Unit 12: The Digital Business; Transformation and Optimisation

Level: 7

Unit type: Optional

Guided learning hours: 45

Credit value: 20

Unit introduction

The use of electronic tools, systems, devices and resources by businesses is constantly evolving: digital technology is now a key driver of business change and growth. It is, therefore, vital that strategic leaders and managers have an insight into how digital technologies can transform all aspects of a business's operations, and why they should.

Learners will examine the differing roles technology can play in supporting business transformation by digitalising its operations to support its overarching strategies. Learners will also consider the challenges a business could face when designing and implementing a digital strategy to fit with its overall organisation strategy.

Learners will consider how business leaders can make sure that the business's digital strategy is most effective by ensuring it is sufficiently agile, sustainable and innovative. This leads learners to an investigation of digital technologies of the future, with artificial intelligence (AI) a key consideration.

Using this knowledge as a basis, learners will review a business's strategic use of digital technology, before making appropriate recommendations for improvement.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

Learning outcomes		Asse	ssment criteria
A	Understand the importance of digital strategies to businesses	A.1	Assess current digital technology concepts, frameworks and contexts
		A.2	Critically discuss the relationship between business strategy, organisational change and digital technology
		A.3	Critically evaluate the impact of digital technology on business strategy
В	Understand digital transformation challenges to businesses	B.1	Critically discuss the concept of digital transformation
		B.2	Assess ethical, cultural, legislative and regulatory considerations when using digital technology
		B.3	Critically discuss the process requirements of digital transformation
		B.4	Critically analyse the impact of digital technology transformation on business operations
С	Understand how businesses can sustain an effective digital strategy	C.1	Critically examine the value of having a digital strategy to businesses
		C.2	Discuss the relationship between agility, leadership and innovation when shaping a digital strategy
		C.3	Critically discuss the challenges faced by businesses when optimising and sustaining a digital strategy
D	Understand digital technologies of the future	D.1	Discuss the impact of converging technologies on business operations and strategy
		D.2	Critically evaluate the role of artificial intelligence as a tool to support business growth
		D.3	Critically review the impact of the evolving power of digital intelligence on businesses
Е	Be able to review an organisation's development and implementation of a digital strategy	E.1	Critically review the digital technology context of a business
		E.2	Critically review the extent to which a business's digital technology is being strategically managed
		E.3	Develop justified recommendations for how a business could improve its digital strategy to meet current and future challenges and opportunities

Unit content

Learning outcome A: Understand the importance of digital strategies to businesses

- *Digital technology concepts, frameworks and contexts:* digital data, software, hardware, networks, cyberspace/security, cloud computing, multimedia, digital design, the digital age, internet of things, rise of the machine, robotics.
- *Organisational change:* new product development, building digital capabilities, mobilising the business, framing the digital challenge, reinventing business models.
- Impact of digital technology on business strategy: human/digital interfaces and interaction, communication, research, information overload, currency and legitimacy, new breed of influencers, impact on stakeholders, impact on supply chains, competitive advantage.

Learning outcome B: Understand digital transformation challenges to businesses

- The concept of digital transformation: five dimensions of customer, competition, data, innovation and value, turning data into assets, disruptive business models, governing the transformation, exploiting the power of core operations.
- Ethical, cultural, legislative and regulatory considerations: job displacement, health issues, data manipulation, 'fake news', employee (mis)perceptions, collaboration, employee-leadership disconnect, legislation/regulation that cover e.g. technology, health and safe working, data protection, communications
- The process of digital transformation: types of transformation (e.g. to business models, to business process, to business domain, to business culture), process stages including identify transformation objectives, study technology enablers, envision the future, master the digital lifecycle, organise for digital innovation, execute an agile approach.
- The impact of digital technology on a business's operations: impact on costs, security, communication, productivity, collaboration and outsourcing, impact on functional areas such as marketing, production, research and design and public relations.

Learning outcome C: Understand how businesses can sustain an effective digital strategy

- *Digital strategy*: improved customer engagement and stakeholder interaction, encourages innovation and adaptation, eliminate missed opportunities, differentiate through digitalisation, support strategic direction, improved return on investment, automate manual processes.
- Agility, leadership and innovation: changing how digital technology is created, changing how digital technology supports product/service development, dynamic systems development, visionary leadership, flexible leadership, leading digital change, employee engagement, leadership as a challenge, adapt and evolve, changing the digital landscape, machine to machine communication.

