



Accredited

# OCR LEVEL 3 CAMBRIDGE TECHNICAL CERTIFICATE/DIPLOMA IN IT



**e-commerce**

**A/601/7313**

**LEVEL 3 UNIT 6**

**GUIDED LEARNING HOURS: 60**

**UNIT CREDIT VALUE: 10**



# e-commerce

A/601/7313

LEVEL 3 UNIT 6

## AIM OF THE UNIT

Businesses are constantly looking for ways to expand their business and increase their market presence. By taking their business online this could ensure they reach new markets and therefore increase their profits. This unit will provide the learner with the skills to research the benefits of having an e-commerce strategy.

This unit is to help the learner understand the technologies required for an e-commerce system. Learners will then learn the impact of e-commerce on an organisation and how this affects e-commerce in society. Finally they will be required to create a plan for an e-commerce strategy.

## ASSESSMENT AND GRADING CRITERIA

<b>Learning Outcome (LO)</b>  The learner will:	<b>Pass</b> The assessment criteria are the pass requirements for this unit.  The learner can:	<b>Merit</b> To achieve a merit the evidence must show that, in addition to the pass criteria, the learner is able to:	<b>Distinction</b> To achieve a distinction the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
1 Know the technologies required for an e-commerce system	P1 describe the technologies required for e-commerce		
2 Understand the impact of e-commerce on organisations	P2 explain the impact of introducing an e-commerce system to an organisation	M1 describe how organisations promote their business using e-commerce	
3 Understand the effects of e-commerce on society	P3 explain the potential risks to an organisation of committing to an e-commerce system	M2 explain solutions for the potential risks of using e-commerce	
4 Be able to plan e-commerce strategies	P4 review the regulations governing e-commerce		
	P5 examine the social implications of e-commerce on society		D1 compare the benefits and drawbacks of e-commerce to an organisation
	P6 plan an e-commerce strategy	M3 provide annotated planning documentation for your e-commerce strategy	D2 evaluate your e-commerce strategy

## TEACHING CONTENT

The unit content describes what has to be taught to ensure that learners are able to access the highest grade.

Anything which follows an i.e. details what must be taught as part of that area of content.

Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used, learners must know and be able to apply relevant examples to their work though these do not need to be the same ones specified in the unit content.

### LO1 Know the technologies required for an e-commerce system

#### Technologies

- hardware e.g. web server and specifications, monitor, keyboard, mouse, modem, network card
- software e.g. server, web browser, web creation and database creation software
- networking e.g. ports, protocols, TCP/IP
- domain names and registration
- programming e.g. MySQL, PHP, JavaScript, HTML
- internet speeds and connections
- W3C.

### LO2 Understand the impact of e-commerce on organisations

#### Advantages

- 24/7 opening
- global business opportunities
- start-up and running costs are low
- can be used to expand a retail business
- increased income
- customer information can be stored
- competitors can be monitored
- can be searched easily
- can be run from home
- can be managed easily
- ease of access by customers.

#### Disadvantages

- customers not able to see products
- product description maintenance
- delivery costs and other issues
- customers are unsure whether to trust the business
- lack of personal attention
- global legislation
- security.

#### Promotion of Business

- search engine optimisation, meta tags, search results listing
- pop-ups
- banners and advertising
- forums, newsgroups, blogs and vlogs

- spam
- direct marketing
- website being accessible.

### LO3 Understand the effects of e-commerce on society

#### Risks

- hacking
- viruses
- identity theft
- passwords
- fraud
- returns
- payments.

#### Solutions

- firewalls
- virus software
- SSL, HTTPS
- data security methods
- returns policy
- secure payment software.

### LO4 Be able to plan e-commerce strategies

#### Legislation and Regulations

- Data Protection Act 1998
- Computer Misuse Act 1990
- Consumer Credit Act 1974
- Trading Standards
- Freedom of Information Act 2000
- Copyright legislation
- Distance selling 2000
- e-commerce regulations 2002.

#### Social Implications

- bricks and clicks e.g. high street stores having an e-commerce facility
- advantages to customers e.g. 24/7, shopping from home, access to goods globally
- disadvantages to customers e.g. card details stolen, products not as described, delivery issues
- isolation/lack of social interaction

- customer service e.g. ease of ordering, delivery
- keeping up with technology in order to use e-commerce sites
- reduction in employment
- closure of high street sites.

