

Unit 11: Strategic Quality and Systems Management

Unit code:	H/602/2327
QCF Level 7:	BTEC Professional
Credit value:	10
Guided learning hours:	30

Unit aim

This unit provides the learner with an understanding of the importance of effective quality and systems management to enable achievement of organisational objectives. It also provides the learner with the skills to be able to implement a strategic quality change in an organisation.

Unit introduction

This unit gives learners the appropriate knowledge and understanding to enable them to make an effective contribution to the implementation of policies in order to achieve a strategic quality change which will improve customer focus and develop continuous improvement. Contributions will be developed in respect of the operational, functional and strategic management of quality. Learners will gain an understanding of the principles, concepts, processes and procedures associated with quality management.

This unit will help learners to make a significant contribution to implementing strategies for achieving excellence. They will gain knowledge and understanding of a broad range of modern theory and techniques covering the operational, functional and strategic management of quality. Critical thinking and self-directed study are important aspects of working at this level.

Learners will look at the philosophies and practices that provide the theoretical knowledge for planning and implementing a quality programme and then consider the methods available to introduce a strategic quality change programme successfully.

Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand the role of operations management in an organisation	1.1 explain the importance of effective operations management in achieving organisational objectives 1.2 evaluate the success of existing operations management processes in meeting an organisation's overall strategic management objectives
2 Understand the importance of managing quality in an organisation	2.1 explain the importance of effective quality management in achieving organisational objectives 2.2 evaluate the success of existing quality management processes in meeting an organisation's overall strategic management objectives
3 Be able to plan a strategic quality change in an organisation	3.1 plan a strategic quality change to improve organisational performance 3.2 define resources, tools and systems to support business processes in a strategic quality change 3.3 evaluate the wider implications of planned strategic quality change in an organisation 3.4 design systems to monitor the implementation of a strategic quality change in an organisation
4 Be able to implement a strategic quality change in an organisation	4.1 implement a strategic quality change in an organisation 4.2 embed a quality culture in an organisation to ensure continuous monitoring and development 4.3 monitor the implementation of a strategic quality change in an organisation

Learning outcomes	Assessment criteria
5 Be able to evaluate the outcomes of a strategic quality change in an organisation	5.1 evaluate the outcomes of a strategic quality change in an organisation 5.2 recommend areas for improvement to a strategic quality change that align with organisational objectives

Unit content

1 Understand the role of operations management in an organisation

Operations management: design, management, and improvement of the systems that create an organisation's goods or services; production of goods and services; resource procurement, conversion into outputs, distribution to users

Strategic objectives: the importance of effective operations management; role of operations; operations strategy; quality; timing; reliability; flexibility; cost; strategic decisions

Performance management: benchmarking; targets; performance indicators; use of environmental research; the balanced scorecard; profit; growth; competitiveness; value for money

2 Understand the importance of managing quality in an organisation

Quality: definitions; quality gurus; evolution of quality; product quality and service quality, 5 gaps model; benchmarking; best practice; self-assessment; vision; continuous improvement

Quality models: development eg Japanese, USA, European, Deming, Baldrige, European Foundation of Quality Management, Six Sigma; current focus, future trends

Monitoring organisational performance: principles of models underpin organisational performance; types of performance measures and how to determine and set them; cost-benefit analysis; risk analysis; the value of a customer-focused culture; the importance of prevention rather than correction; importance of developing a continual improvement culture and how to involve others; planning, proposing, implementing and evaluating change; identifying wider implications of change within an organisation; Business Process Re-engineering (BPR)

3 Be able to plan a strategic quality change in an organisation

Planning for a strategic quality change: gap analysis; degree of change; change strategies – creating a climate of change, workforce participation, communication, stakeholder participation, action planning, timescale, agreeing roles, ensuring resources, final feasibility review; purpose; aims/objectives; resources; targets

Designing systems: process, objectives, systems and operations; layout and flow of processes; the impact of technology on operations and systems; Total Quality Management (TQM) philosophy, principles, methods and techniques

