Market orientation and product orientation

The metaverse is a growing market for many businesses. The metaverse is a virtual reality (VR) environment that users experience through virtual reality headsets. With computer technology, users can develop their own environments, creating physical spaces and communities with others.

Figure 1. The development of the metaverse raises interesting business and ethics questions related to product orientation and market orientation.

Credit: Kilito Chan, Getty Images

There is much debate about the uses and potential harm resulting from the development of the metaverse and the products that businesses might create for it. These questions are related to whether businesses are more focused on creating products, or more focused on meeting market needs.

Concept

Ethics

VR technology has made enormous advances in the past decade and is now used in many fields from gaming and other leisure activities to health care. However there are some concerns that, when people use VR technology, they may lose their ability to interact with the real world. And as a result, they may become more isolated from other people. Also, as people interact more in the digital world, there are growing ethical concerns about the impact of VR on privacy and data protection.

When businesses create new technologies, they need to consider the possible negative consequences of their products. Businesses must ensure that the benefits to people are maximised and that the harm is minimised.

Product orientation

Companies are considered to show product orientation if they prioritise the research and development of high quality, specialised products rather than prioritising market research. Product-oriented companies are inward facing. They have faith in their designers and engineers to come up with new and innovative ideas that can be passed on to the marketing department to sell.

It is possible to get a patent for innovative products and designs. A patent is the legal right to be the only producer and seller of a good for a period of time. This means that a business that has a patent can earn large revenues as the only seller. It also means that the business's competitors cannot easily copy its ideas. This leads to companies gaining a unique selling point (USP).

Toyota, for example, invested millions when researching its efficient hybrid car engines. As a result, its cars offer customers high fuel efficiency and low running costs. Despite the relatively high prices for the cars, the USP has allowed Toyota to become the market leader – the company with the highest market share – in the hybrid car market.

The key disadvantage to product orientation is that there is no guarantee customers will want to buy the final product. If this is the case, then large amounts of money invested in the product could be lost.

An example of this was when the British and French governments funded the development of Concorde, a supersonic passenger airliner. The plane was incredibly fast. A flight between Paris and New York took just three and a half hours, compared with the regular time of around eight hours. However, the plane could only hold between 92 and 128 passengers, which made it very expensive to run. As a result, only 14 planes were ever sold – seven each to British Airways and Air France – the cost of which was subsidised by the British and French governments respectively.

Figure 2. Concorde – a supersonic airliner.

Source: Eduard Marmet (https://commons.wikimedia.org/wiki/File:British_Airways_Concorde_G-BOAC_03.jpg), CC BY-SA 3.0 GFDL 1.2 (https://creativecommons.org/licenses/by-sa/3.0/deed.en), via Wikimedia Commons

Table 1 outlines some additional advantages and disadvantages of product orientation.

Table 1. Advantages and disadvantages of product orientation.

Advantages	Disadvantages
USP and quality. Product orientation can distinguish a business from its competitors by providing high quality and a unique selling point (USP).	**High risk.** There may be no customer interest in the product because it was not targeted at an identified need.

Advantages	Disadvantages
Monopoly power. New products may receive a patent. This would enable the business to be the sole producer for a period of time, resulting in large revenues and profits.	**High costs.** Product orientation requires large sums for investment – money that could be used elsewhere in the business on less risky activities.
Lack of competition. Developing totally new products may mean there is little or no competition in the market, enabling large revenues and profits.	

Theory of Knowledge

You may be familiar with facial recognition technology, which is now used in many new mobile and other devices. The purpose of this is to make the device more secure, in order to protect privacy. However, this technology can also be used for other purposes that violate privacy. For example, it can be deployed to track people in public spaces, recording their locations without them knowing. The use of this data can potentially violate human rights.

- What are the ethical implications of developing new products, when it is not understood how they will be used in the future?

Concept

Creativity, sustainability and ethics

Product orientation is often about imagining things that people do not yet know they need. This requires enormous creativity from businesses, who do not necessarily have the feedback from customers to guide their direction.

But there might be negative consequences for sustainability from product orientation. If businesses use resources to develop products that people do not need or want, this could result in waste.

Even worse are the ethical issues that emerge when businesses develop products that people do not really need or want, but use sophisticated marketing strategies to convince them that they do.

Market orientation

When companies are market oriented, the needs and wants of the customer are put above everything else. Extensive and ongoing market research will be at the centre of all decision making. New products are only developed when the business fully understands the needs and wants of the customers. This means that when new products are developed, they are much more likely to be accepted by the target market.

South Korean company Dot (http://dotincorp.com/) is an example of a business that has to be market oriented. Dot, a certified B Corp, makes assistive technologies for people who are visually impaired. In order to be successful, the company would need to understand the needs of the community it serves by carrying out extensive market research. Dot's products must be created with those needs in mind and piloted with consumers to ensure that they work for them.

Amazon is another company that is focused on its markets. The company uses sophisticated technology to gather data on people's shopping habits and their reviews of products. The company is able to use this information to make changes to its marketing mix in order to meet customers' expectations.

Figure 3. Food businesses that are market oriented will want to carry out extensive research to find out what flavours consumers like.

Credit: Edwin Tan, Getty Images

Concept

Change

To be market oriented means to be able to adapt quickly to changing external conditions. In other words, businesses need to carry out excellent market research and be flexible to respond to the changing external environment.

However, there are downsides to this customer-centred approach. Firstly, a business might develop a product based solely on its target market's needs, but its competitors can do the same. This means that the business cannot develop a unique selling point (USP), so sales and profits may be lower. Secondly, there can be problems relating to how market research is carried out. If the wrong questions are asked, products can be developed that will be rejected by the consumer once they are launched.

