

1. Introduction

- **Operations** refers to the business processes that involve the transformation or, more generally, the production process
 - **Transformation** refers to the conversion of inputs (resources) into outputs (goods and services)
 - **Value adding** involves the creation of extra or added value to the business as the inputs are transformed into outputs
- **Operation management** involves management of:
 - The production of goods and services
 - Production controls and associated quality controls
 - Supply chain management (SCM)
 - Inventory controls
 - Logistics and distribution

INPUTS AND OUTPUTS

For a producer of goods

- Inputs: ideas, information, raw materials, human resources, machinery, technology, facilities etc
- Outputs: finished good that will be sold

For a producer of services

- Inputs: skill, education, time, qualifications, materials, technology etc
- Outputs: the effects/results of the service

OPERATIONS AND CUSTOMER FOCUS

- Recently, customers have been more involved in the business's operations and production process especially regarding ethical issues

Waste minimisation

- Also known as **lean production** which aims to eliminate waste at every stage of production by analysing each stage of the production process, detecting where inefficiencies exist and correcting them
 - Benefits the environment
 - Benefits the business since waste adds cost but doesn't add value

Fair value for any labour used

- Consumers are concerned with ethical issues regarding the conditions of the business's employees (i.e. working conditions and pay wages)
- This has resulted in the growth of the Fairtrade movement

Reduce costs to maximise affordability

- In competitive markets, businesses will aim to reduce costs to make their products more affordable and more competitive
- Businesses can reduce costs by:
 1. Global sourcing - affects where the resources are from
 2. Supply chain management (SCM) - affects how the resources are transported to the business

Adapting operation processes to shifting needs

- Improvements in technology have influenced this
- Successful businesses will adapt to keep up with changes in the consumer markets and perhaps will even cause/control the changes

2. Strategic role of operations management

- Every business function is a strategic component
- A strategic component means that it affects all key business operations (e.g. strategic planning - 5+ years, involves the whole business)
- An example of a strategic goal is to maximise profits
 - This can be done in two main ways:
 1. Increasing revenue and profits
 2. Decreasing costs and expenses
 - Finance and marketing can help increase revenue (profit centres)
 - Operations and HR can help decrease costs (cost centres)
 - Thus, a strategic aspect of operations management is to manage costs

COST LEADERSHIP

- **Cost leadership** involves aiming to have the lowest costs or to be the most price-competitive in the market
 - Can be achieved through using economies of scale
- **Economies of scale** refers to the cost-saving advantages that a business can benefit from by increasing their scale of business operations
 - Cost-saving benefits can be from: **bulk-buying** (which decreases the cost per unit of input) or through **increased efficiency** from better technology or machinery

PRODUCT DIFFERENTIATION

- **Product differentiation** means distinguishing products (goods or services) in some way from their competitors
- Factors that **distinguish goods from services**:
 - Goods are tangibles, services are not
 - Most goods can be kept/stored, services only exist when they are performed however their effects can last for longer
 - Goods tend to be standardised, services tend to be customised
 - Goods can be owned and transferred, services cannot
 - The value of goods can be easily calculated from the costs of inputs, transformation and a profit margin, the value of services are subjective
- **Ways to differentiate goods**
 - Vary the actual product features
 - Vary the product quality
 - Vary any augmented features (add-ons or additional benefits)
- **Ways to differentiate services**
 - Vary the amount of time spent on the service
 - Vary the level of expertise brought to a service
 - Vary the qualifications and experience of the service provider
 - Vary the quality of materials/technology used in the service delivery

Cross branding

- Is another way to differentiate products through an external factor
- Achieved by creating alliances with other businesses to add value to the products by offering consumers added benefits
- For example: Coles-Shell alliance, Woolworths-Caltex alliance

3. Goods and services in different industries

GOODS IN DIFFERENT INDUSTRIES

- **Standardised goods** are goods that are mass produced, usually on an assembly line, uniform in quality (with a predetermined level of quality) and produced with a production focus
- **Customised goods** are goods that are varied according to the needs of customers and are produced with a market focus

Operational processes for perishable goods

- Perishable goods tend to be foods/fruits
- Operational processes should include:
 - High standards of quality, safety and cleanliness
 - Very short lead times
 - Quick and efficient distribution
 - Appropriate packaging

Operational processes for non-perishable foods

- Operational process should include:
 - Management of all aspects of quality (e.g. sourcing, production)
 - Effective inventory management strategies
 - Being highly responsive to market demand to avoid overproduction
- **Intermediate goods** are goods that are processed more than once since once finishing one round of the production cycle, the finished good becomes an input to become further processed (e.g. screws)

SERVICES IN DIFFERENT INDUSTRIES

- Services can be standardised or customised
 - Standardised services tend to benefit from cost leadership
- **Self-service** occurs when a business encourages their customers to take the initiative to help themselves (e.g. airline ticketing)
 - Purpose: to allow the business to concentrate on customising their services for customers that cannot help themselves or have difficulties
 - Disadvantage: **drip pricing** which occurs when a business advertises one price but due to customisation, numerous additional costs are added and the final price is higher than what was advertised

4. Interdependence with other key business functions

- **Interdependence** refers to the mutual dependence that the key functions of business have on one another since each area depends on the support of others if it is to perform at the best capacity

Operations	Marketing
Finance	Human Resources

- Employees in all departments should collaborate and work towards one common goal (usually strategic goals)

TASKS WITHIN KEY BUSINESS FUNCTIONS

Operations

- **Operations** refers to the business processes that involve transformation and the production process
- Includes activities such as:
 - Manufacturing
 - Provision of services
 - Other value adding

Marketing

- **Marketing** aims to meet the needs and wants of consumers through provision of products at prices that the market is prepared to pay
- Includes activities such as:
 - Sales and advertising
 - Product design
 - Marketing strategies
- **Interdependent link between marketing and operations:** the product design (a marketing responsibility) directly affects the sourcing of inputs for production and the value adding process.

Finance

- **Finance** is concerned with the recording and summarising financial transactions into a series of reports that can be easily interpreted
- Includes activities such as:
 - Administration
 - Financial management
 - Financial planning
 - Management and change
- **Interdependent link between finance and operations:** in order to achieve profitability (a financial goal), operations must find a way to maximise profits by reducing costs whilst maintaining a certain quality so the goods can generate higher revenue

Human resources

- **Human resources** is responsible for dealing with the people that the business employs and the issues arising from their employment
- Includes activities such as:
 - Industrial relations (IR)
 - Human resources management (HRM)
 - Managing personnel
- **Interdependent link between HR and operations:** the introduction of new technology will affect the production process which would affect HR since the skills needed in employees would differ. The operations department's decision to outsource will also affect HR
 - **Outsourcing** is the use of specialised external organisations to perform a task that is ordinarily done within a business