The Impact of Digital Transformation on IT Operations

Yasser A AlQahatni
Dhahran, Saudi Arabia

Abstract -Digital transformation integrates digital technology in all business areas, notably through changing the way operation takes and delivers the best value to customers. Through the advancement in technology, digital transformation has become burdensome to most business and their operations ranging from small to big enterprises. The digital transformation uses digital technologies to modify or create new business processes and customer experiences and change the culture of how people used to think and operate before moving from analog to digital platforms. IT operations are the set of services and processes administered by an IT department within a business or a larger organization. It functions as a working group that is distinct within an IT department. However, digital transformation has influenced IT operations through the cloud, data, and artificial intelligence (AI) and its impact on the environment. The aim of this research is to examine the effect of IT operations on digital transformation.

Keywords: Digital transformation, technology, IT operations, cloud, data, Artificial Intelligence

INTRODUCTION

Information Technology (IT) operations have experienced the impact of digital transformation as it makes its way through IT. Recurrent business processes may not attract much attention to many enterprises. Nevertheless, the disruption of these practices will make organizations feel at their best ability to move to digital transformation, gain a competitive advantage, and improve the customer experience. This research aims to enlighten the ways the digital transformation has negatively and positively impacted IT operations. Digital transformation has influenced business IT operations by incorporating cloud computing, which avails many data to users. The application of artificial intelligence (AI) has also changed the business world enormously.

Data

The influx of data and its ability to mobilize, process, and analyze the information can transform enterprise information. However, the information on data comes from various areas that include customer relationship management (CRM) and the Internet of Things (IoT). Gölzer and Fritzsche (2017) elucidate that with access to such information from large enterprises' customers, the IT operations team will better understand its behaviour. Once they have predicted the customer's action, the operations will know what kind of clients they are dealing with and seek the best measures to apply to gain a highly competitive advantage over the other operators through digital transformation. Moreover, the information's safety is guaranteed, and technological systems can store the customer, employer, and company data in a large, locked, and onset filing cabinet through transformation.

Cloud

Digital transformation has positively impacted IT operations as, in partnership with the processing of data, the cloud is accessible. This has made public cloud providers consider the low cost of accessing the cloud and making the cloud services accessible to any business type, whether small or large or any task that the industry is legally investing to do (Van Veldhoven and Vanthienen, 2019). Through the introduction and improvements in the cloud, the companies will provide an optimized customer experience since most of them will incorporate the latest technology for production.

Artificial Intelligence

Digital transformation has made the IT department team acquire artificial intelligence, analyzing the processes and making recommendations on what can be automated. According to Heilig, Lalla-Ruiz and Voss (2017), AI processors will take automation, helping the employees free themselves from the more complex tasks. In this connection, the employees will take and focus on other future roles within the department. For example, artificial intelligence has become more useful in the affordability of graphics processing units (GPUs) to run algorithms in high-resolution for video games. Currently, most businesses can use artificial intelligence to solve business algorithms.

Positive Impacts of Digital Transformation on IT Operations

Digital transformation has led to increased profits in IT operations. According to Morakanyane, Grace and O'Reilly (2017), "an efficient digital service in the IT industry reduces operational costs by decreasing labor" (p. 16). The reduction of costs and workforce then improves the profits of the operations. The development of digital services promotes consumer insights and experience, which creates a digital culture making it easy to collaborate with other organizations within the IT business. Improved operating services contribute to operational innovation, which has mainly changed the attitudes and perceptions of consumers, pressurized conventional systems and created a competitive market. New and innovative technological companies have exceeded conventional businesses as a result. Digital developments have now drawn attention to particular fields of technology. Consolidated technologies in IT organizations significantly enhance the industry's effectiveness; job qualification and work quality rise. Digital technology in IT services brings some level of efficiency in production and general work performance. The machines brought in to assist in the various job positions enhance the workforce's overall look reducing the amount of time spent completing tasks.

Moreover, to adapt to digital transformation, qualified workers can learn from their managers whenever they pay

their time informative potential threats inside the operations systems. Li (2020) explains that it is essential to push leaders to ensure that the entire team recognizes all problems intimately and foresees a simple transition to digital services. Leaders should, therefore, provide the company as a whole, operations departments, and alternative customers with the necessary examples. Thus, they create higher levels of awareness across the IT operation, thereby enhancing organizational efficiency. The augmented automation of tasks and services within the digital platforms provides valuable and economic systems whereas reducing redundancy within the IT business.

Negative Impacts of Digital Transformation on IT Operations

Digital transformation has impacted the IT industry in several ways mentioned above. In IT operations, digital transformation has created other issues that have significantly affected operations diversity. The introduction and development of advanced technology impact the jobs and individual employees' skills. Some tasks performed by the employees are automated, deeming the job positions irrelevant in the organizations, which will no longer need the workforce. Digital transformation has reduced interpersonal communication in an office set up as some of the teams may be affected by a lack of a collaborative environment where they can physically share ideas for better performance. Recently, organizations have adopted Skype and Zoom technologies for communication, making it difficult for companies to maintain a healthy in-depth professional relationship.

Furthermore, IT operations have caused cybersecurity problems that make it difficult for companies and organizations to keep their data secure. Alrawadieh, Alrawadieh and Cetin (2020) elucidate that advanced technology has made more people gain knowledge on artificial intelligence, manipulate how the technology is supposed to work, and use it for their gains through fraud. For example, some organizations and enterprises worldwide have evaded direct tax using this new technology. The governments of those affected countries have failed to find solutions for those digitalized companies. However, avoiding tax encourage revenue loss in the host countries where these companies are operating their businesses. Therefore, the government and the citizens must ensure that the revenue from taxes is spent on development projects.

CONCLUSION

In conclusion, digital transformations have revolutionized the world through the advancement of technology. The IT operations have been made easy, and technology experts can record the information quickly and efficiently. The data can be stored in a large filing cabinet and retrieved any time the company needs to verify it. With improved technology, cloud providers have encouraged even small businesses to acquire services and keep up with the changing technology. There is a concern in the digital transformation over threats of data security and the safety of data stored in the cloud as a security breach becomes familiar with the advanced technology. As the world embraces digital transformation, artificial intelligence is becoming more common as more and more people are eager to learn AI and how it operates. However, advanced technology has the potential to negatively and positively affect IT operations. Efficiency, increased profits, and market competition is some of the positive impacts of IT operations, while job loss is the major negative impact of digital transformation.

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