

Unit 8: Optimise the Use of Technology

Unit reference number: F/506/2064

QCF level: 5

Credit value: 6

Guided learning hours: 29

Unit summary

Technology continues to change the way businesses operate, for example:

- computing and the supporting networks that enable the instant, secure completion of business transactions wherever the parties are located
- additive manufacturing that enables the small scale production of customised components
- inventories controlled through 'just-in-time' systems.

The impact of technological change has been to improve business efficiency. Some businesses have successfully exploited technological change and other developments, while other businesses have seen their competitive edge slip by failing to exploit technology.

Learners will learn how to optimise the use of technology and understand that it is necessary to establish the availability of technology and the capacity it offers businesses. Learners will gain understanding of the need to have a technology strategy and will recognise that there are legal implications associated with the use of technology in areas such as privacy and security. Learners will scope out how the technology can be extended to improve business systems and operations. They will develop, implement and manage procedures to ensure that technology is used efficiently and effectively in ensuring that business objectives are supported.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes	Assessment criteria
<p>1 Understand the principles underpinning the optimisation of technology</p>	<p>1.1 Explain how to keep up to date with technological developments</p> <p>1.2 Analyse the requirements of organisational procurement processes</p> <p>1.3 Evaluate the implications of technology for business continuity and crisis management plans</p> <p>1.4 Evaluate the legal implications of changes to the use of technology</p> <p>1.5 Analyse the requirements of a technology strategy</p>
<p>2 Be able to scope the use of technology</p>	<p>2.1 Establish evaluation criteria for the use of technology including extent of use, value, efficiency and quality</p> <p>2.2 Evaluate the current use of technology against agreed criteria</p> <p>2.3 Identify the scope for improvement including training, adaptations to existing systems and the implementation of new systems</p> <p>2.4 Identify the strategic implications of changes to the use of technology</p> <p>2.5 Assess the risks, limitations and benefits of changes to the use of technology</p>

Learning outcomes	Assessment criteria
<p>3 Be able to optimise the use of technological solutions</p>	<p>3.1 Specify technological requirements and priorities, including the input of others in accordance with organisational technology strategy</p> <p>3.2 Take action to ensure the compatibility of technological plans and systems with other systems, processes and plans</p> <p>3.3 Recommend technological solutions that meet the specified objectives</p>
<p>4 Be able to manage the use of technology</p>	<p>4.1 Develop procedures that address all aspects of the technology and their implications</p> <p>4.2 Take action to ensure that everyone using the technology is adequately trained and equipped</p> <p>4.3 Promote the benefits of technology</p> <p>4.4 Use monitoring techniques that are appropriate to the nature of the work carried out and the system</p> <p>4.5 Take prompt corrective action in the event of problems arising</p>

Unit amplification

AC1.1: Explain how to keep up-to-date with technological developments

- *Technological developments:* hardware; software; networking; cloud computing; applications, e.g. manufacturing; design; distribution; finance; marketing; back office functions
- *Keeping up to date:* research and development; literature scanning; trade fairs; liaison with IT suppliers; demonstrations; competitor analysis

AC1.2: Analyse the requirements of organisational procurement processes

- *Organisational procurement:* direct procurement, e.g. material for production; indirect procurement, e.g. maintenance resources; procurement process; business case for acquisition; tendering; supplier selection; negotiation; delivery; payment; reasons for standard procurement process, e.g. openness; best value; fraud minimisation; use of information technology in procurement

AC1.3: Evaluate the implications of technology for business continuity and crisis management plans

- *Implications of technology:*
 - o business continuity plans – identifying business critical activities; monitoring risks to business critical activities; maintaining business critical activities when risk occurs; recovering business critical activities; generating reports
 - o crisis-management plans – identifying potential crisis events; assessing risk; monitoring risk; automated warning; initiating responses; monitoring crisis responses; generating reports

AC1.4: Evaluate the legal implications of changes to the use of technology

- *Legislation:* Health and Safety at Work Act 1974; Computer Misuse Act 1990; Data Protection Act 1998; The Freedom of Information Act 2000; Copyright, Design and Patents Act (1988); Telecommunications Act (1984); Interception of Communications Act (1985)
- *Legal implications:* working conditions when using technology; access to computer-based information; security of computer-based information; rights of access to information; respecting copyrights; use of telecommunications systems

AC1.5: Analyse the requirements of a technology strategy

- *Technology strategy:* objectives; alignment with business objectives; creating value; generating efficiency; integration of internal business activities; integration of business systems with external systems, e.g. suppliers, fiscal authorities; technology use to exploit business opportunities and develop competitive advantage; resource requirements; monitoring and review processes