspective to digital business, reviewing differences in marketing required through digital media. Structured around developing a digital marketing plan.
- **Chapter 9: Customer relationship management.** Reviews marketing techniques that apply e-commerce for acquiring and retaining customers.

Part 3: Implementation (Chapters 10–12)

Management of digital business implementation is described in Part 3 of the book in which we examine practical management issues involved with creating and maintaining digital business solutions.

- **Chapter 10: Change management.** How to manage the organisational, human and technology changes required in the move to digital business.
- **Chapter 11: Analysis and design.** We discuss the main issues of analysis and design raised by e-commerce systems that need to be discussed by managers and solutions providers.
- **Chapter 12: Digital business implementation and optimisation.** How should e-commerce systems be managed and monitored once they are live?



Who should use this book?

Students

This book has been created as the main student text for undergraduate and postgraduate students taking specialist courses or modules which cover digital business, e-commerce information systems or digital marketing. The book is relevant to students who are:

- *undergraduates on business programmes* which include modules on the use of the Internet and e-commerce; this includes specialist degrees such as electronic business, electronic commerce, internet marketing and marketing or general business degrees such as business studies, business administration and business management;
- *undergraduate project students* who select this topic for final-year projects or dissertations – this book is an excellent resource for these students;
- *undergraduates completing work placement* involved with different aspects of digital business such as managing an intranet or company website;
- *postgraduate students on specialist masters degrees in electronic commerce, electronic business or digital marketing and generic MBA, Certificate in Management or Diploma in Management Studies* which involve modules or electives for electronic commerce and digital marketing.

What does the book offer to lecturers teaching these courses?

The book is intended to be a comprehensive guide to all aspects of deploying digital business and e-commerce within an organisation. The book builds on existing theories and concepts and questions the validity of these models in the light of the differences between the internet and other media. The book references the emerging body of literature specific to digital business, e-commerce and digital marketing. As such, it can be used across several modules. Lecturers will find that the book has a good range of case studies, activities and exercises to support their teaching. These activities assist in using the book for student-centred learning as part of directed study. Web links given in the text and at the end of each chapter highlight key information sources for particular topics.

Practitioners

There is also much of relevance in this book for the industry professional, including:

- *senior managers and directors* seeking to apply the right digital business and e-commerce approaches to benefit their organisation;
- *information systems managers* who are developing and implementing digital business and e-commerce strategies;
- *marketing managers* responsible for defining a digital marketing strategy and implementing and maintaining the company website;
- *supply chain, logistics and procurement managers* wanting to see examples of best practice in using e-commerce for supply chain management;
- *technical project managers or webmasters* who may understand the technical details of building a site, but have a limited knowledge of business or marketing fundamentals.

Student learning features

A range of features have been incorporated into this book to help the reader get the most out of it. They have been designed to assist understanding, reinforce learning and help readers find information easily. The features are described in the order you will encounter them.

At the start of each chapter

- *Chapter at a glance*: a list of main topics, 'focus on' topics and case studies.
- *Learning outcomes*: a list describing what readers can learn through reading the chapter and completing the activities.
- *Management issues*: a summary of main issues or decisions faced by managers related to the chapter topic area.
- *Web support*: additional material on the companion website.
- *Links to other chapters*: a summary of related topics in other chapters.
- *Introductions*: succinct summaries of the relevance of the topic to marketing students and practitioners together with content and structure.

In each chapter

- *Activities*: short activities in the main text that develop concepts and understanding, often by relating to student experience or through reference to websites. Model answers to activities are provided at the end of the chapter where applicable.

- *Case studies*: real-world examples of issues facing companies that implement digital business. Questions at the end of the case study highlight the main learning points from that case study.
- *Real-world digital business experiences*: interviews with e-commerce managers at a range of UK, European and US-based organisations concerning the strategies they have adopted and their approaches to strategy implementation.
- *Digital trends updates*. References to relevant statistical sources to update information on the latest consumer and business adoption of digital technology.
- *Box features*: these explore a concept in more detail or give an example of a principle discussed in the text.
- *'Focus on' sections*: more detailed coverage of specific topics of interest.
- *Questions for debate*: suggestions for discussion of significant issues for managers involved with the transformation required for digital business.
- *Definitions*: when significant terms are first introduced the main text contains succinct definitions in the margin for easy reference.
- *Web links*: where appropriate, web addresses are given for further information, particularly those that update information.
- *Chapter summaries*: intended as revision aids and to summarise the main learning points from the chapter.

At the end of each chapter

- *Self-assessment exercises*: short questions which will test understanding of terms and concepts described in the chapter.
- *Discussion questions*: require longer essay-style answers discussing themes from the chapter, and can be used for essays or as debate questions in seminars.
- *Essay questions*: conventional essay questions.
- *Examination questions*: typical short-answer questions found in exams and can also be used for revision.
- *References*: these are references to books, articles or papers referred to within the chapter.
- *Further reading*: supplementary texts or papers on the main themes of the chapter. Where appropriate a brief commentary is provided on recommended supplementary reading on the main themes of the chapters.
- *Web links*: these are significant sites that provide further information on the concepts and topics of the chapter. All website references within the chapter, for example company sites, are not repeated here. The website address prefix 'http://' is omitted from www links for clarity.

At the end of the book

- *Glossary*: a list of all definitions of key terms and phrases used within the main text.
- *Index*: all key words and abbreviations referred to in the main text.

Learning techniques

The book is intended to support a range of learning styles. It can be used for an active or student-centred learning approach whereby students attempt the activities through reflecting on questions posed, answering questions and then comparing their answer to a suggested answer at the end of the chapter. Alternatively, students can proceed straight to suggested answers in a more traditional learning approach, which still encourages reflection about the topic.

Module guide

Table B presents one mapping of how the book could be used in different weekly lectures and seminars through the core eleven weeks of a module where the focus is on management issues of digital business and e-commerce.

A full set of PowerPoint slides and accompanying notes to assist lecturers in preparing lectures is available for download at www.pearsoned.co.uk/chaffey.

Enhancements for the sixth edition

The effective chapter structure of previous editions has been retained, but many other changes have been incorporated based on lecturer and student feedback. We now refer to digital business throughout rather than the dated term e-business which we had included from the first edition in 2002. The rationale is that the term e-business is less used now in industry; instead companies increasingly reference management of digital technologies, channel strategies, digital marketing and digital transformation.

You will see from the listing of updates below that the most significant additions to the content reflect the growth in importance of mobile marketing and commerce and inbound marketing, including content marketing and social media marketing.

Each chapter has been rationalised to focus on the key concepts and processes recommended to evaluate capability and develop digital business strategies. The main updates for the sixth edition on a chapter-by-chapter basis are:

- *Chapter 1.* The chapter starts by introducing the major trends now determining selection of digital services which are a major theme in the book: *inbound marketing* (content, search and social media marketing), Google's *Zero Moment of Truth* (ZMOT) and *mobile commerce*.

Paid, owned, earned (POE) media options for reaching audiences are introduced and a new mini case study on Tatu Couture shows how small and larger businesses can use these techniques to reach new audiences. All other cases have been updated, as is the case for the majority in the book.

Dated Internet adoption data has been removed and replaced by a new 'Trends update' feature and activities directing students via Dave Chaffey's *SmartInsights.com* site to the best data sources in their country for reviewing adoption of digital technologies.

