



Higher National Unit Specification

General information

Unit title: Business Process Management: Introduction
(SCQF level 7)

Unit code: HT9K 34

Superclass: CC

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Unit purpose

The purpose of this unit is to enable learners to develop a basic knowledge of business process management and the corresponding Business Process Model and Notation (BPMN) standard. This is a specialist unit intended for learners undertaking a Higher National award in an IT or Business related discipline.

Learners will be introduced to the evolution of Business Process Management (BPM) from the Total Quality Management (TQM) initiatives of the early 1970s through to Six Sigma and Lean methodologies. Learners will develop a basic understanding of the BPM lifecycle and the basic components of BPM including process, collaboration and choreography diagrams and their basic element categories, including flow objects, connecting objects, swim lanes and artefacts.

This introductory unit provides the basis for further study in business process management, specifically the *Business Process Management (SCQF level 8)* unit.

Outcomes

On successful completion of the unit the learner will be able to:

- 1 Describe the Business Process Model lifecycle and framework.
- 2 Describe the primary components of Business Process Model and Notation.
- 3 Apply best practice to create business process diagrams.

Credit points and level

1 Higher National Unit credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

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Recommended entry to the unit

This is an introductory unit to the Business Process Model and Notation (BPMN) and, as such, there are no recommended entry requirements.

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

Context for delivery

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

The Assessment Support Pack (ASP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Higher National Unit Specification: Statement of standards

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Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the Business Process Model lifecycle and framework.

Knowledge and/or skills

- ◆ Definition of Business Process Model and Notation
- ◆ Historical context of the development of BPMN
- ◆ BPM lifecycle
- ◆ Business process hierarchy
- ◆ Benefits of BPM
- ◆ Contemporary Business Process Management System (BPMS) architecture

Outcome 2

Describe the primary components of Business Process Model and Notation.

Knowledge and/or skills

- ◆ Use of swimlanes to represent process participants
- ◆ Definition of process behaviour and flow elements
- ◆ Flow and association connector objects
- ◆ Use of data input, data output and data store objects
- ◆ Use of group and annotation artefacts in process diagrams

Outcome 3

Apply best practice to create business process diagrams.

Knowledge and/or skills

- ◆ Definition of business process to be modelled
- ◆ Use of minimal subset of BPMN elements
- ◆ Application of strict naming conventions
- ◆ Reduced complexity using multiple levels of detail

Higher National Unit Specification: Statement of standards (cont)

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Evidence requirements for this unit

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes by showing that they can produce:

- ◆ knowledge evidence (for Outcomes 1 and 2)
- ◆ product evidence (for Outcome 3)

The knowledge evidence will be the definitions, descriptions and explanations required for Outcomes 1 and 2. The whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. This evidence may be assessed on a sample basis when testing is used. When testing is used, it must be controlled in terms of location, timing and access to reference materials. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

The product evidence required for Outcome 3 will be the application of BPM methodology to a specific problem to create a series of BPM process diagrams.

The diagrams will be derived from a given strategic process model and associated supporting documentation. Diagrams must include examples of activity, event and gateway flow objects, sequence flow, message flow association connecting objects and annotation artefacts.

The amount of evidence should be the minimum consistent with the defined knowledge and skills. When evidence is produced in uncontrolled or loosely controlled conditions it must be authenticated. The *Guide to Assessment* provides further advice on methods of authentication.

There are no time limitations on the production of evidence. The evidence may be produced at any time during the life of the unit.



Higher National Unit support notes

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Unit support notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this unit

This unit is set within the overall framework of business analysis techniques.

The unit takes an introductory overview of Business Process Management (BPM) methodology, its evolution from related methods and its position within the context of business analysis techniques.

The unit is intended as an introduction to and as such no prior knowledge or experience of BPM is required.

Business process management is first and foremost a business discipline and it sits within the requirements analysis hierarchy as detailed in the Business Analysis Book of Knowledge (BABOK) the globally recognised standard for the practice of business analysis.

It is one of a number of related and complementary techniques such as Six Sigma and Lean which will be covered briefly in the content of this unit.

