Unit 34: Operations Management

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Learning Outcome 2

- LO2 Understand the link between operations organisations management and strategic planning
  - AC 2.1 Appraise the importance of the 'Three Es' to organisations
  - AC 2.2 Assess the impact of the tension between cost minimisation and quality maximisation in organisations
  - AC 2.3 Evaluate the significance of the five performance objectives that underpin operations management to organisations

In this Session

- LO2 Understand the link between operations organisations management and strategic planning
  - AC 2.3 Evaluate the significance of the five performance objectives that underpin operations management to organisations
    - cost,
    - Dependability,
    - Flexibility,
    - Quality and
    - Speed
- Further readings
- References

Introduction

- Operations objectives are very broad. Operations management has an impact on the five broad categories of stakeholders in any organisation. Stakeholders is a broad term but is generally used to mean anybody who could have an interest in, or is affected by, the operation (staffs.ac.uk, 2016). The five group includes shareholders, suppliers, customers, employees and the society. Your operations performance objectives therefore must seek to meet the needs of these stakeholders.

Operations Performance Objectives

- In order to ensure that resources are allocated appropriately in operations it is necessary to record, monitor and review aspects of operations performance.
- A key task in this process is the identification of appropriate measures of performance that relate to the internal and external factors that are relevant to organisational competitiveness.
- Slack et al. (2007) describe five basic operations performance objectives which allow the organisation to measure its operations performance. The performance objectives are quality, speed, dependability, flexibility and cost.

Significance of the Performance Objectives that underpin OM to Organisation

- Bennett (2015) indicates that it involves the responsibility of ensuring that business operations are:
  1. Efficient in terms of using as few resources as needed, and
  2. Effective in terms of meeting customer requirements.
- It is concerned with managing the process that converts inputs (in the forms of materials, labour, and energy) into outputs (in the form of goods and/or services).

Significance of the Performance Objectives that underpin OM to Organisation cont

- **From a customer perspective quality characteristics include**:
  1. Reliability,
  2. Performance and
  3. Aesthetics.
- **From an operations viewpoint quality is related to** how closely the product or service meets the specification required by the design, termed the 'quality of conformance' (Bennett, 2015).

Performance Objectives of Operations

- Staffs.ac.uk (2016) indicate the following five performance objectives:
  - Quality
  - **Speed**
  - **Dependability**
  - **Flexibility**
  - **Cost.**

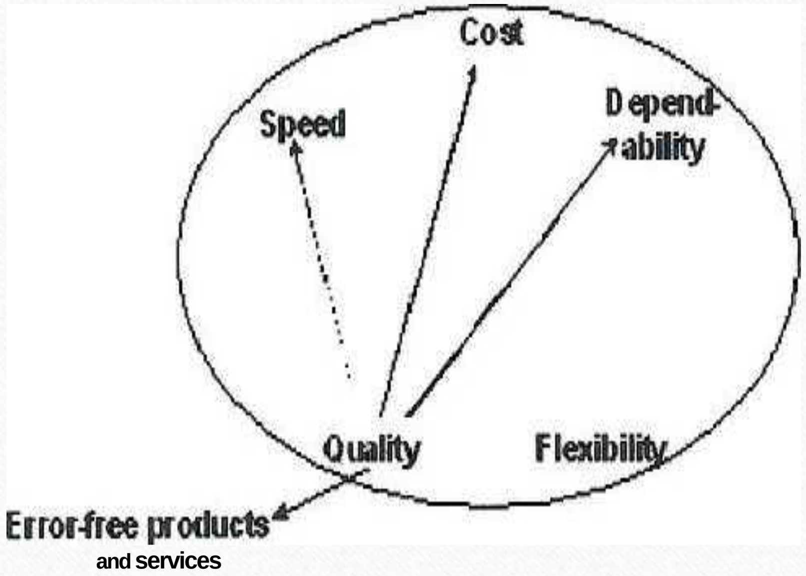
Quality (being right)

- According to staffs.ac.uk (2016) quality is discussed largely in terms of it meaning 'conformance'. That is, the most basic definition of quality is that a product or service is as it is supposed to be. In other words, it conforms to its specifications. Quality is placed first in our list of performance objectives because many authorities believe it to be the most important.

- There are two important points to remember when reading on quality as a performance objective:
  - The external affect of good quality within in operations is that the customers who 'consume' the operations products and services will have less (or nothing) to complain about
  - Inside the operation quality has a different affect. If conformance quality is high in all the operations processes and activities very few mistakes will be being made.

Quality (being right)

- Your Objective is to have an error free product.



Costs (being productive)

- Costs is significance to organisational competitiveness.