- *Chapter 2.* Increased emphasis on online start-up businesses, of particular interest to students. Mini case study on *Ecomum* added to give a recent example of an e-retail failure with serious consequences. New case at start of chapter on *Blackcircles.com*.

Updated review of *online ecosystem* to explain the increasing role of *mobile platform usage* and *multiscreening*.

Business model canvas introduced. A useful new tool for students to review online business models for case studies and assignments.

- *Chapter 3.* A new introductory section on the growing range of *digital business technology platforms*, focussing on *mobile platforms*, has been added at the start. Decisions on implementing mobile design such as responsive vs adaptive design are covered in Chapter 11. An example of setting objectives and strategies for mobile platforms is given.

In this chapter we now focus on the management decisions involved with creating an effective technology infrastructure rather than explaining the technology in detail. We explained the technology such as TCP/IP and XML in more detail in previous editions, when it was less familiar. Research and feedback from users of the book have shown that this knowledge usually exists from other courses, modules or during work, so there is little

value in duplicating it. The chapter has been simplified and restructured to reflect this change.

- *Chapter 4.* Data on consumer and business adoption and usage of different digital platforms updated. Sections on changes in *privacy law* updated.
- *Chapter 5.* This chapter has remained much the same, since the fundamental processes of strategy creation are similar. It has been simplified and the examples updated, including examples of vision setting.

Discussion of mobile value propositions is added in Mini-case study 5.1.

- *Chapter 6.* A mini case study on the launch of the Pebble watch on *crowdfunding* site Kickstarter shows how digital business potentially makes it easier to set up new supply chains to manufacture and distribute products. A new case study on the implementation of SCM showing the impact on outbound logistics at 3 Suisses France is included.

US Department of Commerce (2013) data used to illustrate the aim of reducing inventory holding across the supply chain. Review of the concept of inventory turnover as applied to supply chain management.

Development of the Internet of Things and machine-to-machine (M2M) applications is introduced and briefly reviewed.

PriceWaterhouseCoopers (PWC)'s 2013 global supply chain survey data are reviewed at end of chapter.

- *Chapter 7.* Mini-case study 7.1 added. This gives an example of how one UK business has created a solution to help its customers worldwide with e-procurement. IFO-Basware (2012) study of the global adoption of e-invoicing summarised. Alibaba.com case study updated.
- *Chapter 8.* Chapter renamed *digital marketing* in place of *E-marketing* to reflect common industry usage describing this activity. Interview reviewing how the marketing mix strategy can change with the adoption of digital media added. Concepts of inbound and content marketing introduced at the start of the chapter, with a new activity introduced around the content marketing matrix to audit and improve content quality. Five different classes of interactive online feedback tools which digital businesses can use to understand and identify customer needs and perceptions added.
- *Chapter 9.* Sections on content marketing, social CRM and social media marketing expanded.
- *Chapter 10.* The new interview at the start of the chapter shows how many companies are now continuously improving their digital services through *conversion rate optimisation*. *Growth hacking* is a related concept that is particularly relevant to online startups, but can be applied to existing businesses too. A section on transformation to the *Social Business* has been added at the end of the chapter.
- *Chapter 11.* Box 11.2 explains the *Big Data* concept and gives examples of the application of big data. The concept of *Social Sign-in* is introduced briefly.

The move from designing a user experience (UX) on a single device to the more complex challenge of *customer experience management* (CXM) across multiple devices, including smartphones and tablets, and physical locations is described.

Today, the increasing importance of mobile design means that designing for mobile devices is a key consideration, so we have added a separate section on design for mobile platforms reviewing five alternative approaches that managers need to discuss, including responsive and adaptive design.

Security breaches data updated and 10 security guidelines for business added.

- *Chapter 12.* New section on the process and tools needed for managing content marketing updates. Section added within analytics on evaluating social media.

Table A

In-depth case studies in Digital Business and E-Commerce Management, 6th edition

Chapter	Case study
1 Introduction to digital business and e-commerce	1.1 The Facebook business model
	1.2 eBay – the world's largest online business?
2 Marketplace analysis for e-commerce	2.1 i-to-i – a global marketplace for a start-up company
3 Managing digital business infrastructure	3.1 Innovation at Google
4 E-environment	4.1 The implications of globalisation for consumer attitudes
5 Digital business strategy	5.1 Debenhams creates value through mobile commerce
	5.2 Setting the Internet revenue contribution at Sandvik Steel
	5.3 Boo hoo – learning from the largest European dot-com failure
6 Supply chain management	6.1 Shell Chemicals redefines its customers' supply chains
	6.2 Argos uses e-supply chain management to improve customer convenience
	6.3 RFID: keeping track starts its move to a faster track
7 E-procurement	7.1 Cambridge Consultants reduce costs through e-procurement
	7.2 Covisint – a typical history of a B2B marketplace?
8 Digital marketing	8.1 The evolution of easyJet's online revenue contribution
	8.2 Dell gets closer to its customers online
9 Customer relationship management	9.1 Tesco.com increases product range and uses triggered communications to support CRM
10 Change management	10.1 Process management: making complex business simpler
	10.2 Using collaborative tools to support knowledge management at Janssen-Cilag Australia
11 Analysis and design	11.1 Providing an effective online experience for local markets
12 Digital business service implementation and optimisation	12.1 Learning from Amazon's culture of metrics

Table B

Module guide

Week	Lecture topic	Seminar or tutorial topics	Notes
1	L1 Introduction to digital business and e-commerce	Activity 1.1 Case study 1.2 Debate 1.1	Introduction eBay How new is the Digital business concept? Chapter 1 and Chapter 3 (technical introduction)
2	L2 E-commerce micro-environment	Activity 2.1 Case study 2.1 Debate 2.1 Debate 2.2	Introduction i-to-i Countermediation Innovative business models Chapter 2
3	L3 E-commerce macro-environment	Activity 4.1 Case study 4.1 Debate 4.1	Introduction Globalisation Opt-in Chapters 3 and 4
4	L4 Digital business strategy: (a) Situation analysis and objective setting	Activity 5.2 Case study 5.1 Debate 5.1	Digital channels Debenhams Digital business responsibility Chapter 5
5	L5 Digital business strategy: (b) Strategy and tactics	Activity 5.3 Case study 5.3 Debate 5.2	Digital business strategies Boo.com Board-level representation Chapter 5
6	L6 Digital business applications: (a) Supply chain management	Activity 6.1 Case study 6.1 Case study 6.2 Debate 6.1	Introduction Shell Chemicals Argos Value chain Chapter 6
7	L7 Digital business applications: (b) E-procurement	Activity 7.1 Case study 7.1 Case study 7.2 Debate 7.2	Introduction Cambridge Consultants Covisint B2B marketplaces Chapter 7
8	L8 Digital business applications: (c) Digital marketing	Activity 8.3 Case study 8.1 Debate 8.1	Competitor benchmarking easyJet Digital marketing planning Chapter 8
9	L9 Digital business applications: (d) E-CRM	Activity 9.1 Case study 9.1 Debate 9.1	Introduction Tesco.com Permission marketing Chapter 9



Table B

Continued

Week	Lecture topic	Seminar or tutorial topics	Notes	
10	L10 Change management	Activity 10.1 Case study 10.1 Case study 10.2 Debate 10.1	Introduction Process management Janssen-Cilag Organising for digital business	Chapter 10
11	L11 Evaluation and maintenance	Activity 12.1 Case study 11.1 Case study 12.1 Debate 12.1	Introduction i-to-i Amazon Standards control	Chapters 11 and 12

