

5.1 Introduction to operations management

The role of operations management

In [Section 1.1.1 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36497\)](#), you learned that businesses are systems with inputs, processes, outputs and feedback. Inputs are all the resources needed for the product: physical, financial and human resources. Output is the product itself, whether a good or a service. Feedback occurs when the output of a business becomes an input to the same business. Feedback often involves information from production and output that can inform the business about needed changes.

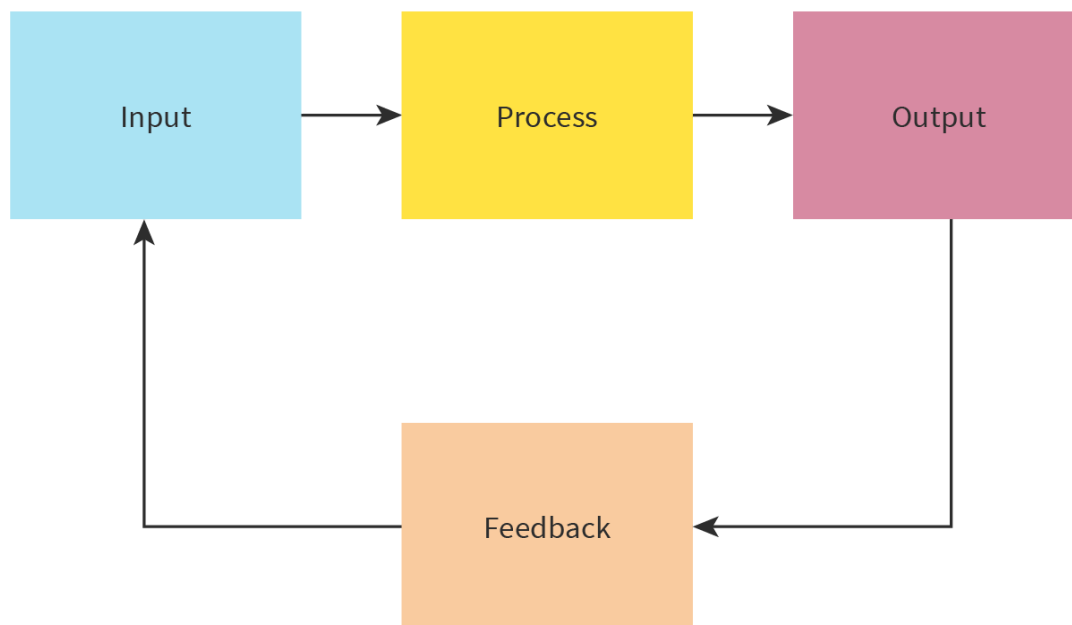


Figure 1. Businesses, like all systems, have inputs, processes, outputs and feedback.

The ‘process’ part of the system for businesses includes all the business functions you have already learned about in this course: human resource management, finance and accounts, and marketing. Operations management is the final function. It involves the specific process of transforming inputs into outputs to achieve business objectives.

Transforming inputs into outputs most often involves combining or changing the characteristics or qualities of materials and work to create something new. This could be creating a physical product by transforming steel, rubber, and human labour into a bicycle. Or it could be creating a service by transforming the skills of multiple people

into education for students in your school. Operations management could also involve the transfer of products from one place to another – as with delivery services, for example – or it could involve breaking bulk – as wholesalers do.

Activity

Learner profile: Thinkers

Approaches to learning: Thinking skills (transfer)

Operations management is often easier to imagine in a manufacturing facility than it is in a business that provides services. In a small group, or as a class, see if you can:

- Identify the specific processes related to operations management in your school. Make sure to identify both the obvious and less obvious processes.
 - What might happen to the operations of the school if some of these less visible operations functions do not work well?
- Identify who is involved in carrying out the processes you have identified.
 - Which of these employees are visible to you as a student?
 - Which of these employees are not visible?



Figure 2. Operations management involves transforming inputs into outputs, such as transforming steel, rubber and human labour into a bicycle.

Credit: Mint Images, Getty Images

<https://www.gettyimages.co.uk/detail/photo/employee-performance-evaluation-royalty-free-image/168262233>

Making connections

In [Subtopic 1.1 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36497\)](/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36497), (</study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36497>) you learned about businesses as systems. As you move into this last subtopic of the course, you may want to revisit that subtopic, because it provides the big picture overview of inputs, processes, outputs and feedback. This could support your understanding of the role of operations in a business.

Whatever is being produced, operations management involves careful planning and coordinating between the different departments of a business, controlling the processes, quality and costs involved. Operations management is deeply interconnected with the other business functions.