#### **e-commerce Strategy**

- client, purpose and target audience
- structure of website e.g. site plan, navigation
- components and facilities e.g. product information, ordering and payment services
- website hosting e.g. choice of ISP, reasons for choice
- advertising e.g. search engines, marketing
- costs e.g. setup, maintenance, security and advertising costs.

#### **Documentation**

- site map, content, storyboards
- assets
- image and product details
- house style and consistency
- business plans.

#### **Benefits**

- wider target audience
- more competitive
- easier stock control
- reduced overheads
- immediate stock/availability check
- access to goods globally
- price comparison.

#### **Drawbacks**

- fraud
- delivery issues
- internet access
- choice
- increased returns.

#### **Payment Systems**

- services available e.g. PayPal, NoChex, credit or debit cards, securepay.

#### **Evaluation**

- review strategy details
- review documentation created.

## DELIVERY GUIDANCE

### **Know the technologies required for an e-commerce system**

Learners should be encouraged to visit a range of e-commerce sites to help them understand what e-commerce is. As a group they could be encouraged to identify the hardware and software components required in order to have an e-commerce site and discuss these findings.

The tutor should explain the technical terminology and protocols that are applicable to the unit as it is essential that learners understand the term TCP/IP and what is meant by ports and protocols. To reinforce this they could be asked to identify a range of protocols from a suggested list of websites.

Learners are also required to understand domain names and the registration process, as a group they could be provided with exercises to identify the parts of a domain name. They should also look at how they can register or check domain names without physically having to register or purchase.

Learners need to understand internet speeds, they could use an online speed checker to find out the speed of the website they are using and should then as a group discuss the advantages and disadvantages of having a fast speed/slow speed. Learners should be encouraged to research W3C and what this means.

### **Understand the impact of e-commerce on organisations**

Learners as a group could discuss the advantages and drawbacks of an organisation having an e-commerce system. The organisation used for discussion could be one provided to them or one they have found when looking at different e-commerce sites. They should be encouraged to identify as many advantages and drawbacks as they can. They may even discuss how the drawbacks could be overcome or considered to reduce the impacts.

Learners are required to understand how an e-commerce system could be promoted, which can be done by using different search engines, pop-ups, banners and advertising, forums, newsgroups, blogs and vlogs etc to see how they work and how they help promote e-commerce websites. This should be carried out as individual research and group discussion to enable learners to fully consider all aspects.

### **Understand the effects of e-commerce on society**

Learners need to understand the potential risks for e-commerce systems, which should be set initially as research activities. Learners could brainstorm risks and then discuss as a group to identify risks that they may not have considered and look at the different aspects and implications of each.

The learners could then be encouraged in small groups to further research risks allocated to them to see if they can find an example of when the risk has happened or may have been avoided, as well as find a solution or preventative method. The small groups/pairs could then be encouraged to provide feedback to the main group.

### **Be able to plan e-commerce strategies**

Learners are required to understand the different legislations associated with having an e-commerce site. They should be taught the different legislation and regulations that apply to e-commerce, the purpose and benefits of them and they should be encouraged to refer to the relevant websites and find out more details as to what the legislations specifically covers. Activities to help them research the legislations could be provided along with a quiz to check that they have understood what they have found out.

Learners need to understand social implications of the increasing move towards becoming an e-commerce society, which could be set as research activities. Learners could be asked to identify as many social implications as they can and these can then be distributed to learners in small groups or pairs for further research. The small groups/pairs could then be encouraged to provide feedback to the main group. Learners working in small teams could also be asked to identify a selection of benefits and drawbacks for customers of using e-commerce sites.

Learners should be encouraged to research a selection of e-commerce website interfaces. They should then use an example business (this could be provided) to help them research what the business is, the purpose and target audience for the website, how the business is structured online, creating an outline site plan to show the structure, how it is promoted and hosted.

Learners could be encouraged to create planning documentation and the relevant details that would be needed, for one of the webpages that they have researched. They could also do some research into the costs involved in creating an e-commerce system and the security measures that should be put in place. Once the learners have carried out their research they could provide feedback to the group informing them of their findings and also reviewing the site plans and documentation created by others.

One final group discussion would be to evaluate the group's findings to ensure that the criteria identified would be suitable for a commercial strategy.