Table C

The author's timeline

		1960
1963	Born	Black and white television
		1970
1976		Colour television
		1980
1982		First used computer-programmed mainframe using punched cards
1985	BSc, Imperial College, London	
1988	PhD, University of Leeds	Wrote PhD on mainframe
1989	Project Manager in software house developing GIS for marketing planning	First used PC
		1990
1991	Software Engineering Manager for company producing packaged and bespoke engineering software	Sent first email
1994	Project Manager for customer-facing financial services systems	Started using World Wide Web
1995	Senior Lecturer, Business Information Systems, Derbyshire Business School, University of Derby	First ordered book online
1997	Delivering CIM Internet Marketing seminars	Built first website
1998	<i>Groupware, Workflow and Intranets</i> published	Mobile phone
1999	<i>Business Information Systems</i> published	
		2000
2000	<i>Internet Marketing</i> published	Interactive digital TV
2000	MSc E-commerce course launched at Derby	WAP phone
2003	Nominated by CIM as one of 50 'gurus' to have 'shaped the future of marketing' along with Philip Kotler and Michael Porter!	
2004	Recognised by the Department of Trade and Industry, NOP World and E-consultancy as one of the 'Top 100 people commended by the industry as key influencers and drivers, who have driven the development and growth of e-commerce in the UK over the last ten years'	
2005	Second edition of <i>E-marketing Excellence</i> published	Blogging and RSS on www.davechaffey.com
2006	Third edition of <i>Digital business and E-Commerce Management</i> published	Participating in social networks such as Facebook and Linked-In
2008	E-consultancy Managing Digital Channels research report published	Using Twitter to stay up to date with technology innovation

This timeline considers the diffusion of technological innovation at home and in the workplace. The author first started using a computer regularly when he was 18, yet his 4-year-old daughter is already an internet user. Readers can compare their own adoption of computer technology at home and at work. How do you think the use of the internet and its successors for e-commerce and e-entertainment will change as successive generations become increasingly computer literate?

Guided tour



Part 1 Introduction

Part 1 introduces digital business and e-commerce and their relevance to organizations and consumers. It clarifies terms and concepts such as digital business, devices and technology trends, as well as reviewing alternative applications through activities and case studies.

- 1 Introduction to digital business and e-commerce p. 3**
 - The impact of electronic communications on traditional businesses
 - What is the difference between digital business and e-commerce?
 - Digital business opportunities
 - Risks and barriers to digital business adoption
 - Barriers to consumer internet adoption
- 2 Marketplace analysis for e-commerce p. 41**
 - Online marketplace analysis
 - Location of trading in the marketplace
 - Business models for e-commerce
 - Focus on... Online start-up companies – the 'dot coms'
- 3 Managing digital business infrastructure p. 77**
 - Digital business infrastructure components
 - A brief introduction to Internet technology
 - Management issues in creating a new customer-facing digital service
 - Managing internal digital communications through intranets and extranets
 - Web presentation and data infrastructure components
 - Focus on... Web services, SaaS and service-oriented architecture
 - Internet governance

Part introduction Each part of the book is summarized with a brief list of chapter contents and 'focus on' issues.

3 Managing digital business infrastructure

Chapter at a glance

Main topics

- Digital business infrastructure components: 85
- A brief introduction to Internet technology: 85
- Management issues in creating a new customer-facing digital service: 85
- Managing internal digital communications through intranets and extranets: 107
- Web presentation and data exchange standards: 114

Focus on...

- Web services, SaaS, cloud computing and service-oriented architecture (SOA): 95
- Internet governance: 115

Case studies

- 8.1 Innovation at Google: 121

Web support

The following additional case studies are available at www.pengwinbooks.co.uk/chapter3

- Selecting a supplier for hosting web site services
- Archiving chapters between different systems through XML

The site also contains a range of study materials designed to help improve your results.

Scan code to find the latest updates for this chapter

Chapter at a glance This feature summarizes the main topics of the chapter and the case studies.

Learning outcomes These are set out clearly at the start of each chapter.

Management issues These list the strategic and practical implications of each topic and case study.

Links to other chapters To highlight the connections between chapters.

Web support To highlight additional support material on the website.

Chapter 12 Digital business service innovation and optimization 251

Focus on **Web analytics: measuring and improving performance of digital business services**

We review measuring and improving the effectiveness of a commerce system in detail since it is a key part of optimizing a commerce system. We start with measurement of full-site e-commerce, since the approach is most advanced for this sector, but the principles and practice can be readily applied to other types of digital business systems such as intranets and extranets.

Companies that have a successful approach to e-commerce often seem to share a number of characteristics. They all have great experience and devote resources to measuring the success of their online marketing and gaining in place the processes to continuously improve the performance of their digital channels. This interest in continuous analysis is visible in the UK-based Alliance and Lionstar (Sainsbury), Stephen Lottman, head of e-commerce, described their process in 'The Lionstar Retail' (Sainsbury, 2006). Creative Strategy, senior manager, customer acquisition of e-commerce at A&E, explains further: 'Our online approach is integral with our digital brand and creative strategy, with a focus on direct, targeted and personalized, of strong, value-led messages. Everything we do online, including creative, is driven by an extensive and dynamic testing process.'

Subhramanyam, Director of Customer Knowledge at Hewlett-Packard, speaking at the 2006 eBusiness Summit, described their process as 'Measure, Interpret, Act, Review, Optimize'. Adams refers to the approach as 'The Culture of Metrics' (see Case study 12.1). Jan Verme, who continues an annual event devoted to improving online performance (www.amaonline.org), has commented his view on the required approach in his book, *Web Metrics* (Shore, 2002) as 'TMSEIT', which stands for 'Try the Measure 30 Times 10'. In online content should be reviewed and improved continuously rather than as a periodic or ad hoc process. The importance of defining an appropriate approach to measurement and improvement is such that the term 'web analytics' has developed to describe this key Internet marketing activity. A web analytics association (www.webanalyticsassociation.org) has been developed by vendors, consultants and researchers in this area. Eric Fournier (2006), an author specializing in web analytics, defines it as follows:

Web analytics is the assessment of a variety of data, including web traffic, web-based transactions, web server performance, usability statistics, user-submitted information (e.g. surveys) and related sources to help create a generalised understanding of the visitor experience online.

You can see that in addition to what are commonly referred to as 'key statistics' about web traffic, sales transactions, usability and marketing conversion, 'views through servers' are also included. However, this suggests analysis for the sake of it - whereas the business purpose of analytics should be emphasized. The definition could also refer to comparison of user behaviour and demographics relative to competition using panel and DSP collected data. Our definition is: Web analytics is the customer-oriented analysis of website usage and marketing-related data-making in order to improve the business contribution of online channels to an organization.

A more recent definition from the Web Analytics Association (WAA, www.webanalytics-association.org) is 2010 as:

Web Analytics is the objective tracking, collection, measurement, reporting and analysis of quantitative internet data to optimize website and web marketing initiatives.

Principles of performance management and improvement

To improve results for any aspect of any business, performance management is vital. As Bob Nippon, Chief Information Officer, Hewlett-Packard, was reported to have said back in the 1990s: 'You can't manage what you can't measure.'