A social enterprise is more likely to be market oriented than product oriented. Because social enterprises focus on meeting human needs, or on solving problems in society or the environment, they need to understand those needs or problems thoroughly before developing a good or a service, or before taking other action. **Table 2** outlines some advantages and disadvantages of market orientation.

Table 2. Advantages and disadvantages of market orientation.

Advantages	Disadvantages
Low risk. There is likely to be product–market fit and, for products to be sold, this means increased revenues and profits.	**No USP.** Other companies can carry out the same market research to find appropriate products, so competition may be greater.
Repeat customers. With high product–market fit, repeat business is more likely, resulting in increased revenues and profits.	**Market research must be right.** Poor market research could result in poor product development.
Social enterprises. These will want to be market oriented in order to meet human needs or to solve problems in society or the environment.	**Agility.** Businesses must be responsive to changing market conditions; this can be difficult for some companies

Case study

Research into messenger RNA (mRNA) technologies has resulted in a number of new applications important for human health.

mRNA is a genetic molecule that exists in the cells of the human body. It gives the cells instructions to create the proteins necessary for the cell to function. mRNA can be created in a laboratory, and several pharmaceutical companies are researching how the molecule can be programmed to fight disease. For example, when mRNA is used in a vaccine, the immune system is trained to act against an infection as though the immune system had been exposed to a virus.

Pharmaceutical businesses could use mRNA technology to provide a very specific and fast response to diseases. The technology could be used to combat cancer or to reduce the immune responses that cause autoimmune diseases.

Scientists believe that mRNA could have wide, and yet unknown, applications for many other diseases too. For example, researchers are experimenting with mRNA vaccines to treat diseases such as malaria, Zika, flu and Lyme disease, as well as cancers and multiple sclerosis. Scientists have been working on mRNA vaccines for years, but proof that they work only came in around 2019.

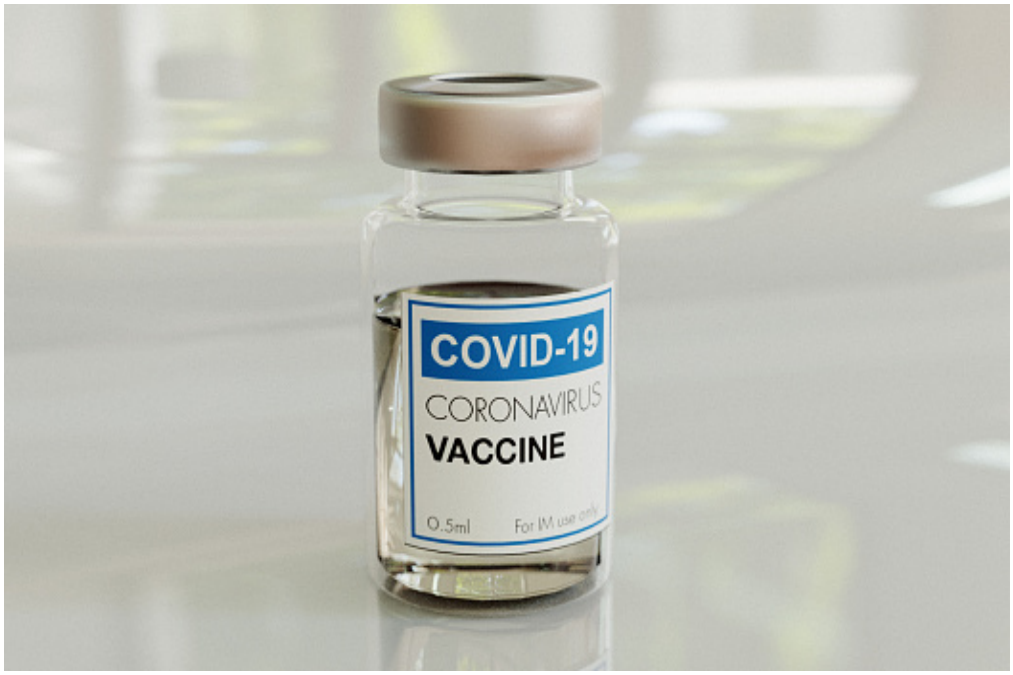

Figure 4. mRNA technologies can be used to develop vaccines, but they also have a wide range of other possible applications.
Credit: Joao Paulo Burini, Getty Images

Investment in research and development in this field is now huge. Many believe mRNA technologies could be the future of the entire pharmaceutical industry. Moderna (USA) and BioNTech (Germany) are two of the largest companies currently researching and experimenting with mRNA technologies. They have also produced two of the most effective COVID-19 vaccines.

Both Moderna and BioNTech have earned huge revenues from their COVID-19 vaccines. In 2021, Moderna earned more than 11 billion USD and BioNTech earned more than 13 billion USD. So, the huge sums of money spent in researching and developing this new technology have paid off in meeting a clear market need in the case of COVID-19. There are hundreds of other companies working on mRNA technologies, but the success of these two companies with their COVID-19 vaccines will give them a major lead, because they can reinvest their profits into further research in a positive feedback loop.

The potential for mRNA technologies indicates a growing market, but one that is very uncertain moving into the future.

Questions

1. Describe a human need that is being met through mRNA product development. [2 marks]
2. Define product orientation. [2 marks]
3. Define market orientation. [2 marks]
4. Explain how the research into mRNA technologies could be classified as both product orientation and market orientation. [4 marks]

International Mindedness

The international cooperation between German company BioNTech and US company Pfizer to produce and distribute a COVID-19 vaccine is an example of how businesses can work together to meet global human needs.

In this case, the companies worked together to improve human health by combining BioNTech's experience in mRNA technologies with Pfizer's production and supply chains, producing a vaccine needed worldwide.