Resources, tools and monitoring systems: facilities; workforce; machinery; transportation; technology; quality systems; quality circles; ISO 9000/ EN 29000; TQM; managing and monitoring quality

Wider implications: improved business performance, corporate image, reputation, standing; competitor response; impact on other functions and departments

4 Be able to implement a strategic quality change in an organisation

Implementation of strategic quality change: timing; resource planning; staff training; communication; action planning; monitoring and evaluation criteria

Quality culture: self-managed teams and quality circles; matrix structures; senior management commitment; workforce commitment; workforce empowerment; partnerships with suppliers; external auditing; customer service policies; Kaizen, continuous improvement

5 Be able to evaluate the outcomes of a strategic quality change in an organisation

Evaluation of strategic quality change: monitoring and evaluation techniques; action learning; change agents; catalysts; empowerment; performance measuring; developing communication channels; task and role realignment; piloting; ice-breaking; business performance indicators; customer feedback; effect on sales and profit

Essential guidance for tutors

Delivery

For learning outcome 1, learners could explore the role of operations management in an organisation. Tutors could encourage learners to use their experiences from their own organisations to stimulate debate and discussion. Learners need to understand how operations management impacts on the achievement of organisational objectives and, through individual and group work, they could reflect and evaluate whether their own and other organisations' operations management has been successful or not. When delivering this learning outcome, use of case studies demonstrating the importance of operations management can enhance the learning experience.

For learning outcome 2, learners need to understand the importance of managing quality in an organisation. Learners could assess quality management in their own organisations and appropriate guest speakers can give learners useful information on how other organisations manage quality.

For learning outcome 3, learners will need to understand the importance of planning a strategic quality change and that the change-planning process is key to achieving success. Learners need to be made aware of the importance of communicating clearly with those who will be affected by change, including encouraging employee participation in the process of change. Learners may be able to draw on their experiences of this process in their own organisations, which could provide useful topics for debate and discussion. Case studies and visiting speakers can be used to help learners understand the importance of systems in the quality change process, and group discussions on the wider implications of planned strategic quality change can also be beneficial.

For learning outcome 4, learners need to understand the implementation process for a planned strategic quality change. They could consider how to embed a quality, continuous improvement culture into an organisation. Case studies can be used to demonstrate the importance of culture in developing Total Quality Management (TQM) in an organisation. Learners could also examine how a strategic quality change can be monitored during its implementation.

For learning outcome 5, learners need to understand how to evaluate the outcomes of a strategic quality change. Tutors could encourage learners to use their experiences and knowledge gained in their own organisations where strategic quality changes may have been introduced. They also need to know about the various evaluation methods and how they can be put in place to measure success.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to unit and the programme of assignments Tutor-led discussion on the role of operations management – group work and exercises
Tutor-led discussion on the importance of managing quality in an organisation – group work and exercises
Guest speaker – Total Quality Management Group discussion
Tutor-led discussion on managing performance in an organisation – group work and exercises
Visit to a local organisation who is about to introduce Six Sigma – talk given by senior personnel on planning its implementation
Tutor-led discussion on systems to support business processes – group work and exercises
Group work – case study exercises covering the wider implications of a strategic quality change
Tutor-led discussion on the implementation of a planned quality change using case studies on organisations that have successfully implemented quality change programmes
Guest speaker – evaluation methods for quality change programmes Group discussion
Assignment: Implementing Strategic Quality Change in an Organisation (covering all assessment criteria)
Review of unit and assignment guidance

Assessment

Learners need to research information on quality management in an organisation and produce a report discussing their findings and making recommendations for strategic quality changes.

For AC 1.1 and 1.2, learners need to explain the importance of effective operations management in achieving organisational objectives clearly, indicating how this takes effect in their own organisations or the organisation they have chosen to base their assessment evidence on. They then need to evaluate the success of operations management in meeting their chosen organisation's strategic management objectives.

For AC 2.1 and 2.2, learners need to explain the importance of effective quality management in achieving their chosen organisation's objectives. Following this explanation, they need to evaluate the success of existing quality management processes in meeting their chosen organisation's strategic management objectives.