Focus on 'Focus on' sections contain more detailed coverage of key areas.

Mini Case Study Extra smaller case studies have been added to give students more examples of e-commerce within business.

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Mini Case Study 8.1 **Overcrowding - Penguin recruits bloggers to appeal to teenagers**

Penguin used crowdsourcing to cover both the creation and management of Spinbooks (Figure 8.3), a new site proposition to enable fans to interact with bloggers, in an interview with the Marketing 2009, Anna Hafferty, Managing Director of the Digital Division at Penguin Books, described the process. During the website development Penguin recruited hundreds of teenagers from every area and background for focus groups and usability testing. The teenagers made every decision, choosing the URL and the nature of the brand themselves. 'We decided not to make any descriptions', says Hafferty.

The site is now run by three fans of teenagers, or 'owners' as they are called to be called, who have varying levels of control over the site. The core crew of 12 teenagers sent all of the website copy and came into the Penguin offices every month to discuss strategy; the second crew of 70 deputy editors are based all over the country and have back-end access to the site, while the third tier consists of the hundreds of teenage bloggers who participate on the site.

Figure 8.3 Spinbooks

Activity To test students' understanding of key topics.

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Activity 2-3 Revenue models at online media sites

Purpose: To illustrate the range of revenue-generating opportunities for an online publisher. This site looks at three alternative approaches for publishing, referencing three different types of site.

Question: Visit each of the sites in this category: 1. Summarise the revenue models which are used for each site by looking at the information for advertisers and affiliates. 2. What are the advantages and disadvantages of the different revenue models for the site audience and the site owner?

3. Given an equivalent audience, which of these sites do you think would generate the most revenue? You could develop a simple spreadsheet model based on the following figures:

- Monthly site visitors: 100,000; 0.5% of these visitors click through to affiliate sites where 2% go on to buy business reports or services at an average order value of 100 GBP.
- Monthly page views: 1,000,000; average of three ads displayed for different advertisers at 20 CPM (see note assuming all ad inventory is sold, which is rarely true in reality).
- Subscription to weekly newsletter: 50,000; each newsletter broadcast: four times per month has four advertisers each paying at a rate of 10 CPM.

Note: These are not actual figures for any of these sites.

The sites are:

- Marketing Profs (www.marketingprofs.com)
- Smart Insights (www.smartinsights.com)
- Marketing Therapist (www.marketingtherapist.com)

Answers to activities can be found at www.parramond.co.uk/chaffey

Focus on: Online start-up companies

Dot-com business was one of the main buzzwords for the Internet. One category of Internet purveyor distinguished itself by offering products and services to online consumers. An online start-up company is a business that is established and operated via the Internet.

To conclude the chapter, we review how to evaluate the potential of new Internet start-ups. Many 'dot-coms' were launched in response to the opportunities of new business and revenue models opened up by the Internet in the mid-to-late 1990s. We also consider what lessons can be learnt from the dot-com failures. But Table 1.1 showed that the growth of Internet purveyors did not end in 2000. In fact, rather many successful online companies such as digital publishers and social networks have developed since then.

An Internet 'purveyor' which only has an online representation is referred to as a 'click-only' or 'click-and-mortar' or 'multichannel' business. A purveyor typically has no retail distribution network. It may have phone-based customer service, or it may have retail outlets (e.g. a clothing retailer). Some purveyors, such as the case with the financial services provider, Zopa (www.zopa.com), or it may offer phone services for more valuable customers, as in the case with hardware provider dab.com (www.dab.com).

Essay, Discussion and Examination questions These provide engaging activities for students and lecturers in and out of the classroom.

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7 Consumer adoption of the digital technology is limited by lack of imperative, cost of access and security issues. Business adoption levels to be restricted by perceptions of cost, making return on investment difficult to quantify.

8 Introducing new technology is not all that is required for success in introducing e-commerce and digital business. Clearly defined objectives, creating the right culture for change, mix of skills, partnerships and organisational structure are arguably more important.

Exercises Answers to these exercises are available online at www.parramond.co.uk/chaffey

Self-assessment questions

- 1 Distinguish between e-commerce and digital business.
- 2 Explain what is meant by buy-side and sell-side e-commerce.
- 3 Explain the scope and benefits of social media and social commerce as an organisation of your choice.
- 4 Summarise the consumer and business adoption levels in your country. What seems to be the main barriers to adoption?
- 5 Outline the reasons why a business may wish to adopt e-commerce.
- 6 What are the main differences between business-to-business and business-to-consumer e-commerce?
- 7 Summarise the impact of the introduction of digital business on different aspects of an organisation.
- 8 What is the relevance of intermediary or influence areas to a B2C company?

Essay and discussion questions

- 1 Suggest how an organisation can evaluate the impact of digital technology on its business. Is a passing fad or does it have a significant impact?
- 2 Explain the concepts of social media and social commerce and how they can assist organisations in reaching their objectives.
- 3 Summarise benefits and business cases for the adoption of sell-side e-commerce for both B2B and B2C organisations. Discuss.
- 4 Evaluate how social media marketing techniques can be applied within an organisation and with its stakeholders.
- 5 The web presence of a company has similar aims regardless of the sector in which the company operates.

Examination questions

- 1 Explain the relationship between the concepts of e-commerce and digital business.
- 2 Distinguish between buy-side and sell-side e-commerce and give an example of the application of each.
- 3 Summarise three reasons why a company may wish to introduce e-commerce.
- 4 Describe three of the main barriers to adoption of e-commerce by consumers and suggest how a company could counter these.

'Real-world Digital Business' Interviews with industry leaders in the e-commerce world to give personal insight to students.

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- Revenue generation: Bookish uses the Internet for direct channel sales of products such as textbooks which do not have strong distribution channels.
- Channel partnership: Tintinberry, with distribution being essential.
- Communications and branding: Car computer kitmaker developed the MySitem site to foster close relationships with customers.

Real-world Digital Business The Smart Insights interview

Digital strategy development at Dunelm

Dunelm Mill is the UK's largest homeware retailer with a portfolio of established out-of-town supermarkets with the Simply Value for Money proposition, its online store features over 17,500 products under the brand name Bookish Mill. In this interview, Sajjad Bhujani, Head of Dunelm Direct Trading at Dunelm, explains the approach to digital marketing.

The Interview

Q: What is your process for creating a digital marketing strategy?

Sajjad Bhujani, Dunelm: The business has an ongoing three-year plan, which is revised every 18 months or so. It has the standard Profit and Loss projections for the online sales part of the business. Project P&L is based on estimates of growth in traffic and sales based on consumer mobile. These targets are split into three time periods, but are re-reviewed as part of the annual planning process.

For introducing new features to the site and improving our digital marketing we have a 12-month cycle for development of new features.

Q: How do you define your e-commerce strategy?

Sajjad Bhujani, Dunelm: I see the 4Ps of the marketing mix as still vital to take strategic decisions for multichannel retailers. Product relative to the range of products we offer on our site compared to the stores and how we promote them through merchandising such as featured offers on the home page or different categories.

With these, multichannel retailers need to consider whether they have consistent pricing with stores; this is the approach we take. The right approach will vary by market. For example, I don't believe that in our sector, channel-specific pricing such as online discounts is right. But it may be in other sectors such as Electrical where price checking can be important. That's less relevant for us since we offer on-brand products.

