

The Impact of Digital Transformation on Optimising Organisational Efficiency

Cen Feng^{a,*}, Dhakir Abbas Ali^b

Management Faculty of Business and Accountancy, Lincoln University College, Petaling Jaya, Selangor, 47301, Malaysia

^afeng.cen@lincoln.edu.my, ^bdrdhakir@lincoln.edu.my

**Corresponding author*

Keywords: Digital transformation; Optimize organizational efficiency; Enterprise resource planning

Abstract: The digital reform and promotion of enterprises is to implement comprehensive and systematic reform and adjustment of their strategic structure, business strategy, business operation, production management and organizational structure through the application of digital technology. The third industrial revolution has promoted the development of machinery and ushered in a new era of information technology. However, the rapid accumulation of information has brought huge troubles to the operation of a company or a certain field, and the continuous rise of operating costs caused by the reduction of operational efficiency has formed a problem with the characteristics of The Times. Driven by the fourth Industrial Revolution, digital manufacturing has gradually transformed into a common business strategy, its core is to use data as a means of processing, and rely on the ICT platform to build a new industrial manufacturing model. Three major moving factors are driving the digital transformation of enterprises: the implementation of 5G, the rapid use of artificial intelligence, and the technology separation between China and the United States. At the same time, the wide application of 5G has also spawned progress in emerging technology fields such as the Internet of Things and edge computing. In this process, many companies are embarking on digital transformation, in which artificial intelligence plays a key role, driving the emergence of more efficient and smarter production models.

1. Introduction

Digital transformation refers to the use of digital technologies to optimize a company's internal and external operational processes, organizational structures, and business strategies to achieve business expansion and profitability. At present, the global digital economy is developing rapidly, and various fields and industries are actively promoting digital transformation. In other words, enterprises in China are currently undergoing digital transformation, which is the main direction of their development. According to 2021 statistics, China's digital progress shows a steady growth trend, especially in the Internet, e-commerce, artificial intelligence and other potential segments, which have received a lot of attention and investment. At the same time, the digital transformation has also brought profound impact on the division of responsibilities of companies, digital technology can

disrupt the traditional organizational structure, product design and manufacturing models, open up new market areas and business opportunities, further improve the adaptability of the market and win the competitive advantage.

2. The significance of enterprise digital transformation

2.1 Enhance the competitiveness of enterprises

Digital technology brings more lasting benefits to companies, such as reducing overhead, improving efficiency, and optimizing resource allocation. Through digital transformation, companies can more effectively meet customer needs and improve customer experience, thus enhancing their competitiveness^[1]. Digital transformation can strengthen the ties between companies and suppliers, channel partners, customers and employees, improve collaboration efficiency, and help companies better adapt to changes in the market.

2.2 Improve enterprise operation efficiency

Through digital transformation, companies are able to automate and intelligentize processes, significantly improving their operational efficiency. With digital technology, companies can reduce manual work in the process, reduce errors and transaction times, thereby further enhancing production efficiency and improving the quality of lean manufacturing. The digital transformation can significantly improve the internal communication and cooperation of the company, eliminate the information gap, and enhance the enthusiasm of communication and cooperation. In addition, digital collaboration tools allow employees across offices to collaborate effectively without time constraints.

2.3 Expand marketing channels

Digital transformation not only brings new modes of information exchange and collaboration for companies, but also opens up diversified marketing paths for companies. With digital technologies, companies are able to leverage emerging avenues such as social media, SEO, e-commerce, etc. to promote products and services to more effectively meet customer needs and expand market share. Digital transformation can help companies more quickly capture and analyze information about consumer behavior and preferences to optimize decisions in areas such as product development, sales, and service.

2.4 Improve enterprise response speed

Through digital transformation, companies are able to adapt faster and more flexibly to market dynamics, customer needs, and competitive pressures. With digital technology, companies can react faster, allowing them to make faster decisions in all aspects of production and delivery. Through digital transformation, companies can react more quickly and effectively to ensure that their products or services perform well in the market, while preventing failure or failure to meet customer needs. The digital transformation of a company is a comprehensive, tedious and protracted process. The importance of digital transformation is not only reflected in enhancing the competitiveness of the company and expanding the marketing path, but also in improving the production efficiency, cooperation efficiency and response speed of the company. Digital transformation requires the integration of organizations, processes, and technologies, as well as methods and resources such as leadership support, effective management, and employee training.

3. The challenge of digital transformation to the organizational structure of enterprises

Enterprises have gained great development space in digital transformation, but they also face a series of challenges. Traditional organizational structures often place too much emphasis on hierarchical differences and complex divisions, however, in the digital age, more flexible and rapid response capabilities are required. In this wave of digital transformation, enterprises must address the following challenges:

3.1 Need to quickly adapt to the changing market environment

In the digital age, the market is becoming more competitive and customer needs are constantly changing. As a result, companies need to be more sensitive to changes in the market and adjust quickly. However, the traditional organizational structure often has a complex decision-making process, resulting in a slow response.

3.2 Demand for data-driven decision making

In this digital age, data is seen as a valuable asset, and companies must extract insights from big data to promote scientific decision-making ^[2]. However, in the traditional organization structure, the flow of information is limited to a certain extent, and the problem of information isolation among various departments is very serious, which reduces the efficiency of data collection and use.