Outcome 1

This outcome introduces the Object Management Group (OMG) formal definition of BPM as 'a set of techniques for the continuous, iterative improvement of all the processes involved in running a business'. The following topics should be introduced and explained at a basic level:

- ◆ The evolution of BPM through the first phase of process management initiated by Total Quality Management (TQM) and Just in Time (JIT) to the second phase led by Business Process Improvement followed by Six Sigma and Lean methods culminating in BPM.
- ◆ The primary goals of BPMN. These are to provide a notation that is readily understandable by all business users including the business analysts who created the draft processes, the technical developer's response for creating technology solutions to perform the processes and the people who manage and monitor the processes.
- ◆ The business process definition metamodel – a technical specification which provides the bridge between business-friendly BPMN diagrams and the software tools that automate and coordinate business processes across organisations.

Higher National Unit support notes (cont)

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- ◆ How BPM leads to the identification and elimination of redundant processes and the automation of repeatable processes thus saving an organisation time and money. Other benefits such as improving business agility and more effective operational management.
- ◆ The BPM lifecycle including process design, process implementation, process enactment and process evaluation.
- ◆ Intelligent BPM Suites (iBPMS) and their features such as built in real-time analytics and integration with other in house and vendor tools. Features of BPM tools such as business rule management systems and workflow engines should be discussed.

Outcome 2

This outcome introduces the notation and semantics of a business process diagram. The flowchart technique of a business process diagram, showing graphical sequences of all the activities that take place during a process, should be discussed.

Business process diagrams are contained in objects known as pools that represent the responsibilities in a process or simply identify the process.

The four basic categories of swim lanes, flow objects, connecting objects and artefacts should be introduced in the context of a practical example. The creation of pools and lanes and their use to represent the participants in a business process should be discussed. The three types of elements, flow objects, which describe the process behaviour, namely activities, events and gateways should be explored.

Sequencing elements that connect flow objects with pools: sequence flows, and between pools: message flows should be explained. The use of artefacts to add contextual information into the model and the representation of the creation, processing and filing of information via data objects should be explored.

Collaboration diagrams depicting the interaction between two or more processes should be introduced.

Outcome 3

This outcome delivers the practical skillset for the unit. Learners should construct business process diagrams from a given simple scenario. A suitable tool should be introduced to create the relevant diagrams. A process survey of the existing system should be undertaken and documented giving a current state process model. Process analysis will be undertaken to create a target state process model.

Higher National Unit support notes (cont)

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Guidance on approaches to delivery of this unit

It is recommended that the knowledge outcomes are taught in sequence (1, 2 and 3). A suggested distribution of time, across the outcomes, is:

Outcome 1	8 hours
Outcome 2	10 hours
Outcome 3	22 hours

There are significant resources, both in formal publications and general online resources, which can be utilised in the delivery of this unit. A blend of tutor led exploration and learner centred research is recommended. Introduction to a suitable BPM tool is an essential element of unit delivery. Learners should be competent at creating basic business process diagrams featuring the basic elements of the BPM notation.

Group activity analysing existing processes are recommended.

It is recommended that summative assessment is carried out towards the end of the unit where learners should have accumulated sufficient theory and practice to successfully undertake assessments. There are opportunities to carry out formative assessment throughout the unit.

Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Outcomes 1 and 2 relate to knowledge and understanding of the business process management and as such lend themselves to summative assessment by extended response in the form of a report.

Outcome 3 relates to the acquisition of practical skills relating to the creation of business process diagrams using an appropriate tool and as such lends itself to a practical assignment examining a simple business scenario.

Higher National Unit support notes (cont)

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Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

Although this unit does not embed any Core Skills, there are opportunities to develop the Core Skills in *Problem Solving* (Outcome 3).

History of changes to unit

Version	Description of change	Date

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General information for learners

Unit title: Business Process Management: Introduction (SCQF level 7)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

You will be introduced to the evolution of Business Process Management (BPM) from the Total Quality Management (TQM) initiatives of the early 1970s through to Six Sigma and Lean methodologies. You will develop a basic understanding of the BPM lifecycle and the basic components of BPM including process, collaboration and choreography diagrams and their basic element categories, including flow objects, connecting objects, swim lanes and artefacts.

This introductory unit provides you with the basis for further study in business process management, specifically the *Business Process Management* unit at SCQF level 8.

You may be assessed for knowledge and understanding of business process management by extended response in the form of a report and also be required to carry out a practical assignment in the creation of business process diagrams using an appropriate tool.

There are opportunities to develop the Core Skills in *Problem Solving* through the practical assignment required in Outcome 3.