Unit 31: 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 an 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
1 Understand the principles underpinning the optimisation of technology	1.1 Explain how to keep up-to-date with technological developments 1.2 Analyse the requirements of organisational procurement processes 1.3 Evaluate the implications of technology for business continuity and crisis management plans 1.4 Evaluate the legal implications of changes to the use of technology 1.5 Analyse the requirements of a technology strategy
2 Be able to scope the use of technology	2.1 Establish evaluation criteria for the use of technology including extent of use, value, efficiency and quality 2.2 Evaluate the current use of technology against agreed criteria 2.3 Identify the scope for improvement including training, adaptations to existing systems and the implementation of new systems 2.4 Identify the strategic implications of changes to the use of technology 2.5 Assess the risks, limitations and benefits of changes to the use of technology
3 Be able to optimise the use of technological solutions	3.1 Specify technological requirements and priorities including the input of others in accordance with organisational technology strategy 3.2 Take action to ensure the compatibility of technological plans and systems with other systems, processes and plans 3.3 Recommend technological solutions that meet the specified objectives

Learning outcomes	Assessment criteria
4 Be able to manage the use of technology	4.1 Develop procedures that address all aspects of the technology and their implications 4.2 Take action to ensure that everyone using the technology is adequately trained and equipped 4.3 Promote the benefits of technology 4.4 Use monitoring techniques that are appropriate to the nature of the work carried out and the system 4.5 Take prompt corrective action in the event of problems arising

Unit amplification

AC 1.1 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

AC 1.2 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

AC 1.3 Evaluate the implications of technology for business continuity and crisis management plans

- *Implications of technology:*
  - 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
  - crisis-management plans – identifying potential crisis events; assessing risk; monitoring risk; automated warning; initiating responses; monitoring crisis responses; generating reports

AC 1.4 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

AC 1.5 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

Information for tutors

Suggested resources

Books

Bocij, P., Chaffey, D., Greasley, A. and Hicjkie, S. – *Business Information Systems: Technology, Development and Management for the E-Business*, 3rd edition (Financial Times/Prentice Hall 2005) ISBN 978-0273688143

Turban, E., Leidner, D., McLean, E. and Wetherbe, J. – *Information Technology for Management: Transforming Organizations in the Digital Economy*, 6th edition (John Wiley & Sons, 2007) ISBN 978-0471787129

Websites

www.managementhelp.org – The Free Management Library, information on the use of information technology in business

www.open.edu – The Open University, offers a course on knowledge management technology

Other

The Bottom Line Podcasts and Downloads chaired by Evan Davies and Stephanie Flanders. The podcasts bring together practitioners to discuss current business matters. Many podcasts touch on topics relevant to the unit, for example the podcasts on hyper connectivity and tech slowdown consider aspects of technology use. They can be searched through and downloaded from www.bbc.co.uk/podcasts/series/bottomline/all

E-Commerce Times (ECT News) – has current stories about the use of technology in business, it can be found at:

www.ecommercetimes.com

The Economist (The Economist Newspaper Ltd) – has a business section and articles on the use and application of technology in business. There is an archive with articles and surveys on business and technology usage

Assessment

To pass this unit the evidence that the learner presents for assessment must demonstrate that they have met the required standard specified in the learning outcomes and assessment criteria and the requirements of the Assessment Strategy.

To ensure that the assessment tasks and activities enable learners to produce valid, sufficient, authentic and appropriate evidence that meets the assessment criteria, centres should apply the *Unit Assessment guidance* and the requirements of the Assessment Strategy below.

Wherever possible, centres should adopt a holistic approach to assessing the units in the qualification. This gives the assessment process greater rigour and minimises repetition, time and the burden of assessment on all parties involved in the process.

Unit assessment requirements

This unit must be assessed in the workplace in accordance with Skills CFA Business Administration, Customer Service and Management and Leadership Assessment Strategy in *Annexe A*. Simulation is not allowed for this unit. All evidence of occupational competence should be generated through performance under workplace conditions; this includes evidence of achievement for knowledge-based learning outcomes and associated assessment criteria.

Unit assessment guidance

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

Assessment is based on performance at work in an area that requires the learner to be involved in optimising the use of technology.

Sources of evidence for demonstrating achievement of learning outcome 1 could include work products such as stakeholder mapping and change analyses to which the learner has contributed. These can be augmented by the learner keeping a log or reflective journal with witness statements. Explanatory narratives could be used to identify the learner's specific contributions. These sources of evidence should show clearly how and why the learner considered the need for optimising the use of technology. In learning outcomes 2, 3 and 4 the log or reflective journal should ensure that the learner reflects on the approach adopted for the practical aspect of this unit and any lessons learned from putting theory into practice.

For learning outcome 2, work products such as a traceability matrix, a project scope statement, meetings records, risk assessments and discussion papers will cover all the assessment criteria. For AC2.1, a professional discussion could consider how and why particular evaluation criteria are selected, together with reasons why others are unsuitable. For AC2.4, a log or reflective journal could explore the strategic implications and identify those that are the most significant when considering the impact of technological change.

For learning outcome 3, work products such as proposals and recommendations to develop technical solutions to improve business activities, technical specifications and records of actions to integrate technical systems with other systems will cover all the assessment criteria. For AC3.3, witness testimony could identify how the proposed technological solutions were identified from the range of solutions that were considered, together with their benefits.

For learning outcome 4, work products such as process specifications, training programmes, promotional presentations and materials, monitoring records on the functioning of technologically-based systems and logs of actions taken in response to problems will cover all the assessment criteria. A witness statement could similarly support the achievement of all criteria and confirm the performance indicated through work products. For AC4.3, a log or reflective journal could be used to explore the factors to be considered in selecting appropriate methods to promote the benefits of technology to a range of stakeholders.

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.