For AC 3.1 and 3.2, learners need to plan a strategic quality change that aims to improve organisational performance in their chosen organisation. The plan needs to be action orientated, detailed, and include SMART targets. It should clearly define the resources, tools and systems that will support the business processes involved in the quality change process.

For AC3.3, learners need to evaluate the wider implications of their planned strategic quality change. They could assess how the organisation will be perceived from outside, as well as discussing the knock-on effects of the change to systems, people and functions, and their performance within the organisation.

For AC3.4, learners need to design systems that will monitor the implementation of their planned strategic quality change. These could be associated with the layout and flow of processes, or other aspects of monitoring using IT systems.

For AC 4.1 and 4.3, learners need to implement and monitor their planned strategic quality change.

For AC4.2, learners need to provide evidence to demonstrate how they embedded a quality culture into their chosen organisation. For example, they could describe the senior management commitment to the culture change and perhaps how self-managing teams have been introduced.

For AC 5.1 and 5.2, learners need to evaluate the outcomes of the implementation of their strategic quality change and make recommendations on how further improvements can be made. The improvements recommended need to clearly align with organisational objectives.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Assessment criteria covered	Assignment title	Scenario	Assessment method
All assessment criteria	Implementing Strategic Quality Change in an Organisation	The learner is acting as an internal quality consultant for an organisation of their choice. They are required to look at the existing quality management within the organisation, and implement a strategic quality change, ensuring the necessary monitoring evaluation systems are in place and evaluating the outcomes of the change.	Report

Essential resources

There are no essential resources required for this unit.

Indicative resource materials

Textbooks

Bank J – *The Essence of Total Quality Management, 2nd Edition* (Prentice Hall, 1999) ISBN 0135731143

Beckford J – *Quality: A Critical Introduction, 3rd Edition* (Routledge, 2009) ISBN 041599635X

Bicheno J – *The Quality 75: Towards Six Sigma Performance in Service and Manufacturing* (PICSIE Books, 2002) ISBN 0954124405

Brue G – *Six Sigma for Managers: 24 Lessons to Understand and Apply Six Sigma Principles in any Organization* (McGraw-Hill Professional, 2005) ISBN 0071455485

Burnes B – *Managing Change, 5th Edition* (Financial Times/Prentice Hall, 2009)
ISBN 0273711741

Johnston R, Chambers S, Slack N, Harrison A and Harland C – *Cases in Operations Management, 3rd Edition* (Financial Times/Prentice Hall, 2002) ISBN 0273655310

Naylor J – *Introduction to Operations Management, 2nd Edition* (Financial Times/Prentice Hall, 2002) ISBN 0273655787

Oakland J S – *TQM: Text with Cases, 3rd Edition* (Butterworth-Heinemann, 2003)
ISBN 0750657405

Pike J and Barnes R – *TQM in Action, 2nd Edition* (Springer, 1995)
ISBN 0412715309

Slack N, Chambers S and Johnston R – *Operations Management, 4th Edition*
(Financial Times/Prentice Hall, 2003) ISBN 0273679066

Covey S M R – *The Speed of Trust: The One Thing That Changes Everything*
(Simon & Schuster Ltd, 2006) ISBN 0743295609

Journals/newspapers

Many professional institutes and academic institutions publish journals relevant to this unit. Examples are:

Production, Planning and Control (Taylor and Francis)

The TQM Magazine (Emerald)

A good daily broadsheet, eg *The Times*, *The Guardian* or *The Financial Times*

Websites

www.businesscases.org/newInterface	Business case studies
www.efqm.org	EFQM – helping European organisations learn from each other and improve performance
www.hbsworkingknowledge.hbs.edu	Harvard Business School Working Knowledge – management practice research
www.hse.gov.uk	Health and Safety Executive
www.hsl.gov.uk	Health and Safety Laboratory
www.iso9000.org	International Quality Systems Directory
www.managerwise.com	Business management information and resources
www.praxiom.com	ISO quality standards translated into understandable language
www.quality.co.uk	Quality Network – a guide to subject of quality management