We aim to have competitive pricing, but don't tend to offer web exclusives - these were more relevant earlier on in the development of e-commerce to encourage use of the web, but we don't need to create margin one. There's also the risk that differential channel pricing can be confusing. Customers are multichannel as they don't see Dunelm as two different companies. We offer free delivery for consistency too, although this is currently for orders over 150 or 1750 for furniture.

For us, Price online is about offering the right experience, but also offering the right product for each search vector. Merchandising as people search (searching) the first things page is really important. You have to decide the combination of leading offers or best sellers which will vary as our brand runs different promotions. With our Webshapers platform we also have the flexibility for offers such as BOOOP - buy one, get one free.

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Case Study 8.1 The evolution of easyJet's online revenue contribution

This historical case shows how the easyJet website (Figure 8.10) became the main sales channel for flights from its launch in the 1990s. How the Internet was used for revenue delivery and marketing communications is also described. This case study has been retained since it is a popular case illustrating the conventional strategy to commitment to a platform, well-resourced strategy to help grow digital channels and to improve online price cuts. By 2013, over 98% of seats were sold online and 80% of flight revenue people to book online. The revenue through e-250 discount for each leg of a journey.

easyJet was founded by Stelios Haji-Iannaris, the son of a Greek shipping tycoon who reportedly used to 'hack the Internet'. In the mid-1990s, Haji-Iannaris reportedly discovered the Internet as something for 'marketing' and

...sense that it wouldn't do anything for his business. This is no longer the case, since by August 1999 the site accounted for 38% of flight sales or over 135,000 seats. This was just the company's original Internet contribution target at launch of 50% of sales by 2000. In 2000, bookings since it was set up in April 1998 after a 12-week start of sales sales in the first week and increased within the first month. In March 2000 easyJet increased its revenue contribution to 12.35 for a single leg - a higher level of permanent discount than any other airline.

By September 2000, Internet sales reached 85% of total sales. Since this time, the growth in proportion of online sales has decreased. By 2003, over 90% of all

Figure 8.10 easyJet website. www.easyjet.com

Case Study Integrated throughout the text with many taken from the Financial Times, illustrating current examples of e-commerce and its applications.

About the author



Dave Chaffey BSc, PhD, FCIM, HIDM

Dave manages his own digital business, Smart Insights (www.smartinsights.com), an online publisher and analytics company providing advice and alerts on best practice and industry developments for digital marketers and e-commerce managers. The advice is also created to help readers of Dave's books. The most relevant information is highlighted at www.smartinsights.com/book-support.

Dave also works as an independent Internet marketing trainer and consultant for Marketing Insights Limited. He has consulted on digital marketing and e-commerce strategy for companies of a range of sizes from larger organisations like 3M, Barclaycard, HSBC, Mercedes-Benz and Nokia to smaller organisations like Arco, Confused.com, Eurooffice, Hornbill and i-to-i.

Dave's passion is educating students and marketers about the latest and best practices in digital marketing, so empowering businesses to improve their online performance through getting the most value from their web analytics and market insight. In other words, making the most of online opportunities and avoiding waste.

He is proud to have been recognised by the Department of Trade and Industry as one of the leading individuals who have provided input to, and influence on, the development and growth of e-commerce and the internet in the UK over the past 10 years. Dave has also been recognised by the Chartered Institute of Marketing as one of 50 marketing 'gurus' worldwide who have helped shape the future of marketing. He is also proud to be an Honorary Fellow of the IDM.

Dave is a visiting lecturer on e-commerce courses at different universities, including Birmingham, Cranfield, Derby, Manchester Metropolitan and Warwick. He is a tutor on the IDM Diploma in Digital Marketing, for which he is also senior examiner.

In total, Dave is author of five best-selling business books, including *Internet Marketing: Strategy, Implementation and Practice*, *eMarketing eXcellence* (with PR Smith) and *Total Email Marketing*. Many of these books have been published in new editions since 2000 and translations include Chinese, Dutch, German, Italian and Serbian.

When offline he enjoys fell-running, indie guitar music and travelling with his family.

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Screenshots

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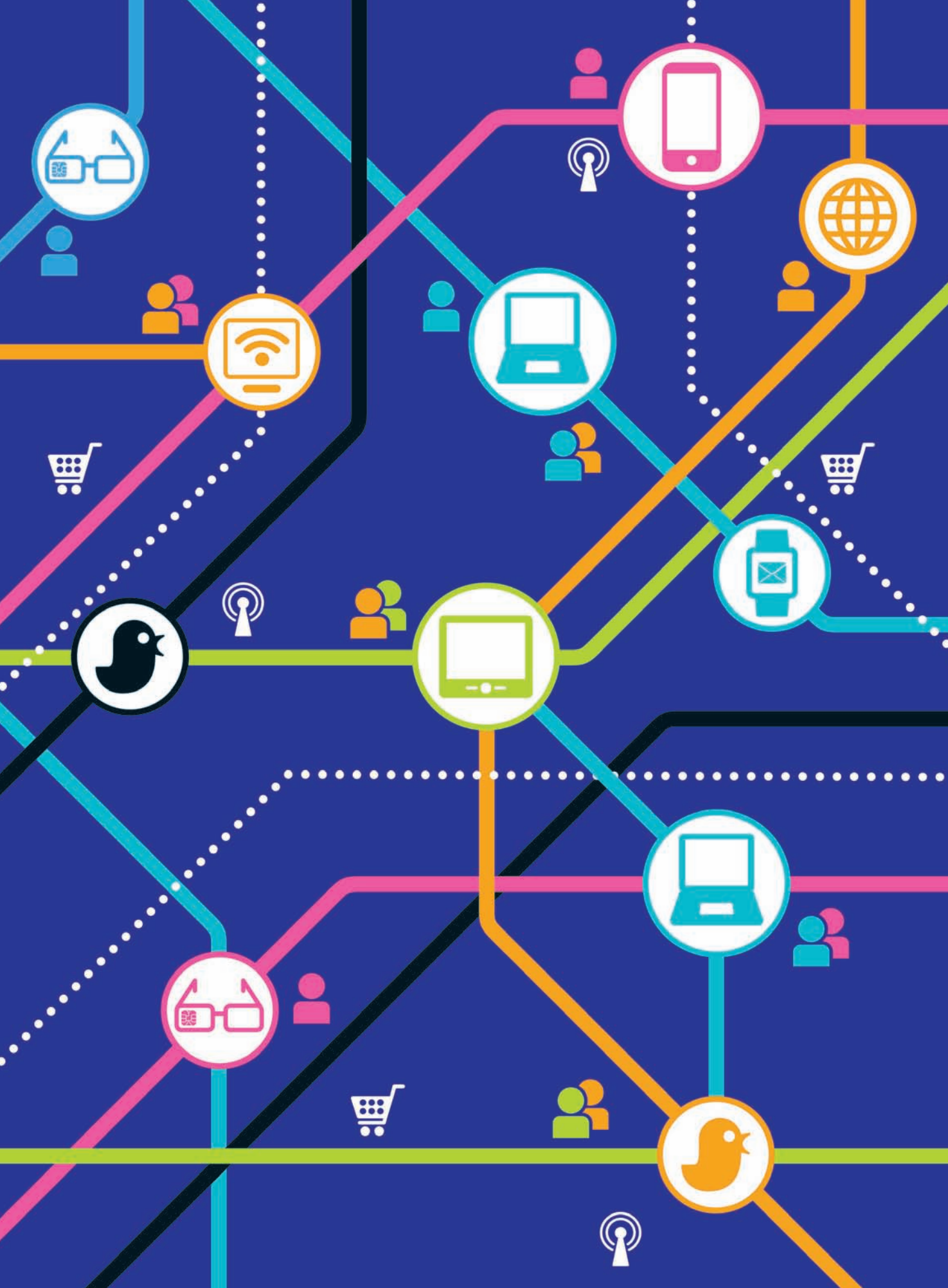
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Part 1

Introduction

Part 1 introduces digital business and e-commerce and their relevance to organisations and consumers. It clarifies terms and concepts such as online business, revenue and technology models by reviewing alternative applications through activities and case studies.

