

# Total Quality Management

## **1 Introduction**

## **2 Historical evolution of Total Quality Management**

## **3 Some definitions of quality**

- 3.1 Exceptional
- 3.2 Perfection or consistency
- 3.3 Fitness for purpose
- 3.4 Value for money
- 3.5 Transformative
- 3.6 Conclusion

## **4 Philosophy, principles and concepts of TQM**

- 4.1 The foundation and the four sides of the TQM pyramid
- 4.2 Focus on the customer and the employee
- 4.3 Focus on facts
- 4.4 Continuous improvements
- 4.5 Everybody's participation

## **5 Quality management systems and standardization**

- 5.1 The concept of system
- 5.2 Quality management systems
  
- 5.3 Joharry's new window on standardization and causes of quality failures
  
- 5.4 Standardization and creativity
  
- 5.5 ISO 9000 and BS 5750—a stepping stone to TQM?

## **6 The European Quality Award**

- 6.1 The background to the European Quality Award
- 6.2 The model
- 6.3 Assessment criteria
- 6.4 Experiences of the European Quality Award

## **Part Two Methods of Total Quality Management**

## **7 Tools for the quality journey**

- 7.1 The quality story
- 7.2 The seven+ tools for quality control
- 7.3 Check sheets
- 7.4 The Pareto diagram
- 7.5 The cause-and-effect diagram and the connection with the Pareto diagram and stratification
- 7.6 Histograms
- 7.7 Control charts
- 7.8 Scatter diagrams and the connection with the stratification principle
- 7.9 Case example: problem solving in a QC circle using some of the seven tools (Hamanako

Denso)

- 7.10 Flow Charts
- 7.11 Relationship between the tools and the PDCA cycle

## **8 Some new management techniques**

- 8.1 Matrix data analysis
- 8.2 Affinity analysis

8.3 Matrix diagrams

8.4 Prioritization matrices and analytical hierarchies

8.5 An example

**9 Measurement of quality: an introduction**

**10 Measurement of customer satisfaction**

10.1 Introduction

10.2 Theoretical considerations

10.3 A practical procedure

**11 Measurement of employee satisfaction**

11.1 Set up focus with employees to determine relevant topics

11.2 Design the questionnaire including questions about both evaluation and importance for each topic

11.3 Compile presentation material for all departments and present the material to the departments

11.4 Carry out the survey

11.5 Report at both total and departmental level

11.6 Form improvement teams

11.7 Hold an employee conference

**12 Quality checkpoints and quality control points**

**13 Quality measurement in product development**

13.1 Definition of the quality concept from a measurement point of view

13.2 Direct measurement of quality

13.3 Indirect measurement of quality

**14 Quality costing**

14.1 The concept of TQM and quality costs

14.2 A new method to estimate the total quality costs

14.3 Advantages and disadvantages of the new method to estimate total quality costs

14.4 Quality cost measurement and continuous improvements

**15 Benchmarking**

15.1 What is benchmarking?

15.2 What can be benchmarked?

15.3 How is benchmarking carried through?

Part Three Process Management and Improvement

**16 Leadership, policy deployment and quality motivation**

16.1 Introduction

16.2 The PDCA Leadership Model—a model for policy deployment

16.3 Leadership and quality motivation

16.4 Conclusion

**17 Implementation process**

17.1 Introduction

17.2 Four stages of implementation

17.3 Plan

17.4 Do

17.5 Check

17.6 Act

**18 Quality culture and learning**

18.1 Introduction

18.2 The concept of culture

18.3 Organizational theory and corporate culture

18.4 Corporate culture

- 18.5 Classifying a culture
- 18.6 Corporate and quality culture
- 18.7 Working with quality culture
- 18.8 Quality culture, quality improvement and TQM
  
- 18.9 Quality learning
- 18.10 Conclusion