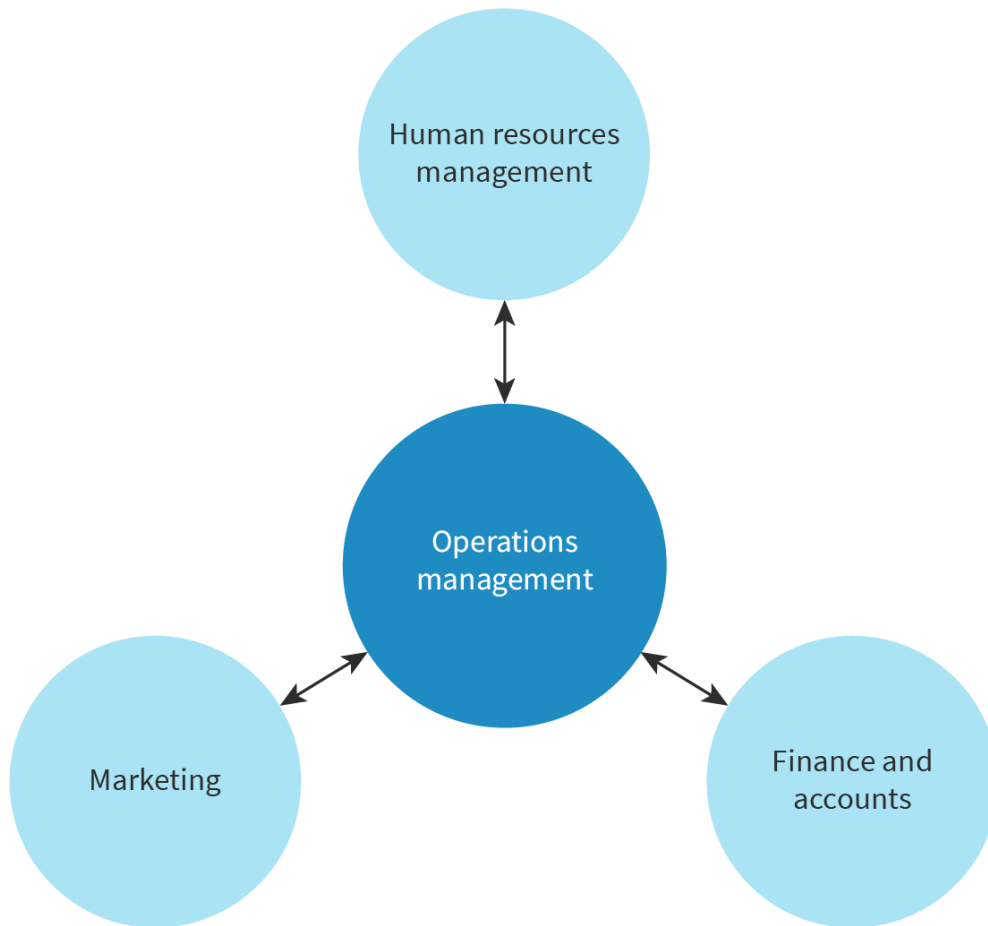


Figure 3. Operations management is affected by, and affects, the other business functions.

The other business functions support and impact the work of the operations department as follows:

- The marketing department discovers consumers' needs and attracts customers.
- The human resource department recruits, trains and motivates the employees that make the products.
- The finance and accounts department ensures that funds are in place to meet the needs of production.

But operations management, in turn, affects the other business functions too. For example, when operations managers make decisions on production methods ([Subtopic 5.2 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-39052\)\)](https://study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-39052), this may result in a need for either more or less people (human resources). If the production processes are capital intensive, it means that production is using more physical capital (machines) relative to labour. If production processes are more labour intensive, it means that production is using more

labour relative to physical capital. The human resource and finance and accounting departments will need to deal with the employee and cost implications of those production choices. All functions of the business are interdependent.

The operations team could improve cost control through lean production methods ([HL Subtopic 5.3 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-39339\)](#)). This would have a positive impact on the finance and accounts department, which may be able to record higher profits as a result. However, if cost reductions and efficiency are poorly executed, the quality of the product could be impacted, which would then affect the marketing team's ability to meet the needs and expectations of their target markets.

The other areas of operations management – including location decisions, research and development (HL), crisis management/contingency planning (HL) and management information systems (HL) – will impact all the other business functions.



Figure 4. Labour-intensive production.

Credit: Roberto Westbrook, Getty Images



Figure 5. Capital-intensive production.

Credit: alvarez, Getty Images

Exam tip

When you are discussing operations management in the exam, it is important to remember that this function of the business is interdependent with the other functions. When you make these connections, you show that you understand business as a system.

Case study

The Hershey Company

The Hershey Company (commonly known as Hershey's) is one of the largest chocolate manufacturers globally. It produces food products such as Reese's, Twizzlers, Kit Kat, Almond Joy, Mauna Loa, Ice Breakers, and Hershey's Cookies. The success of Hershey's lies partly in its effective and efficient operations management. According to Hershey's, its manufacturing process includes high levels of quality management, which includes:

- Selecting quality vendors that provide the best quality cocoa; followed by sampling, testing and certification. Carefully selecting and planning the amount of raw material required.
- Following quality assurance and safety protocols. The company believes in high production standards to ensure that it meets global standards of quality and safety; developing new production methods.
- Installing and maintaining capital equipment.
- Using high-quality packaging and labelling to satisfy customer demands; planning the entire process and ensuring that accurate supplies of packaging materials are in place.
- Providing the best customer service in order to create its brand image and maintain long-term customer relationships.

Hershey's ensures all the above are in place to provide high-quality chocolates and achieve long-term profitability. Different departments along with the operations department ensure the improvement of the overall production process.

Questions

1. Define operations management. [2 marks]
2. Using the example of Hershey's, explain how operations management can impact other business functions. [4 marks]