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- Risks and barriers to digital business adoption
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- E-government
- Technological innovation and technology assessment

1

Introduction to digital business and e-commerce

Chapter at a glance

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Web support

The following additional case studies are available at

www.pearsoned.co.uk/chaffey

- SME adoption of sell-side e-commerce
- Death of the dot-com dream
- Encouraging SME adoption of sell-side e-commerce

The site also contains a range of study material designed to help improve your results.

Scan code to find the latest updates for topics in this chapter



Learning outcomes

After completing this chapter the reader should be able to:

- Define the meaning and scope of digital business and e-commerce and their different elements
- Summarise the main reasons for adoption of digital business and barriers that may restrict adoption
- Outline the ongoing business challenges of managing digital business in an organisation, particularly online start-up businesses

Management issues

The issues for managers raised in this chapter include:

- How do we explain the scope and implications of digital business to staff?
- What is the full range of benefits of introducing digital business and what are the risks?
- How do we evaluate our current digital business capabilities?

Links to other chapters

The main related chapters are:

- *Chapter 2* examines the principal e-commerce business and marketplace models in more detail
- *Chapter 3* introduces the technical infrastructure of software and hardware that companies must incorporate to achieve e-commerce
- *Chapter 5* describes approaches to digital business strategy introduced in *Chapter 1*

Introduction

The Internet

'The Internet' refers to the physical network that links computers across the globe. It consists of the infrastructure of network servers and wired and wireless communication links between them that are used to hold and transport data between the client devices and web servers.

World Wide Web (WWW)

The most common technique for publishing information on the Internet. It is accessed through desktop or mobile web browsers which display interactive web pages of embedded graphics and HTML/XML-encoded text.

Wireless communications

Electronic transactions and communications conducted using mobile devices such as laptops and mobile phones (and fixed access platforms) with different forms of wireless connection.

Disruptive digital technologies

Technologies which offer opportunities for business for new products and services for customers and can transform internal business processes. Danneels (2004) defined disruptive technologies as 'a technology that changes the bases of competition by changing the performance metrics along which firms compete. Customer needs drive customers to seek certain benefits in the products they use and form the basis for customer choices between competing products'.

Organisations have now been applying technologies based on **the Internet, World Wide Web** and **wireless communications** to transform their businesses for over 20 years since the creation of the first website (<http://info.cern.ch>) by Sir Tim Berners-Lee in 1991. Deploying these **disruptive digital technologies** has offered many opportunities for innovative businesses to transform their services. Table 1.1 highlights some of the best-known examples and in Activity 1.1 you can explore some of the reasons for success of these companies.

In *Digital Business and E-Commerce Management* we will explore approaches managers can use to assess the relevance of different digital technologies and then devise and implement strategies to exploit these opportunities. We will also study how to manage more practical risks such as delivering a satisfactory service quality, maintaining customer privacy and managing security. In this chapter we start by introducing the scope of digital business and e-commerce. Then we review the main opportunities and risks of digital business together with the drivers and barriers to adoption.

For the author, e-commerce and digital business is an exciting area to be involved with, since many new opportunities and challenges arise yearly, monthly and even daily. Innovation is a given, with the continuous introduction of new technologies, new business models and new communications approaches. For example, Google innovates relentlessly. Its service has developed a long way since 1998 (Figure 1.1) with billions of pages now indexed and other services such as web mail, pay-per-click adverts, analytics and social networks all part of its offering. Complete Activity 1.1 or view Table 1.1 to see other examples of the rate at which new innovations occur.



Figure 1.1

Google circa 1998

Source: Wayback machine archive: <http://web.archive.org/web/1998111183552/google.stanford.edu>. Google and the Google logo are registered trademarks of Google Inc., used with permission.

Table 1.1

Timeline of websites indicating innovation in business model or marketing communications approach

Year founded	Company/site	Category of innovation and business model
1994	Amazon	Retailer
1995 (March)	Yahoo! (yahoo.com)	Directory and portal
1995 (Sept)	eBay	Online auction
1995 (Dec)	AltaVista (altavista.com)	Search engine
1996	Hotmail (hotmail.com)	Web-based email Viral marketing (using email signatures to promote service) Purchased by Microsoft in 1997
1998	GoTo.com (goto.com) Overture (2001)	Pay-per-click search marketing Purchased by Yahoo! in 2003
1998	Google (google.com)	Search engine
1999	Blogger (blogger.com)	Blog publishing platform Purchased by Google in 2003
1999	Alibaba (alibaba.com)	B2B marketplace with \$1.7 billion IPO on Hong Kong stock exchange in 2007 (see case in Chapter 7)
1999	MySpace (myspace.com) Formerly eUniverse	Social network Purchased by News Corp. in 2005
2001	Wikipedia (wikipedia.com)	Open encyclopaedia
2002	Last.fm	A UK-based Internet radio and music community website, founded in 2002
2003	Skype (skype.com)	Peer-to-peer Internet telephony VoIP – Voice over Internet Protocol Purchased by eBay in 2005
2003	Second Life (secondlife.com)	Immersive virtual world
2004	Facebook (facebook.com)	Social network applications and groups
2005	YouTube (youtube.com)	Video sharing and rating
2009	Foursquare (foursquare.com)	A location-based social media website designed for mobile access.
2011	Pinterest	Social network offering image sharing
2014	Google Glass	An example of a wearable computing device
??	The future	??

Activity 1.1

Innovative digital businesses

Purpose

To illustrate innovation in online business models and communications approaches.

Questions

- 1 Think about the innovation that you have witnessed during the time you have used the Internet and World Wide Web. What would you say are the main sites used in your country which have changed the way we spend our time or buy online?



- 2 We talk about these businesses being 'successful', but what is success for a start-up business?
- 3 What do these services have in common that you think has made them successful?

Answers to activities can be found at www.pearsoned.co.uk/chaffey

The impact of electronic communications on traditional businesses

Digital business transformation

Significant changes to organisational processes, structures and system implemented to improve organisational performance through increasing the use of digital media and technology platforms.

During the period shown in Table 1.1 managers at established businesses have had to determine how to apply new electronic communications technologies to transform their organisations. As we will see later in this chapter, existing businesses have evolved their approaches to digital business through a series of stages. Innovation is relentless, with the continuous introduction of new technologies, new business models and new communications approaches. So all organisations have to review new electronic and Internet-based communications approaches for their potential to make their business more competitive and also manage ongoing risks such as security and performance. For example, many businesses are reviewing the benefits, costs and risks of digital business technologies they are currently implementing as part of **digital business transformation** projects.

