

## **Higher National Unit Specification**

### **General information for centres**

Unit title: Internet: E-commerce Theory and Practice

Unit code: D7L6 34

**Unit purpose:** This unit is designed to explain: the key concepts required to understand what electronic commerce (e-commerce) is, what benefits it brings to business and consumer, how commercial Web sites function, and how e-commerce is likely to develop. This is an introductory level unit, intended for us with a wide range of candidate groups. The unit aims to combine practical and theoretical aspects of the subject.

On completion of this unit candidates should be able to:

- 1. compare the function of a range of commercial Web sites;
- 2. explain the operation and benefits of an e-commerce Web site;
- 3. identify key influences on the future development of e-commerce.

**Credit value:** 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

SCQF (the Scottish Credit and Qualifications Framework) brings Scottish qualifications into a single framework of 12 levels ranging from SQA Access 1 to doctorates. The SCQF includes degrees; HNC/Ds; SQA National Qualifications; and SVQs. Each SQA Unit is allocated a number of SCQF credit points at a specific level. 1 SCQF point = 10 hours of learning. HN candidates are normally expected to input a further number of hours, matched to the credit value of the Unit, of non-contact time or candidate-led effort to consolidate and reinforce learning.

**Recommended prior knowledge and skills:** No prior knowledge of e-commerce is required. However, it would be preferable that candidates have a basic level of computer literacy, and are familiar with the operation of a browser and the principles of browsing the Web. The possession of Communication 4 or a similar qualification would also be desirable.

**Core skills:** There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

**Context for delivery:** If this Unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

**Assessment:** It may be possible to integrate two or more assessments into a single assessment activity. Further advice and guidance on this is contained within the respective Unit outcomes.

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All assessment must be carried out under controlled conditions. Where an assessment permits the sampling of knowledge and skills, candidates must not know the nature of the sample prior to the assessment occasion.

Re-assessment would normally be undertaken using a different instrument of assessment. However, candidates who narrowly fail an extended response assessment may be permitted to correct the errors or omissions and resubmit the original work (at the discretion of the assessor).

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

#### Outcome 1

Compare the function of a range of commercial web sites.

### Knowledge and/or skills

- Definition of a commercial Web site
- Main categories of commercial Web sites:
  - sites selling goods
  - sites selling services
  - information sites
  - marketing sites
  - portal sites
- Characteristics of effective commercial Web sites:
  - delivers revenue streams or efficiency savings for the company, or complements some other aspect of its marketing
  - targets existing or potential customers for the company
  - offers clear signposting of content and methods of navigation
  - is consistent with the perceived brand or company image

#### **Evidence requirements**

Candidates will need written and/or oral evidence to demonstrate their knowledge and skills by showing that they can describe a range of commercial Web sites and comment on their effectiveness as e-commerce sites.

The candidate should describe at least one Web site falling into each of the categories outlined in the knowledge components. Sites may fall into more than one category simultaneously, but each category must be covered. In describing the chosen sites candidates should:

- identify the category into which the sites falls
- explain the main purpose of the site from the point of view of both business and consumer

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- identify where site revenue comes from, (if applicable)
- comment on the effectiveness of the site in respect of its intended purpose
- comment on the effectiveness of the site as a commercial site.

Assessment evidence for the first knowledge element – definition of a commercial Web site – will be inferred by the successful selection of a range of commercial sites.

#### **Assessment guidelines**

The assessment of this outcome relies extensively on practical work by the candidate, in viewing and researching a range of commercial Web sites.

If the assessment instrument chosen is extended response, a minimum length of 400-600 words would be expected, supported by references to the Web sites selected. Alternative approaches to the assessment of this outcome may be offered.

In the case of an oral presentation the principal criterion for the amount of assessment evidence will be that the candidate must cover all elements listed above for each site. However, as a general guide such a presentation may be expected to fall in the 10-15 minute range, supported by written notes which are afterwards submitted by the candidate.

In the case of an extended response instrument of assessment being chosen for this outcome, it would be possible to integrate the assessment with that for Outcome 2, and potentially Outcome 3. More detailed suggestions are given in the Assessment Guidelines for Outcome 2.

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#### Outcome 2

Explain the operation and benefits of an e-commerce web site.

