

**ANL201**

**Data Visualization**

**Tutor-Marked Assignment**

**January 2021 Presentation**

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**Question 1a)**

A mission statement defines what an organization is, why it exists, and its purpose. It is a general description of its core function and objectives. It supports the vision and serves to communicate purpose and direction to everyone.

Microsoft is an innovative company whose mission to empower every person and every organization on the planet to achieve more. It describes the organization’s objectives and its strategy to achieve them. Microsoft is empowering individuals and organizations worldwide to reach their full potential by using its wide range of computing products with varying benefits for different individuals. It shows commitment to everyone without discrimination of whether technological needs are for personal or organizational uses. It remains to be accessible to every individual all around the world.

**Question 1b)**

A vision statement outlines what an organization aims to do for the foreseeable future, takes place over a period of five to ten years, or often even longer. It sets out the framework of what the business will look like in the future and sets out a defined path to prepare and deliver company strategy. A company with a powerful vision focuses on what is essential for the company and develops a definitive aim for its future. In comparison, in a company without a vision, employees will work with no purpose, feeling unmotivated and not knowing the company’s direction is heading towards.

Here, Microsoft’s vision for 2020 was to create more opportunities, innovate more individuals and organizations to thrive, and improve individuals’ lives through the power of their computing products. Microsoft reinvent productivity and business processes as they want to continue to innovate more organizations, creating new businesses to ensure that they grow through digital technologies. Microsoft intends to continue delivering its vision to everyone by consistently investing in large and growing markets. Microsoft is committed to ensuring the technologies they have created are the most sustainable ones in the world as they aim to foster a sustainable future where everyone has access to the benefits and opportunities.

**Question 1c)**

Strategic themes are the main high-level business strategies that an organization must excel in to achieve its vision. They align independent activities and focus on the functional groups that are significantly essential for the organization. Strategic themes act as the organizations’ main pillars and define the organization’s essential areas to achieve its vision. Determining the strategic themes helps to get the dominant strategy for the organization. Therefore, it helps to work efficiently.

In this case, the first strategic theme for Microsoft is they are largely invested in innovation and acquisition to expand its product range to increase their financial growth. Microsoft have been partnering and acquiring organizations and investing in datacenters and other hybrid and edge infrastructure to support their products. Instead of competing with the smaller organizations, Microsoft did partnerships with them to help them build their own digital capability by using Microsoft’s technology. Other than their software products, Microsoft also offers a large range of services including cloud-based solutions to consumers. Additionally, Microsoft have been investing in innovation like Artificial Intelligence (AI).

The second strategic theme for Microsoft is growing their brand image. Microsoft have been working to provide a sustainable future where everyone has access to the benefits and opportunities. They have been working with organizations around the world to teach young individuals with digital skills that is required for the future. Microsoft also showed their support for the nonprofit organizations by donating and providing discounted software and services. This is inline with their mission to empower more individuals worldwide without any discrimination.

The last strategic theme for Microsoft is learning and growth by creating a performance-focused culture and improving employee retention. Microsoft prioritize their employees and the families’ well being by providing them industry-leading benefits, including paid and sick leaves, as well as paid leaves of absence for a variety of life scenarios. They also create a more diverse and inclusive workplace by hiring individuals from diverse background.

**Question 1d)**

The first basic stage is data collection and storage. It refers to gathering quantitative and qualitative information on specific variables in a systematic approach for research. The challenges that may face are the cost of hiring non–locals for data collection and the cost to run its infrastructure. In this case, Microsoft is incurring high costs on their own data centers to support their cloud-based services associated with general and administrative matters that include human resources, facilities maintenance, legal, and other additional administrative fees to run them. Microsoft is mass hiring university and industry talents globally to continue to develop and deploy competing cloud-based services for people. These investments will continue to increase their operating costs.

The second basic stage is data pre-processing. It is a data mining technique that transforms raw data into an understandable format. It removes all the unnecessary values, errors in it. The challenges that Microsoft are facing is the large volume of data that they are receiving every single day with over billions of connected devices daily and the raw data that they were receiving daily might not be broken down into an understandable format.

The third basic stage is the graphic engine. It refers to the display hardware and the graphics algorithms to produce data visualization on screen. The challenges that Microsoft are facing is the limitation of what graphic engines can produce such as they cannot cater to individuals with blindness.

The last stage is human visual and cognitive processing. It refers to the human perceptual and cognitive systems that are involved in interpreting and visualizing data. It conveys the information visually using various charts to make it approachable to people. The challenges that may face are that the data representation may be biased because the person gathering the data may only focus on specific data and exclude the rest of the data during the visualization. Therefore, the data that is presented has to be understandable, meaningful for the audiences to interpret. In this case, Microsoft did not use any data visualization charts to convey their summary report analysis inside their Annual Report 2019. Overall, the annual report was too wordy, and readers may find it challenging to understand the statistics. There is no correlation between the factors that they discussed in the report, which makes readers understand the issues related to it.

**Question 1e)**

One of the interesting points from the data in Microsoft’s 2019 Annual Report is the technology transformation. Microsoft is an innovation company, and over time, Microsoft has been creating new and exciting products, services, and experiences for individuals to keep up with the digital world. To maintain competitive advantages, Microsoft has over 61000 US and international patents issued and over 26000 pending approval to be a market leader in the technology industry. Microsoft also partners with other technology companies covering the entire range of patents, and they went into an agreement with them to incorporate into their product and services.

It is a strategic move by Microsoft, as this is to ensure that they have the freedom to decide over modifications and improvements on their products. When other technology startup companies required a specific type of license, they must enter a partnership agreement with Microsoft. This way, Microsoft will have more partnerships with companies rather than competition in the market. In the long run, many companies will use Microsoft technology in the technology industry, and Microsoft will leverage on them to gain market share. However, with many patents, it also meant that all the technical information about their technology is publicly available for their competitors. Microsoft has to consistently invest in their research and development to maintain and improve their products to keep competition off.

Another interesting point from Microsoft’s 2019 Annual report is environmental and corporate social responsibility. Being a global company with all the resources that they have, Microsoft is in an excellent position to use technology to reduce environmental footprints and create solutions for a more sustainable world such as Microsoft uses their own AI technology to generate insights on the earth and supports companies that are applying AI to the environmental challenges. They have also been working with nonprofit organizations to allow individuals to learn the technology required for the future. This is an interesting point as Microsoft, being the market leader in the industry, Microsoft is leading the future towards a sustainable world with its technologies. They are impacting the planet.

**REFERENCES**

Microsoft Annual Report 2019. (n.d.). *Microsoft*. Retrieved From <https://www.microsoft.com/investor/reports/ar19/index.html>