

# Unit 54: E-Commerce & Strategy

<b>Unit code</b>	<b>D/615/1683</b>
<b>Unit level</b>	<b>5</b>
<b>Credit value</b>	<b>15</b>

---

## Introduction

Electronic commerce, or e-commerce, refers to any type of commercial/business transaction where information, data, products and services are exchanged across the internet. These transactions can cover a wide diversity of business types, including: consumer-based retail sites (for example Amazon), sites that provide facilities such as auctions (for example eBay) and business exchanges between different organisations. E-commerce allows consumers to electronically exchange goods and services 24/7 with no barriers in terms of time or geography.

In this unit, students will gain an understanding of how and why businesses and organisations develop e-commerce strategies to remain competitive in the global market. Students will develop an appreciation of the elements and resources required to set up an e-commerce site and will be engaged in the design and implementation of their own strategies that would, in reality, form part of a secure e-commerce site. Students will examine the impact that e-commerce has on society and the global market for consumers, buyers and sellers in terms of the benefits and drawbacks of online purchasing. Students will research and investigate the technologies involved in setting up a secure e-commerce site in preparation for their own e-commerce strategy.

Students will devise a strategy based on an element of e-commerce, for example designing a shopping cart, an ordering system, payment system or an online marketing system. Their design should be fully implemented and evaluated in terms of its success or failure.

On successful completion of this unit, students will have gained a technical and a practical insight into e-commerce strategy, design and development. As a result, they will develop skills such as communication literacy, critical thinking, analysis, reasoning and interpretation, which are crucial for gaining employment and developing academic competence.

## **Learning Outcomes**

By the end of this unit students will be able to:

- LO1 Examine the strategies employed by and the impact of e-commerce on business organisations
- LO2 Analyse the hardware, software, web-based and database technologies involved in setting up a secure e-commerce site
- LO3 Design an e-commerce strategy based on a given end-user requirement or specification
- LO4 Implement an e-commerce strategy based on a given end-user requirement or specification.

## Essential Content

### LO1 **Examine the strategies employed by and the impact of e-commerce on business organisations**

#### *Customer expectations:*

Raised expectations for a quick and efficient service, e.g. timely responses to customer communications, quick delivery of the product or service, accurate information, reduced pricing for the product/service, greater choice.

#### *Benefit and drawbacks:*

Wider market, niche target marketing, lower overheads and costs, greater flexibility and access to goods/services 27/7.

Visibility, security issues and threats, down-time, high set-up and maintenance costs, the need to employ a technician or web-based administrator to manage the provision.

### LO2 **Analyse the hardware, software, web-based and database technologies involved in setting up a secure e-commerce site**

#### *Web architecture:*

Components, e.g. server-side scripting, client/server/script interaction, operation of server-side web applications, accessing data on the web server.

Dynamic web pages, including consistent navigational menu on all pages, browser cookies, embedding animation and video content in web pages, adding interactivity with plug-ins.

#### *Hardware and software:*

Use of web servers, browsers, server software, web-authoring tools, database system, shopping-cart software, scripting software, browser and platform compatibility.

Networking technology, e.g. TCP/IP addresses, ports and protocols, domain names, multiple registration of domains.

Setting up the server directory structure, deploying access configuration/security.

Impact of blockchain technology for payments, supply chain and decentralised marketplace.

*Database technology:*

Uses and processes, e.g. database-driven web pages, opening a connection to a database, storing data captured from forms, performing dynamic queries on the database, generating a web page response displaying the results of a query.

*Communication technology:*

Uses, e.g. email support, forum; search engine optimisation; additional hardware and software components required to support communications.

*Data transmission:*

Features, e.g. download speeds, transfer rates, bandwidth required for given applications, including text, graphics, video, speech.

**LO3 Design an e-commerce strategy based on a given end-user requirement or specification**

*Considerations:*

Hardware and software, design and development, costs and resources, security, maintenance, customer online support and logistics.

Security management, e.g. password protection, security and session management.

*Internet strategy:*

Hosting, e.g. internal, sub-contracted; design of the website; maintaining 24/7 access.

