

Unit 11: Principles of Internet and E-Business

Unit reference number: K/506/4200

QCF Level: 4

Credit value: 15

Guided learning hours: 76

Unit aim

The aim of the unit is to give learners an understanding of the significance of the internet and e-business to an organisations activity and the internet's role in promoting growth and efficiency. Effective use of internet and e-business techniques will give an organisation a competitive advantage and contribute to the achievement of their goals.

Unit introduction

In this unit, you will learn about the role of the internet and e-business in contributing to an organisations operations. New technologies have created new ways of doing business. Some organisations, such as Amazon and Expedia, are almost entirely e-businesses. Other organisations have used e-business approaches in developing their existing operations so that techniques such as click and collect allow goods to be purchased from a website but collected from a neighbourhood store.

The internet and its associated technologies give users the means of conducting business online. Web browsers and web pages allow customers to search the globe for goods and services and allow suppliers to market their goods and services across the globe in ways that are easy to use and understand. These activities are supported by secure payment systems that enable trading to take place.

Organisations have developed models to monetise their online business activities. Many news organisations, for example, use pay walls that allow readers to see headlines at no cost but require readers to pay for the in-depth stories that go with the headlines. E-business opens up new methods of conducting business, such as the use of near-field communications technology that makes mobile telephones into credit and debit cards, giving rise to 'wave and pay' as a means of paying for goods and services. Learners will understand that many of the traditional characteristics of running a 'bricks' organisation effectively need to be replicated when running a 'clicks' organisation. Customers expect stores, whether real or virtual, to be laid out in an enticing and customer-friendly way and for payments to be processed accurately. A well-designed website can be made to offer a better way of trading which ultimately helps underpin the achievement of the goals of an organisation.

Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand the scope of e-business	1.1 Describe the environment in which e-business is conducted 1.2 Evaluate the business transaction types for an e-business 1.3 Analyse the benefits and barriers to businesses considering an online presence 1.4 Assess the security and legislative issues facing an online business organisation 1.5 Explain the modes of communication available to an e-business and their applications
2 Understand how the internet works	2.1 Explain the internet technologies and their importance in making an e-business successful 2.2 Analyse the functions of client servers and browsers, and the role of the search engine 2.3 Evaluate the use of intranets and extranets within business communication
3 Understand different e-business models	3.1 Evaluate the different e-business models that can be used to generate revenue for a business 3.2 Analyse each model in terms of its capacity to generate revenue
4 Understand issues in e-business including communication and quality	4.1 Evaluate how the internet can be used for communication with prospective and current employees and customers 4.2 Analyse how an e-business ensures it's quality

Unit content

1 Understand the scope of e-business

E-business environment: size of e-business market (national, global); e-business market trends; computer networks; internet marketing and selling; online transaction processing; electronic funds transfer; logistics and distribution; inventory management systems; automated data collection; electronic data interchange (EDI); secure payments systems; technologies, e.g. computer, email, mobile devices, telephone

Online presence: benefits; global market; 24-hour trading; complement to the 'bricks' market; competitive advantage; customer orientation; customer profiling; targeted marketing; targeted pricing; disadvantages; lack of technical expertise; start up costs, e.g. website, inventory management, logistics, payment processing, location; lack of face-to-face customer support; operating in international jurisdictions

Security and legislative issues: jurisdiction for operations; UK legislation (Data Protection Act 1998, Computer Misuse Act 1990, Consumer Credit Act 1974, Freedom of Information Act 2000, Copyright, Design and Patents Act 1988); trading standards, Electronic Commerce (E C Directive) Regulations 2002; security; system redundancy; back up site; off-site data storage; disaster recovery; continuity of service; denial of service; hacking; viruses; Trojan horses; firewalls; authentication methods; encryption (hypertext transfer protocol secure [HTTPS], RSA keys); secure funds transfer

Modes of communication: facsimile (fax); email; voicemail; voice over internet; internet television; videoconference; short messaging systems (SMS); social media, e.g. Twitter, Facebook

2 Understand how the internet works

Internet technologies: inter-connected computer networks; internet communication protocols (transmission control protocol (TCP), internet protocol (IP)); TCP/IP purposes (format, address, transmission, routing); information sources; information services; domain name system (DNS)

Internet functioning: functions of client servers; access to server resources; interact with server resources; functions of browsers, e.g. read HTML files, convert files to display/audio; role of the search engine hardware (data centres, processing, networks); role of software, e.g. indexing, searching, managing data; communication; web servers; bandwidth (capacity, speed)

