

5.1 Introduction to operations management

The big picture

In May 2022, as China continued to take strong measures to stop the spread of COVID-19, many factories in the country found it difficult or even impossible to continue operations. Given the major role that Chinese manufacturing plays in many global businesses, both for component parts and finished goods, this caused significant disruption to global supply chains.

Tesla, the US-based electric vehicle producer, faced this problem at its Shanghai giga factory. To meet production targets despite the lockdown, Tesla created a closed loop or 'bubble' of workers in their factories. Workers worked for 12 hours per day, and for six days per week. They were not allowed to leave the factory at the end of the working day; instead they slept on the factory floor to avoid contact with those outside. The CEO of Tesla, Elon Musk, praised Chinese workers ([https://www.theguardian.com/technology/2022/may/12/elon-musk-praises-chinese-workers-for-extreme-work-culture?](https://www.theguardian.com/technology/2022/may/12/elon-musk-praises-chinese-workers-for-extreme-work-culture?CMP=tw_tgu&utm_source=Twitter&utm_medium=Echobox=1652361539-1) for their dedication and hard work to keep operations going.



Figure 1. Tesla's giga factory in Shanghai.

Credit: Yaorusheng, Getty Images

Tesla's actions at its Shanghai factory provide an extreme example of the measures that operations managers may take to keep production going when faced with ambitious production and profit objectives. In many other countries, including Tesla's home country, forcing workers to remain in factories would be against the law. Even in China,

there is a legal 40-hour work week with limited overtime, but the law is not enforced. This makes the country an attractive place for manufacturers who want to push the limits of production.

The experience gained from the COVID-19 pandemic has highlighted the need for businesses to reconsider their operations. Some, like Tesla, have reacted to changes in the external environment by extracting even more from their human and material resources. Others are experimenting with operations methods that are more sustainable and resilient, mindful of their ethical obligations and sharing value with a wider range of stakeholders. The increasing use of remote work to provide employees flexibility is an example of this.

Concept

Ethics

Ethics refers to moral principles that govern the behaviour of a person or groups. Every business decision has moral implications, and businesses are often engaged in the question of 'what is the right thing to do?' Ethical responsibilities in business come from the relationships and networks that are formed when business organisations are established.

Operations management involves transforming inputs into outputs. This transformation requires businesses to engage with human and natural resources in a responsible and ethical way. A business needs to create value for customers by transforming resources into products. But it needs to remember to create and distribute value to other stakeholders in the business as well. As you learned in [Subtopic 1.3 \(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36515\)](/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36515), [\(/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36515\)](/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-36515) businesses have a duty to engage positively in reciprocal relationships with their stakeholders and their natural environment.

As businesses transition into the new normal, the role of operations management continues to be a key part of business planning. This subtopic will explain the basic role of operations management in the context of the other business functions.