



SYLLABUS

TOTAL QUALITY MANAGEMENT

INTRODUCTION

In Marketing, four critical success factors are identified as product, price, place and promotion. Like Marketing, the management of quality has become a key issue in the success of modern organisations, regardless of whether they engage in the provision of goods or services. A leading author has observed that

“An organisation will survive only if it creates and retains satisfied customers, and this will only be achieved if it offers for sale products or services which respond to customers’ needs and expectations.....price and delivery are both transient, whereas the impact of quality is sustained long after the attraction or the pain of price and delivery has subsided.”

In the past, quality control in most organisations was the responsibility of the production department, and it was wrongly assumed to be synonymous with physical inspection of goods before they left the premises. The modern view is that quality control and management are the responsibility of everybody in the organisation, starting with the chief executive officer.

OBJECTIVES

After completing this course, students should be able to:

- Identify and explain the basic concepts in Total Quality Management (TQM)
- Differentiate between product quality characteristics and service quality characteristics
- List the key steps in the control of quality
- Distinguish between quality of design and quality of conformance to design
- Explain the process of planning for quality
- Explain the system of documentation, implementation and assessment of quality
- Identify and explain specific tools and techniques for quality improvement
- Explain the role of external and internal customers in setting quality parameters

DETAILED SYLLABUS/COURSE OUTLINE

1. The Foundations of Total Quality Management

- Components of quality
- The total quality management approach
- Innovation, design and improvement
- Product quality characteristics and service quality characteristics
- Quality parameters and specific dimensions of quality

2. Key Aspects of the Quality System

- Planning for quality
 - Flowcharting
 - Detailed flow process charts and flow diagrams
 - Planning for just-in-time (JIT) management
- System design and contents
- System documentation, implementation and assessment

3. TQM Tools and the Improvement Cycle

- Measurement of quality
- Costs of quality
- Tools and techniques for quality improvement
- Statistical process control
- Quality improvement techniques in service industries
- Specific techniques for design, reliability, maintenance and process improvement

4. Conformance and Non-conformance to Quality Standards

- Quality of design
- Quality of conformance to design
- Control of non-conforming products
 - . identifying and classifying non-conformance
 - . documenting non-conforming products
 - . reinspection of repaired and reworked products
- Corrective and preventive action

5. The Quality Organisation Within an Organisation

- People and the organisational structure
- Responsibilities and performance management
- The relationship between the quality organisation and top management
- Culture change through teamwork for quality improvement
- Implementing teamwork for quality improvement: the DRIVE model

6. Control of Quality Records

- Compilation and indexing of quality records
- Storage and maintenance of quality records
- Procedures related to quality records
- Authentication of quality records

7. Internal Quality Audits

- Scope of requirements and audit procedures
- The audit programme and planning of quality audits
- Verifying compliance with planned arrangements
- Determining the effectiveness of the system
- Reporting the results of quality audits
- Follow-up audits

8. Quality and Business Process Re-engineering

- Beyond tools to total quality management
- Stages in the development of quality and related activities:
 - . inspection
 - . quality assurance
 - . company-wide quality control
 - . total quality management
- Quality circles
- Stages in the evolution of a company's improvement capability:
 - . traditional approach
 - . structured continuous improvement
 - . goal-oriented continuous improvement
 - . proactive/empowered continuous improvement
 - .full continuous improvement capability (the learning organisation)

9. Training for Total Quality Management

- Scope of requirements and identification of training needs
- Design of training programmes
- Evaluation of training programmes
- Performance improvement worksheets
- Follow-up of training programmes

REFERENCES

OAKLAND, J.S. Total Quality Management – the route to improving performance Butterworth/Heinemann (1993)

HOYLE, D. ISO 9000 Quality Systems Handbook

2nd Edition Butterworth/Heinemann 1997

TENNER, A.R.

& De TORO I.J.

Total Quality Management – Three Steps to Continuous Improvement

Addison –Wesley Publishing Company 1992

BROWN, S. et al

Strategic Operations Management

2nd Edition Elsevier Butterworth-Heinemann 2005