### Knowledge and/or skills

- domain name registration
- choice of Internet service providers
- hosting options virtual hosting, co-location, dedicated server
- e-commerce packages
- self-build/designer building
- shopping carts
- payment service providers and gateway companies
- merchant accounts
- secure servers
- benefits of e-commerce to business
  - economies of production, distribution and infrastructure
  - creation of niche markets
  - access to national and international audiences
  - ease of communication and trade with other businesses
  - speed of response to changing market conditions
- benefits of e-commerce to consumers
  - ease of access to national and international products and services
  - wide choice and variety of products and services
  - purchase patterns can fit flexible lifestyles
  - enhanced consumer power (reduced cost)
  - new sources of knowledge and information

### **Evidence requirements**

Candidates will need evidence to demonstrate their skills and/or knowledge by showing that they can:

- explain the elements required to create a commercial Web sites
- the decisions and choices which must be made by the entrepreneur in building a site
- the benefits of e-commerce to both businesses and consumers.

In respect of knowledge elements 1-7, the assessment evidence should demonstrate the candidate's understanding of the function each component plays in the construction of a commercial Web site, and of the logical flow of decisions which must be made in choosing these components. This flow is represented by the order of the knowledge elements.

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### **Assessment guidelines**

The suggested instrument of assessment for this outcome would be an extended response, which might take one of a number of formats – an essay, a feature article in the form of a 'Guide to Building a Commercial Web site', or a report. The choice of instrument will be dependent on the nature of the target candidate group.

Assessment evidence should also demonstrate the candidate's understanding of the key benefits of e-commerce to both businesses and consumers. Candidates should cover all elements for each. As a guideline, a written assessment should fall into the minimum range of 500-750 words, unless an integrated approach to the assessment is taken.

It may be desirable to integrate this assessment with Outcome 1, in a single written submission. In this instance the format chosen should be capable of containing assessment evidence for both outcomes, and a report may well be the best vehicle for this. In this case it would be possible to further integrate Outcome 3 into the assessment, with a single report covering all Outcomes. As a general guideline to length, such a report would fall into the range of 1,000-1,500 words. If this latter approach is taken, it is recommended that candidates are also required to make an oral presentation, on the findings of their report in order to underpin the practical nature of much of the unit's material.

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#### **Outcome 3**

Identify key influences on the future development of e-commerce.

### Knowledge and/or skills

- recent or impending legislation regulating e-commerce
- trends in economic and commercial development affecting e-commerce
- social trends affecting e-commerce
- ethical issues affecting e-commerce.

#### **Evidence requirements**

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

• outline two key influences on future e-commerce development in each of the four knowledge areas

Given that the potential range of influences is wide, and that these may change very rapidly with time, the evidence does not have to cover every individual aspect of each knowledge area, and it is appropriate to sample knowledge. For example, candidates are not expected to know every piece of legislation that may impinge on e-commerce. However, candidates are required to demonstrate that they are aware of the main influences in each of these areas.

### **Assessment guidelines**

The assessment of this outcome may take the form of an extended response, in one of the formats already described – essay, feature article or report. If this outcome is assessed separately, it is recommended that an essay would be the most appropriate instrument of assessment. However, as outlined in the Assessment Guidelines for Outcome 2, it is possible to assess this outcome with one or both of the previous outcomes, in the forms suggested.

Assessment evidence should demonstrate the candidate's ability to identify key developments in each area, and to comment on the potential effect these may have on the development of ecommerce both nationally and internationally. As a general guideline the length of the completed assessment should be in the minimum range of 500-750 words.

### **Administrative Information**

Unit code: D7L6 34

**Unit title:** Internet: E-commerce: Theory and Practice

**Superclass category:** AA

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## **Higher National Unit specification: support notes**

**Unit title:** Internet: E-commerce Theory and Practice

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

#### Guidance on the content and context for this Unit

As this unit is intended to be generic, and capable of being delivered to wide range of potential candidate target groups, there may be content elements supplementary to the core elements required for the unit, which it would be appropriate to include. It is also not possible to specify precisely in Outcome 3 the knowledge areas to be covered, as this is an area where the pace of change is rapid. The following elements are therefore intended to amplify the content statements for each outcome.

#### Outcome 1

Although it is desirable that candidates undertaking this unit should be familiar with the use of a browser, it may be thought necessary to begin with some background information on the development of the World Wide Web and E-commerce in general. As already noted the definition of an e-commerce site will not be separately assessed, but this should be incorporated within the learning materials covered for this Outcome. A useful definition for an e-commerce site might be as follows:

A Web site which delivers either an income stream or efficiency savings to a commercial company, or which enhances some aspect of its overall marketing effort, and which targets existing or potential customers.