## SUGGESTED ASSESSMENT SCENARIOS AND TASK PLUS GUIDANCE ON ASSESSING THE SUGGESTED TASKS

### Assessment Criterion P1

The assessment criterion P1 could be evidenced by the use of a report, leaflet or presentation delivered by the learner that could be supported by tutor observation and/or recorded evidence. The learner is required to describe the technologies required for an e-commerce system, as outlined in the teaching content.

### Assessment Criteria P2, M1

The assessment criterion P2 could be evidenced by the use of a report, leaflet or presentation delivered by the learner that could be supported by tutor observation and/or recorded evidence. The learner is required to explain the impact of introducing an e-commerce system on an organisation (the organisation details could be provided). The learner must explain at least four impacts from both the advantages and disadvantages sections in the teaching content.

*The merit criterion M1 could be evidenced by the learner describing and providing a detailed description how an organisation (same business as used for assessment criterion P2) can promote their business using e-commerce. They must provide examples which could be evidenced by screen prints. The learner must include at least four methods listed in the teaching content.*

### Assessment Criteria P3, M2

The assessment criterion P3 could be evidenced by the use of a report, leaflet or presentation delivered by the learner that could be supported by tutor observation and/or recorded evidence. The learner is required to explain the potential risks to an organisation of committing to an e-commerce system, this could relate to the business mentioned under assessment criterion P2. The learner must consider all risks identified in the teaching content.

*The merit criterion M2 could be evidenced by the learner providing a detailed explanation of the risks identified under assessment criterion P3, and must give examples to support their evidence and where possible relating these to organisations and individuals that have had these issues. Learners are also required to provide at least a range of solutions or preventative methods for each of the risks outlined for assessment criterion P3.*

### Assessment Criterion P4

The assessment criterion P4 could be evidenced by the use of a report, leaflet or presentation delivered by the learner that could be supported by tutor observation and/or recorded evidence. The learner is required to review and explain the different regulations to include legislation that affect e-commerce websites. They must briefly cover all of the legislation and regulations outlined in the teaching content, explaining what they are and their purpose.

### Assessment Criteria P5, D1

The assessment criterion P5 could be evidenced by the use of a report, leaflet or presentation delivered by the learner that could be supported by tutor observation and/or recorded evidence. The learner is required to examine the social implications of an e-commerce society and must explain at least four social implications that e-commerce has on society.

*The distinction criterion D1 can be evidenced by the learner providing a comprehensive comparison of the benefits and drawbacks of e-commerce to an organisation. Learners must include all of the benefits and drawbacks outlined in the teaching content and expand on these.*

### Assessment Criteria P6, M3, D2

The assessment criterion P6 should be evidenced by the learner planning an e-commerce strategy. The learner should include details on the client, target audience and purpose for the e-commerce strategy. They would need to create a brief site map to show the structure of the website and identify components and facilities that the website would have as well as hosting options, advertising and a realistic estimate of the costs involved.

*The merit criterion M3 could be evidenced by the learner adding details to the outline strategy plan providing examples e.g. identifying which web host they would recommend. They should also provide a range of documentation such as layouts and descriptions for each of the webpages, image details, assets and any house style that would be used.*



*The distinction criterion D2 should be evidenced by the learner evaluating the e-commerce strategy plan that they have created. The evaluation needs to show that they have evaluated each section of their e-commerce strategy plan, justifying the decisions they made. The learner should also review the various items of documentation that they have created suggesting possible improvements to the site plan, storyboards etc. This could be evidenced as a report.*

## SUGGESTED SCENARIOS

- A business is thinking of going online and developing an e-commerce strategy but in order for them to decide they require some advice so that they can make an informed decision.
- Create an e-commerce strategy for a local business.
- A local shop has asked for assistance in creating an e-commerce strategy.

## RESOURCES

Learners will need access to word processing, publisher and/or presentation software. A selection of trade magazines such as Computing, Computer Shopper, PC advisor and Computer Weekly would be advantageous. Learners will also need access to the internet.

## MAPPING WITHIN THE QUALIFICATION TO THE OTHER UNITS

**Unit 3** Computer systems

**Unit 5** Organisational system security

**Unit 12** Website production

## LINKS TO NOS

**4.6** Human Computer Interaction (HCI) Design

**5.1** Systems Development

**6.1** Information Management

**7.4** IT Application Management/Support

**7.5** IT Technology Management and Support



## **CONTACT US**

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

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