Networks: local area network (LAN); wide area network (WAN); packet switching; access to common data; sharing resources; communication (internal, external); access to external data; speed of communication

3 **Understand different e-business models**

E-business models: generating revenue for businesses; storefront, e.g. Amazon, Tesco; auction, e.g. eBay; portal; dynamic pricing, e.g. Priceline; business to business (B2B); business to consumer (B2C); developments in e-business, e.g. growth, market size, technology, ease of use; integration of models, e.g. storefront and portal; integrating e-business with traditional business activities, e.g. click and collect; targeted customer relationship management; niche marketing; improved customer choice; efficient supply chains; access from multiple gateways, e.g. computer, satellite TV, telephones, portable devices

4 **Understand issues in e-business including communication and quality**

Communication: updates; marketing; communication on new products and/or services; intranet for employees

How an e-business ensures its quality: documents process and procedures; implement necessary changes to processes based on feedback and/or problems encountered; conduct market research, e.g. questionnaires to customers, suppliers, and employees

Essential guidance for tutors

Delivery

Learners are expected to enquire into the topics under discussion, to question theory and to compare and contrast theory with their professional knowledge and practice. For some learners this will mean building on existing knowledge and earlier studies, while for others it will mean drawing on experience gained in a work environment.

Delivery will be through blended learning, using business resources and class-based teaching. Standard tuition materials, texts, business simulations, exercises and formative assessments can be used. Other delivery techniques can also be used, for example, practical work, role play, tutorials, seminars and discussion groups where personal and professional practice can be shared and discussed can also be used. Learners are encouraged to engage in social learning to carry out practical work, discuss problems, consider experiences, work on case studies, prepare reports for presentation and carry out research into the internet and e-business activities. Learners in work are expected to use their working context and roles to learn about practical internet techniques and e-business activities.

Assessment

This guidance supports assessors in making decisions about how best to assess each unit and the evidence needed to meet the assessment requirements. Centres can adapt the guidance for learners and the particular assessment context, as appropriate.

It is important that suitable organisations are chosen for investigation so that learners can acquire the information they need to meet the assessment criteria.

Evidence can be presented as written reports or presentations. If presentations are used, then copies of slides, handouts and presenter notes must be included, as well as learner observation records completed by the tutor.

It would be useful for learners to be given a case study of a proposal for a new e-business. Learners could begin by describing researching the environment in which the e-business is going to be conducted (AC1.1) and the business transaction types for an e-business (AC1.2). This can be developed for assessment criteria 1.3, 1.4 and 1.5, the benefits and barriers to businesses considering an online presence, the security and legislative issues facing an online presence and the modes of communication available to an e-business and their applications.

For learning outcome 2, learners need to understand how the internet works. They could begin by explaining the internet technologies and their importance in making an e-business successful (AC2.1), the functions of client servers and browsers, and the role of search engines (AC2.2) and the use of intranets and extranets within business communication (AC2.3). Relating these areas to the learners case study will make it easier for them to use examples.

This can be built on for learning outcome 3 and 4. It would be beneficial for learners to use their case study to evaluate the different e-business models that can be used to generate revenue for their business (AC3.1), analyse each model in terms of its capacity to generate revenue (AC3.2), evaluate how the internet can be used for communication with prospective and current employees and customers (AC4.1) and analyse how an e-business ensures quality (AC4.2).

Evidence of Recognition of Prior Learning (RPL) can also be used within the unit to confirm competence. Wherever possible, the learning outcomes in this unit should be assessed holistically across the qualification.

Indicative resource materials

Books

Chaffey D – *E-Business and E-Commerce Management* (Financial Times/Prentice Hall, 2011) ISBN: 9780273752011

Daniel I – *E-commerce Get It Right!* (NeuroDigital, 2012) ISBN: 9780956526212

Levine J R and Levine Young M – *The Internet for Dummies* (John Wiley & Sons, 2011) ISBN: 9781118096147

Journals

The Economist (The Economist Newspaper Ltd) has articles on e-business from time to time and offers a current perspective on the application of computing and technology to business

The Financial Times (Financial Times Group) is a daily business newspaper that reports on stories, including those dealing with e-business

Websites

www.bized.co.uk – Biz/ed: material on e-business

www.businesscasestudies.co.uk – The times 100: case studies on e-commerce

www.managementhelp.org – Free management library: articles on e-commerce topics