At the time of writing, there are two key opportunities of digital transformation open to most businesses, which we focus on in this book: inbound marketing and mobile marketing.

Inbound marketing

On the Internet it is often the customer who initiates contact and is seeking information through researching information on a website. In other words, it is a 'pull' mechanism where it is particularly important to have good visibility in search engines when customers are entering search terms relevant to a company's products or services. Amongst marketing professionals this powerful new approach to marketing is now commonly known as **inbound marketing** (Shah and Halligan, 2009). Google have referred to this consumer decision-making before they visit a retailer as the **Zero Moment of Truth (ZMOT)** in a handbook by Lecinski (2012). This describes the combination of online and offline influences on purchase as shown in Figure 1.2.

Zero Moment of Truth (ZMOT)

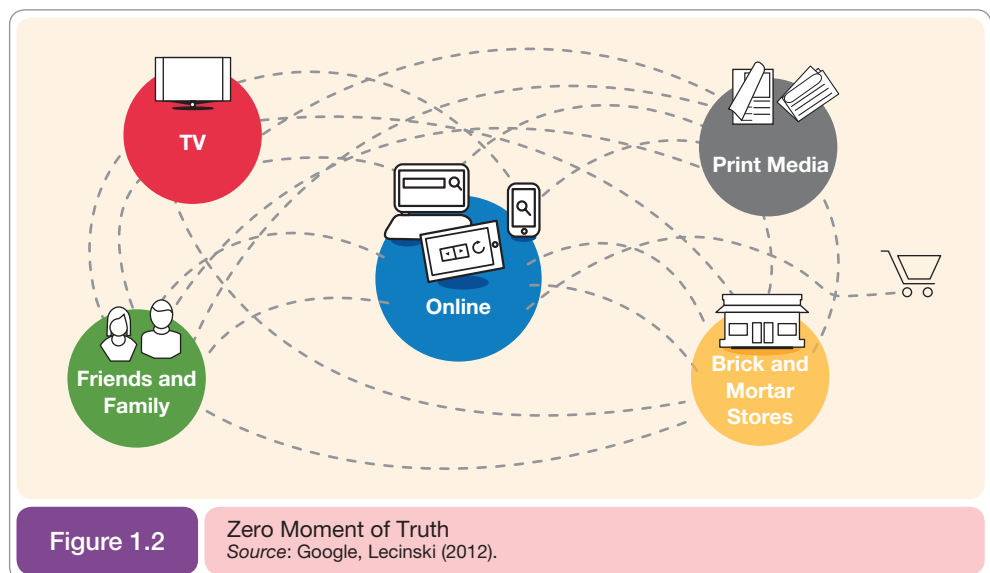
A summary of today's multichannel consumer decision-making for product purchase where they search, review ratings, styles, prices and comments on social media before visiting a retailer.

Inbound marketing

The consumer is proactive in actively seeking out information for their needs, and interactions with brands are attracted through content, search and social media marketing.

Content marketing

The management of text, rich media, audio and video content aimed at engaging customers and prospects to meet business goals, published through print and digital media including web and mobile platforms, which is repurposed and syndicated to different forms of web presence such as publisher sites, blogs, social media and comparison sites.



Search marketing

Companies seek to improve their visibility in search engines for relevant search terms by increasing their presence in the search engine results pages.

Social media marketing

Monitoring and facilitating customer–customer interaction and participation throughout the web to encourage positive engagement with a company and its brands. Interactions may occur on a company site, social networks and other third-party sites.

Inbound marketing is powerful since advertising wastage is reduced. **Search marketing**, **content marketing** and **social media marketing** can be used to target prospects with a defined need – they are proactive and self-selecting. But this is a weakness, since marketers may have less control than in traditional communications where the message is pushed out to a defined audience and can help generate awareness and demand. Advocates of inbound marketing such as Dharmesh Shah and Brian Halligan argue that content, social media and search marketing do have a role to play in generating demand.

Social media marketing

The growth in popularity of **social media** is a major trend in digital business. In particular **social network sites (SNS)** such as Facebook, Google+, Twitter and for business-to-business users LinkedIn and **RSS feeds**. Some niche social media sites are independent from the social networks, including **virtual worlds** such as Habbo Hotel, and **blogs** created by many individuals and businesses. Social media marketing also includes **rich media** such as online video and interactive applications featured on specialist social networks such as YouTube or embedded into websites.

Trends update

Social media usage

The popularity of different social platforms in different countries constantly changes. Visit this compilation to find out the latest in your region or country: <http://bit.ly/smartsocialstats>.

Social media

A category of media focussing on participation and peer-to-peer communication between individuals, with sites providing the capability to develop user-generated content (UGC) and to exchange messages and comments between different users.

Really Simple Syndication (RSS) feeds

Blog, news or other content is published by an XML standard and syndicated for other sites or read by users in RSS reader software services. Now typically shortened to 'feed', e.g. news feed or sports feed.

Virtual world

An electronic environment which simulates interactions between online characters known as avatars. Also known as Massively Multiplayer Online Roleplaying Games (MMORPG).

Blog

An online diary or news source prepared by an individual or a group of people.

Rich media

Digital assets such as ads are not static images, but provide animation, audio or interactivity as a game or form to be completed.

It's important for all businesses to understand the business and revenue models of the major social networks and platforms which are today so influential in shaping people's opinions about brands. Figure 1.3 summarises the main types of social sites that companies need to consider.

Since there are so many types of social presence, it is helpful to simplify the options to manage them. For this we recommend these six categories based on chapters in Weinberg (2010). You can see there's more to social media than social networks:

- 1 Social networking.** The emphasis here is on listening to customers and sharing engaging content. Facebook tends to be most important for consumer audiences and LinkedIn for business audiences.
- 2 Social knowledge.** These are informational social networks like Yahoo! Answers, where you can help an audience by solving their problems and subtly showing how your products have helped others. Wikipedia is another site in this category, although it has relatively little application for marketing.
- 3 Social sharing.** These are social bookmarking sites like Delicious (www.delicious.com) which can be useful for understanding the most engaging content within a category.
- 4 Social news.** Twitter is the best-known example.
- 5 Social streaming.** Rich and streaming media social sites for sharing photos, video and podcasting.
- 6 Company user-generated content and community.** Distinct from the other types of social presence which are independent of companies, these are the company's own social space which may be integrated into product content (reviews and ratings), a customer support community or a blog.

Case study 1.1 considers the growth of Facebook, the largest consumer social network in many countries.