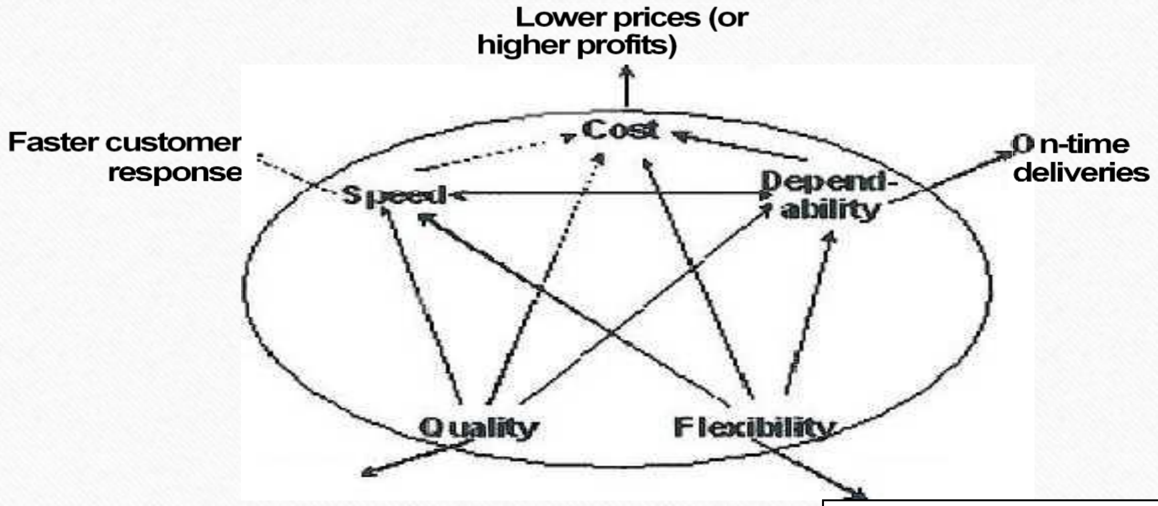
- Cost advantages: Finding appropriate costs to produce goods and services whilst still receiving returns or investment.

    - Reducing the costs of resource inputs OR making better use of them, by cutting out waste for example, allows for the increase in productivity.

Costs (being productive)

- There are two important points here. The first is that the cost structure of different organisations can vary greatly. Second, and most importantly, the other four performance objectives all contribute, internally, to reducing cost. This has been one of the major revelations within operations management over the last twenty years.
- "If managed properly, high quality, high speed, high dependability and high flexibility can not only bring their own external rewards, they can also save the operation cost."

Costs (being productive)



Wider variety
More customisation
More innovation
Cope with volume fluctuations

Dependability (being on time)

- Doing things in time for customers to receive their goods or services when they are needed or promised (Jiwani, 2013).
- Inside the operation internal customers will judge each other's performance by how reliable other processes are in delivering resources on time.
    - Dependability saves time
    - Dependability saves money
    - Dependability gives stability

Flexibility (being able to change)

- Being able to change the operation in some way (Jiwani, 2013):
  - Product/service flexibility
  - Mix flexibility
  - Volume flexibility
  - Delivery flexibility
    - Flexibility speeds up response - saves time
    - Flexibility helps maintain dependability
  - Different things for different customers
  - One form of flexibility involves the production of high variety products in mass manners to help minimize costs - This approach is called mass customization

Speed (Being Fast)

- Speed refers to the time between the beginning of an operations process and its end.
  - Externally: It is the time between customers requesting and receiving products/services.
  - Internally: It is the time between when materials being and finish product.
- Relative success of speed brings other benefits.
  - Dependability is much easier maintained
  - Reduction of costs due to the decreased necessity to manage transformed resources through the operational process.

Internal and External Cost

- These factors can be depicted in a SWOT matrix which lists the current strengths (S) and weaknesses (W) internal to the company, and the opportunities (O) and threats (T) external to the company.
- Internal failure costs include:
  - **Scrap costs:** Costs of poor-quality products that must be discarded, including labour, materials, and indirect costs.
  - **Rework costs:** Costs of fixing defective products to conform to quality specifications.
  - **Process failure Costs**: Cost of determining why the production process is producing poor-quality products.
  - **Process downtime Costs**: Costs of shutting down the productive process to fix the problem.
  - **Price-downgrading Costs:** Costs of discounting poor-quality products – that is, selling products as “seconds.”

External Failure Cost

- External failure costs are incurred after the customer has received a poor-quality product. Examples of external failure costs include:
  - **Customer Complaint Costs**: Costs of investigating and satisfactorily responding to a customer complaint resulting from a poor-quality product.
  - **Product Return Costs:** Costs of handling and replacing poor-quality products returned by the customer.
  - **Warranty Claims Costs**: Costs of complying with product warranties.
  - **Product Liability Costs**: The litigation costs resulting from product liability and customer injury.
  - **Lost Sales Costs**: Costs incurred because customers are dissatisfied with poor-quality products and do not make additional purchases.

Benefits of Excelling in Performance Objectives

- **Quality** - providing error free goods and services will satisfy the customers, this is known as 'quality'.
- **Speed** - doing things fast, to minimise the time between the order and the availability of the product or service that gives the customer speed advantage.
- **Dependability** - doing things in time for customers to receive their gods or services when they are promised.
- **Flexibility** - responding to a dynamic environment is that organisation change their products and services and changes the way they do business.
- **Cost** – producing good and services at less cost that competitors. This is especially where companies compete with prices is 'cost'.

Further Reading

- *www.staffs.ac.uk/sgc1/faculty/bsb10214-2/**Performanceobjectives**.docx*
- https://prezi.com/e9boy6oyvgvs/5-performance-objectives/

References

- Bennett, Claudette (2015) Operations Management Lecture Notes, Colbourne College
- Jiwani, Aleem A (2013)5 Performance Objectives retrieved from https://prezi.com/e9boy6oyvgvs/5-performance-objectives/
- Slack, N., Chambers, S. & Johnston, R. (2007) Operations Management, 5th Edition, London: FT Prentice Hall [Access June 16, 2015] from http://www.keiabroad.org/spain/syllabus/strategic_Operations_Management.pdf
- Staffs.ac.uk (2016) Operations Performance Objectives retrieved from *www.staffs.ac.uk/sgc1/faculty/bsb10214-2/**Performanceobjectives**.docx*