 Making an effective and sustaining a digital strategy: combining digital expertise and sustainability, the digital transformation lifecycle, commercial focus, reflective leadership, continual strategic alignment, leaders 'fluent in digital', enhance engagement with employees.

Learning outcome D: Understand digital technologies of the future

- Converging technologies: blockchain, cloud computing, mobile technologies (e.g. smartphones), social media, home technologies, smart TV, internet of things, operating on different media/technology platforms, multipronged approaches, multitasking.
- Artificial intelligence: four types reactive machines, limited memory, theory of mind and self-awareness, speech recognition, problem solving, learning, reasoning, planning, autonomous vehicles, robotics, drones, evolutionary computation.
- The evolving power of digital intelligence: the digital revolution (e.g. predictive analysis, machine learning algorithms), the power of the computer, optimising assets, the digital twin, rise of the 'super job', speed superintelligence.

Learning outcome E: Be able to review an organisation's development and implementation of a digital strategy

- Conducting a review: relationship between theory and practice, application of digital technology and tools, delivering digital transformation, impact on operations, optimising digital technology, transformational and optimising challenges.
- Justifying recommendations: recommendations must be logically supported, state the recommendations, establish reasons for the recommendations, provide supporting evidence, suggest timeframes if relevant.

Essential information for assessors

Essential resources

There are no specialist resources needed for this unit.

Suggested assessment approach

This section must be read in conjunction with Section 6: Assessment.

This unit is assessed internally by the centre and externally verified by Pearson.

The table below shows the suggested approach to assessments.

When preparing the assessment for this unit, the learner should be given an Assignment brief designed by the tutor. This brief should be set in a specific organisational context, it should draw on learning from the unit, and be designed in a way that enables learners to meet all the assessment criteria.

Learning outcome		Suggested assessment approach	
Α	Understand the importance of digital strategies to businesses		
В	Understand digital transformation challenges to businesses	A management report of approximately 4000 words to include a reference list. The reference list is not included in the word count.	
С	Understand how businesses can sustain an effective digital strategy		
D	Understand digital technologies of the future		
Е	Be able to review an organisation's development and implementation of a digital strategy	A presentation of 15 minutes duration supported by appropriate documents.	

Assessment requirements

Learning outcome A

This learning outcomes requires learners to explore the ways in which digital technologies are framed and used by businesses, particularly when in the context of organisational change. Learners need to consider how digital technology is strategically used to deliver organisational change. This context is different to that for business as usual operations where the impact of technology is likely to be specific to different functions. Learners should be able to demonstrate they can differentiate between programmes of change and their digital requirements and the day-to-day use of technology to support operations. Learners will need to consider these issues in the context of different businesses to support a critical understanding of the importance, to a business, of effective digital strategies.

Learning outcome B

Having understood the importance of digital strategies in both change and business-as-usual contexts, learners must demonstrate that they recognise the challenges presented to a business when attempting to develop and implement a digital strategy. It is important that businesses used as case studies to support this learning outcome are those affected by national and international regulations/legalisation. Learners must demonstrate an appreciation of the ethical considerations that impact on the use of digital technologies where there is regulation/legislation in place to enforce an ethical approach. Learners need to demonstrate an ability to be critical.

Learning outcome C

This learning outcome requires learners to make the connection between a business's adopted digital strategy and its ability to develop this in a sustainable way. Learners must show they appreciate why a business has a digital strategy and how this is developed through effective and visionary leadership. The need for leaders and businesses to be able to adopt an agile approach to digital strategies will be reinforced by exposing learners to different case studies. Learners could consider how different organisations and their strategies/approaches to digital technology have evolved within the context of their operating sectors to support their critical views.

Learning outcome D

In addition to a business's approach to current technologies, strategic managers must be forward thinking. This is especially the case in an environment where changes to technology, and the impact it has, are constantly evolving, often at a fast pace. The relationships between emerging technologies, as they apply in a commercial context, must be explored. As with other learning outcomes in this unit, this could be achieved through a critical examination of different case studies where the focus is not on the use of current technology but on how businesses are preparing themselves for the implementation of emerging technologies.

Learning outcome E

This learning outcome draws together all learning that has taken place in the previous learning outcomes by applying a learner's knowledge and understanding, alongside their ability to critique, to an organisation's development and implementation of a digital strategy. The organisation can be real, or one supplied through a case study.

Learners are advised to develop their response to the assessment for this learning outcome as they progress through the unit's other learning outcomes. As with all other learning outcomes, learners need to demonstrate an ability to be critical.