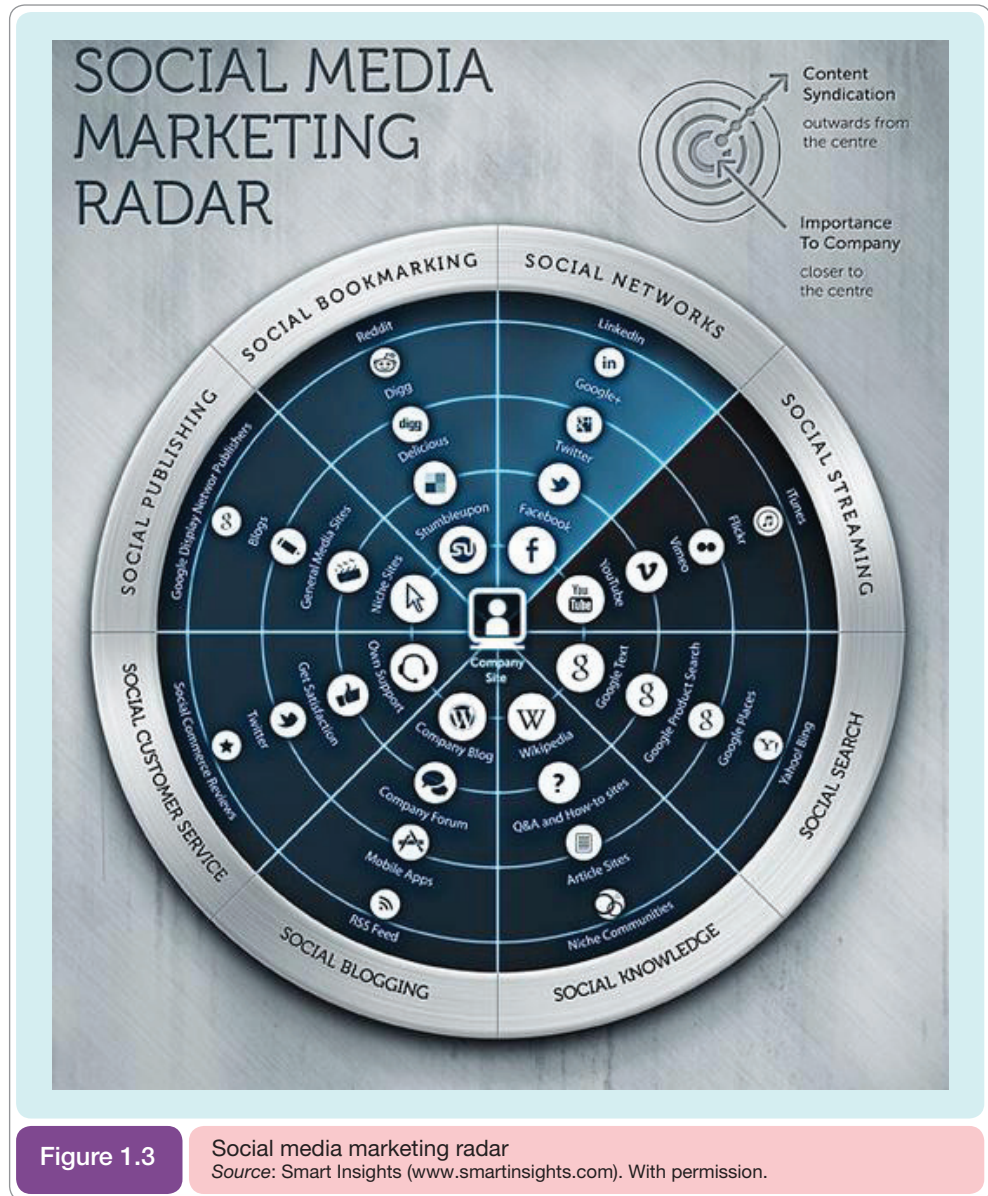


Figure 1.3

Social media marketing radar
 Source: Smart Insights (www.smartinsights.com). With permission.

Case Study 1.1

The Facebook business model

Context

This case is about the social network Facebook which hardly needs an introduction, but when we first featured it in an earlier edition of *E-Business and E-Commerce Management* it was a niche service mainly used in colleges and universities. It is still a good case study in that it shows many of the success factors needed for launch of a new digital business, but also the risks of alienating users when their privacy needs are not listened to. It's incredible that it now has more than a billion

users active monthly worldwide, yet has fewer than 5,000 employees.

In line with other case studies in the book, the case study features a summary using the key categories of the Business Model Canvas (which is introduced in the business models section in Chapter 2).

Value proposition

In 2013, the Facebook mission is simply to 'make the world more open and connected'. Previously,

Facebook described itself as ‘a social utility that helps people communicate more efficiently with their friends, family and coworkers. The company develops technologies that facilitate the sharing of information through the social graph, the digital mapping of people’s real-world social connections. Anyone can sign up for Facebook and interact with the people they know in a trusted environment’.

Consumer value proposition

You have probably seen the 2010 film ‘The Social Network’ which describes how Facebook was founded while Mark Zuckerberg was a student at Harvard University. Initially membership was limited to Harvard students. The initial viral effect of the software was indicated since more than half of the undergraduate population at Harvard registered on the service within the first month! Zuckerberg used open-source software PHP and the MySQL database to create the original ‘TheFacebook.com’ site and these technologies are still in use today. The film also describes the long-running dispute over ownership of Facebook, in which another Harvard-originated social networking site, ‘HarvardConnection’, which later changed its name to ConnectU, alleged in September 2004 that Zuckerberg had used its source code to develop Facebook when it originally contracted him to help in building its site.

When Facebook first launched in February 2004, there were just three things that users could do on the site, which are still core to the functionality of the site. Users could create a profile with their picture and information, view other people’s profiles and add people as friends.

Facebook (2013) explains these core consumer benefits defined by the company:

Connect and Share with your friends. Staying connected is the core feature as we would expect, but note the more emotional underpinnings of the other elements of the value proposition.

Discover and Learn. Facebook references public figures and organisations that interest them – available through Facebook company pages.

Express yourself. A fundamental need. Facebook does this through its key features which it describes as the Timeline, News Feed, Photos and Videos, and messaging through Email, Chat and Text.

*Stay connected everywhere. Referencing the importance of mobile use and use on other sites to Facebook’s users and business model: **People can access Facebook through our website, mobile sites, smartphone apps, and feature phone products.***

Value proposition for marketers and businesses

Facebook works hard to monetise its audience, particularly since Facebook held its initial public offering (IPO) on 18 May 2012. This was the biggest IPO for an Internet company, with a peak market capitalisation of over \$104 billion. Facebook describes its offer to business as follows:

Marketers can engage with more than one billion monthly active users on Facebook or subsets of our users based on information people have chosen to share with us such as their age, location, gender, or interests. We offer marketers a unique combination of reach, relevance, social context, and engagement to enhance the value of their ads.

Commercial companies or not-for-profit organisations (e.g. www.facebook.com/joinred) can also create their own Facebook Pages for their company (currently free). Facebook users can then express their support by adding themselves as a fan, writing on the company Wall, uploading photos, and joining other fans in discussion groups. When users become fans, they can optionally agree to be kept up to date about developments, and updates then appear in their newsfeeds.

To encourage companies to advertise, Facebook uses an algorithm known as EdgeRank which determines the percentage of company status updates that appear in a user’s newsfeed. Marketers need to work hard to maintain the relevance of their posts using the techniques described by Page (2012).

Revenue model

Facebook has an ad-based revenue model. Some of the features of Facebook Ads (www.facebook.com/ads) include:

- Targeting by age, gender, location, interests, and more.
- Alternative payment models: cost per click (CPC) or impression based (CPM).
- ‘Trusted Referrals’ or ‘Social Ads’ – ads can also be shown to users whose friends have recently engaged with a company’s Facebook page or engaged with the company website.

At the time of the launch of ads, the Facebook blog made these comments, which indicate the delicate balance between advertising revenue and user experience. They said, first of all, ‘what’s not changing’:

- ‘Facebook will always stay clutter-free and clean.
- Facebook will never sell any of your information.
- You will always have control over your information and your Facebook experience.
- You will not see any more ads than you did before this.’

