

UNIT 5: OPERATIONS MANAGEMENT

IB Business Management

Revision Guide

5.1 The Role of Operation Management

Operations management and its relationship with other business functions (A01)
Operations management is about acquiring the necessary resources needed for production in the most efficient and cost-effective way. It impacts on the other functional areas of a business, such as:

Marketing

- Goods/services are produced based on market research in order to meet the needs and wants of customers
- the good/service needs to be promoted to existing and potential customers
- the finished product also needs to be distributed using appropriate channels
- a suitable pricing strategy is needed to ensure the products sell well on the market

Finance

- Costs of different production methods (e.g. mass production, are needed to gain economies of scale although this could also require high set-up costs)
- Funding is needed for all aspects of operations management (e.g. product testing, research and development, lean production)
- Production managers must be held accountable for their expenditure and budgets

Human resources

- Production workers need to be hired and trained to work productively
- Supervisors and quality controllers may also need to be hired
- A crisis management team might need to be formed
- Operations managers are responsible for collaborating and working with managers from other departments to meet organizational objectives
- Operations management in organizations producing goods and/or services (A02)

5.3 Lean production and quality management

The following features of lean production: less waste, greater efficiency (A01)

Lean production: originated in japan, it is a philosophy built into the culture of organizations that focus on less wastage and greater efficiency.

Features of lean production

Less Waste

- involves streamlining operations in order to reduce all forms of waste and to achieve greater efficiency.
- overall objective is getting things right the first time and using fewer resources to produce quality output, both of which help to reduce wastage of resources.
- methods of waste minimization: total quality management, cradle-to-cradle manufacturing and just-in-time production

Greater Efficiency

- using resources more effectively to generate output (ex. using less capital or labour to produce the same amount of output).
- efficiency is measured by the productivity rate of resources (ex. labour productivity can be measured by sales per person or output per worker).
- all members of the organization need to be involved for lean production to work efficiently
- greater efficiency can be gained in several way, such as
 - staff training and development
 - higher levels of staff motivation
 - using improved (technologically advanced) capital

The following methods of lean production: continuous improvement (kaizen), just-in-time (JIT), kanban, andon (A02)

Methods (philosophies) of lean production

Kaizen (Continuous improvement)

- involves all workers committing to improving quality standards
- involves making small, incremental progress (rather than infrequent radical changes to improve productivity and efficiency)
- involves empowering workers to make their own decisions for continuous improvements
- can help to achieve greater efficiency through exploring ways to improve the productivity and efficiency of the organizations processes and operations
- however, the implementation of kaizen tends to be costly and time consuming as it requires the effort and commitment of all employees to eliminate waste and to make productivity gains

The main difference between adaptive and innovative creativity is the pace and degree of change involved in the innovation process.

How pace of change in an industry, organizational culture and ethical considerations may influence research and development practices and strategies in an organization (A03)

- **Change in an industry** can influence R&D practices. For example:
 - It can create demand for new products (ex. hybrid or electric fuelled cars)
 - Customers might turn away from rival brands if the firm is highly innovative and sells products that are more appealing to buyers.
 - The life cycle of many products is short, so innovation through R&D can ensure the business embraces change and survives the impacts of the external environment.
- **Organizational culture** determines the degree of risk that a business is willing to take in R&D. It also regulates business practices, e.g. a firm that pursues its corporate social responsibilities is likely to focus on innovations that benefit a greater number of stakeholders.
 - If an organization has a rather low-risk, role-based, bureaucratic or autocratic culture, innovation may then be very limited, as the fear of failure can outweigh the rewards of success.
 - On the other hand, democratic or collaborative organizational cultures may foster risk taking and view creative input as a valuable resource.
- **Unethical business practices** mean that governments need to protect the intellectual property rights of inventors and innovators. For example:
 - A **patent** gives exclusive rights to the registered owner to use an invention for a finite period of time.
 - **Copyrights** protect the published work of artists, composers, musicians, photographers, etc. by creating legal rights to these creations.
 - A **registered trademark** is a sign or symbol that enables a firm to distinguish its products from those of other traders, e.g. brands and logos. Once registered, these trademarks are the exclusive property of the trademark holder for a finite period of time.
 - Even when some innovations are possible legally, some stakeholders may have strong ethical concerns. (ex. animal testing. Some companies don't do animal testing of any kind and in turn, use this stance for marketing purposes)

control.

- Depending upon the crisis and its nature, this may be more or less feasible.

The following advantages and disadvantages of contingency planning for a given organization or situation: Cost, Time, Risks, Safety (A02)

Advantages and disadvantages of contingency planning

Cost

Advantage	Disadvantage
<ul style="list-style-type: none"> - Well developed contingency plans can help avoid financial problems and give confidence to investors - contingency planning is much less expensive than dealing with a crisis without it 	<ul style="list-style-type: none"> - Contingency planning may be costly, both the planning process itself and the need to train staff to deal with a wide range of events and scenarios - Managers/Employees will be pulled away from their daily activity to work on the contingency plans - Consultants may need to be hired

Time

Advantage	Disadvantage
<ul style="list-style-type: none"> - In the long run, time will be saved as crisis will be avoided and/or managers will know what to do in a time of crisis 	<ul style="list-style-type: none"> - Time consuming, in terms of planning and training (ex. health and safety legislation can vary from country to country and some members of staff may need, by law, to be trained and retrained in first aid and emergency response)

Risks

Advantage	Disadvantage
<ul style="list-style-type: none"> - Enables businesses to be better prepared to deal with setbacks - Helps to reduce risks arising from a crisis 	<ul style="list-style-type: none"> - The plans cannot fully prepare firms for the actual impacts of natural disasters - Plans will need to be updated so that they remain relevant to the current situation

Safety

Advantage	Disadvantage
<ul style="list-style-type: none"> - Can ensure the safety of employees in the event of a crisis - Helps protect, reassure customers 	<ul style="list-style-type: none"> - It is not realistic for businesses to account for and plan for all possible risks