### Outcome 2

Outcome 2 covers the most complex material within this unit, and it is important not to introduce too much additional support material which might better be addressed within the framework of a more specialised unit. The knowledge elements outlined are sufficient for an understanding of how an e-commerce Web site works. The stress should be on the components needed to make an e-commerce site and the choices that the builder must face. These components represent a series of logical steps, necessary in the construction. First is the selection of a domain name and ISP, and the choice of hosting option. The hosting choice will be entirely dependent on the size and nature of the intended business. Then the company or individual setting up the Web site is faced with the choice of either opting for an e-commerce package, or building the Web site themselves (or with the help of a designer). The latter choice involves decisions to be made about shopping cart software, if the site is offering goods or services for sale. If the site is intended to be able to handle online credit card purchases, then the necessary systems must be put in place — either a merchant account or

the services of a Payment Service Provider or Gateway company, and the use of secure server technology.

### **Higher National Unit specification: support notes (cont)**

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Only a broad understanding of these elements will be appropriate within this unit, and it is not necessary for candidates to have a detailed understanding of the mechanisms at work. The stress on these elements should be as components of a commercial Web site.

#### Outcome 3

As the particular influences on the development of e-commerce will change rapidly, it is not desirable to specify the exact knowledge components. However, at the time of writing, a sample of the following elements will need to be addressed within each area:

#### Legislation:

- Computer Misuse Act 1999
- Copyright, Design & Patents Act 1988
- Data Protection Act 1998
- Electronic Communications Bill 2000
- European Union's Electronic Commerce Directive
- Human Rights Act
- Regulation of Investigatory Powers Bill

#### Economic and commercial:

- national infrastructures
- new technologies
- competitive advantages in e-commerce
- growth of service industries
- growth of digital products
- globalisation.

#### Social:

- changing work patterns
- increasing acceptance of online purchasing
- leisure time revolution
- changing levels of computer literacy
- changing population profiles
- globalisation.

#### Ethical:

- potential misuses of Internet pornography, propaganda, copyright, privacy, security.
- issues of censorship
- creation of global cultures
- de-socialisation effect

## **Higher National Unit specification: support notes (cont)**

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## Guidance on the delivery and assessment of this Unit

The delivery of this unit will rely substantially on the practical exploration of the World Wide Web by candidates, who will therefore require access to appropriate facilities. Candidates should also be encouraged to use the Internet for the research elements of the unit, in particular for Outcomes 2 and 3, as considerable sources of information are available through this medium.

The ordering of the outcomes does not infer a preferred order of delivery and centres should consider the most appropriate sequence for specific candidate groups.

The unit provides various opportunities to integrate two or more outcomes. Centres may wish to consider alternative assessments to the written assessment suggested. A mixture of written and oral assessment may be most appropriate for certain groups of candidates.

### **Open learning**

This unit would be an appropriate subject for an open learning approach, given its content. Please refer to SQA publication A1030 'Assessment & Quality Assurance for Open and Distance Learning' for further guidance and advice.

### **Special needs**

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative Outcomes for Units. For information on these, please refer to the SQA document Guidance on Special Assessment and Certification Arrangements for Candidates with Special Needs and Candidates for whom English is an Additional Language (SQA, 2000).

### **General information for candidates**

**Unit title:** Internet: E-commerce Theory and Practice

This unit is designed to introduce the principles and practice of electronic commerce ('e-commerce'). No previous knowledge of business or computing is required.

The unit focuses on the following aspects of e-commerce:

- what is it?
- what types are there?
- what makes a good e-commerce site?
- how does an e-commerce site work?
- what benefits does it provide?
- how will e-commerce develop in the future?

The main approach to teaching is through the exploration of contemporary e-commerce sites. You will be given the opportunity to research and evaluate a wide range of different sites. You will also be taught about the operation and benefits of e-commerce – that is, how they work and what they can provide to both businesses and consumers. Finally, you will also have the opportunity to find out more about contemporary legislation relating to e-commerce, and the main social, economic and ethical influences on e-commerce.

The assessment will involve written descriptions of a wide range of commercial Web sites and will include:

- comparison between e-commerce sites
- explanation of the operation of e-commerce sites
- outline of future developments.

To succeed in this Unit you must achieve a satisfactory level of performance in the Unit assessments.