*Marketing strategy:*

Methods, e.g. targeting market segments and interest groups, developing electronic 'web-communities', CRM, promotion strategies to target specific market segments, search engine optimisation, e-marketing software.

*Supply chain strategy:*

Methods, e.g. satisfying customer demand, responsive supply chain, managed in house or sub-contracted, developing 'partnership' relationships with suppliers.

*Electronic payment:*

Transaction processing in e-commerce website, e.g. customer registration, marking order, shopping cart, check out.

Methods e.g. online transaction processing, Commercial Off the Shelf Software (COTS), other payment systems, e.g. PayPal, Worldpay.

#### **LO4 Implement an e-commerce strategy based on a given end user requirement or specification.**

##### *Factors for implementation:*

Different factors to consider, e.g. planning, channel selection, brand, touchpoints, creating personalised experience.

Mapping out the business process from managing product information, pricing, receiving and processing orders, processing customer requests.

Competitor analysis to enhance User Experience design (UX) and User Interface design (UI).

##### *Implementation:*

Different e-commerce business models, e.g. B2B, B2C, C2C.

Building an e-commerce website page or online store, e.g. displaying products, search catalogue, transactions and processing.

Tools and applications for creating an interactive ecommerce website, e.g. use of e-commerce builder WordPress, Squarespace.

## Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
<b>LO1</b> Examine the strategies employed by and the impact of e-commerce on business organisations		<b>D1</b> Critically evaluate the benefits and drawbacks of utilising e-commerce.
<b>P1</b> Discuss the importance of addressing and meeting customer expectations when employing an e-commerce strategy, giving specific examples.	<b>M1</b> Evaluate how e-commerce has been used to improve an element of business operations, giving specific examples.	
<b>LO2</b> Analyse the hardware, software, web-based and database technologies involved in setting up a secure e-commerce site		<b>D2</b> Justify the importance of communications technology in e-commerce design.
<b>P2</b> Analyse different types of technologies involved in setting up a secure e-commerce site.	<b>M2</b> Critically analyse the role that technologies play in the development and sustainability of e-commerce.	
<b>LO3</b> Design an e-commerce strategy based on a given end-user requirement or specification		<b>D3</b> Appraise the design and functionality of the e-commerce strategy for providing a seamless customer experience.
<b>P3</b> Discuss the types of strategy that could be used to drive an e-commerce solution. <b>P4</b> Design an e-commerce solution based on a specified requirement or strategy.	<b>M3</b> Design an e-commerce strategy that integrates functionality to solve issues and challenges to successfully meet the end-user requirement or specification.	
<b>LO4</b> Implement an e-commerce strategy based on a given end-user requirement or specification.		<b>D4</b> Create an e-commerce interactive site that includes engaging UI and UX design components.
<b>P5</b> Build an e-commerce interactive site, based on a specified requirement or strategy.	<b>M4</b> Produce an e-commerce interactive site that applies features and theme, aligned to specified requirement or strategy.	

## Recommended Resources

### Textbooks

BONES, C. and HAMMERSLEY, J. (2015) *Leading Digital Strategy: Driving Business Growth Through Effective E-commerce*. 1st Ed. Kogan Page.

CHAFFEY, D. (2019) *Digital Business and E-Commerce Management*. 7th Ed. Financial Times: Prentice Hall.

HAMMERSLEY, I. and HAMMERSLEY, M. (2018) *Ultimate Guide to E-commerce Growth*. Smartebusiness Ltd.

PHILLIPS, J. (2016) *Ecommerce Analytics: Analyze and Improve the Impact of Your Digital Strategy*. 1st Ed. Pearson FT Press.

### Websites

<a href="http://www.ecommercefuel.com">www.ecommercefuel.com</a>	eCommerce Fuel (Discussion forum)
<a href="http://www.irpcommerce.com">www.irpcommerce.com</a>	IRP Commerce E-commerce resources on the web (General reference)
<a href="http://www.networksolutions.com">www.networksolutions.com</a>	Network Solutions Education Centre Developing an e-commerce strategy (Articles)

### Links

This unit links to the following related units:

*Unit 14: Digital Business in Practice*

*Unit 16: Managing the Customer Experience*

*Unit 35: Integrated Marketing Communications*