3.3 Demand for cross-border collaboration

In the context of digitalization, innovation often involves the convergence of multiple fields, which requires close coordination between various departments. However, in the traditional organizational structure, the gap between the various departments is usually large, resulting in the efficiency of communication and collaboration is not ideal, which also limits the company's innovation ability.

4. Digital transformation trends

Digital transformation refers to the close integration of traditional business processes, strategies and models with digital technology, and the use of digital tools to change the way operations and management, in order to enhance the company's competitive advantage, create new business value and solve existing problems. At present, digital transformation has become one of the main development strategies of the company, with the continuous development and wide application of information technology, the trend of digital transformation is becoming increasingly prominent.

4.1 Data-driven business model

In the digital age, data has been transformed into a key strategic resource for companies, and more and more companies are adopting data-driven business approaches. By using data for forecasting, analysis, and decision making, this approach helps companies increase productivity, reduce costs, improve service quality, and enhance customer satisfaction. In addition, a data-driven business approach also helps companies to provide personalized services in order to more effectively meet customer needs.

4.2 Artificial Intelligence and machine learning

Key technologies for digital transformation include artificial intelligence and machine learning,

which help companies manage data more effectively, improve business processes, and enhance productivity ^[3]. With these two technologies, companies can achieve automated or semi-automated management, reduce labor costs, and improve efficiency and accuracy. In addition, artificial intelligence and machine learning can also help companies interpret and predict data, thereby enhancing the accuracy and effectiveness of decisions.

4.3 Cloud Computing and Big Data

Cloud computing and big data technology play a key role in digital transformation, they can help companies process large amounts of data, achieve data sharing, and enhance data security. With these two technologies, companies have the ability to manage and use their data more effectively, increasing their productivity and innovation. In addition, with cloud computing and big data, companies are able to share resources and collaborate on a global scale, thereby enhancing their overall competitive advantage.

4.4 Mobile Internet and Internet of Things

Digital transformation has benefited from the widespread use of mobile Internet and the Internet of Things. The mobile Internet can break the restrictions of time and space, enabling enterprises to carry out a variety of functions such as telecommuting, online services and mobile payment. The Internet of Things enables the connection and communication between devices, which helps enterprises manage and optimize production processes more effectively. With the advancement of the mobile Internet and the Internet of Things, digital transformation will also be further advanced.

4.5 Blockchain technology

In recent years, blockchain technology has gradually emerged, which can help companies achieve data decentralization, security and immutability. The application of blockchain technology will help companies reduce intermediate links, reduce costs, and improve efficiency and trust. In addition, blockchain technology can also assist companies in the safe management and trading of digital assets, creating more business opportunities for companies.

5. The impact of digital transformation on enterprise organizational structure

5.1 The impact of digital transformation on the composition of enterprise personnel

With the development of digitalization, there is an increasing demand for professionals with digital skills, such as experts in data analytics, artificial intelligence, and cloud computing. In addition, traditional positions also need continuous digital transformation, such as sales teams need to master e-commerce marketing skills, and management needs to be proficient in basic information technology ^[4]. Therefore, the digital transformation has a profound impact on the composition of the company's human resources, and the company must cultivate or recruit talents to meet the needs of the digital economy era.

5.2 Impact of digital transformation on the division of corporate responsibilities

With the advancement of digitization, companies have to pay more attention to the exchange of information and the sharing of knowledge, which has led to a significant change in the way responsibilities are divided. In the past, the division of responsibilities was centered on the role, but in the process of digital transformation, companies are more inclined to emphasize cross-functional

and cross-functional collaboration. For example, when conducting a digital promotion, the promotion staff must coordinate with other positions such as data analysts and product managers to achieve excellent results. As a result, the digital revolution has had a profound impact on the division of responsibilities in companies, which need to redefine responsibilities and enable collaboration across departments.

5.3 Impact of digital transformation on enterprise collaboration

With the advancement of digitalization, companies have begun to place more emphasis on collaboration, which has led to a dramatic change in collaboration models. In the past, face-to-face collaboration methods were the mainstream, but driven by digitalization, companies are starting to value online collaboration more. Cloud services, web files, web conferencing and other tools have been widely used in corporate cooperation, so that companies can cooperate more efficiently. In addition, digital changes are also driving the advancement of global collaboration, and companies are able to use online collaboration to collaborate with partners around the world.

5.4 Impact of digital transformation on enterprise management level

With the advancement of digitalization, companies are required to make more flexible and rapid decisions, which has led to significant changes in management structures. The traditional management structure was cumbersome and required multiple levels of reporting, however, in the process of digital transformation, companies increasingly prefer to adopt a flat management structure. Adopting this approach not only improves decision-making efficiency, but also enables companies to adapt more quickly to market changes and customer needs.

5.5 Impact of digital transformation on corporate culture

In the process of digital transformation, enterprises need to pay more attention to the spirit of innovation and reform, which has a profound impact on their corporate culture. This transformation requires enterprises to emphasize learning and knowledge innovation, and constantly update to adapt to the dynamics of the market. In addition, this transformation requires companies to pay more attention to the quality of customer experience and service, and improve customer satisfaction through digital means. Therefore, the role of digital reform on corporate culture is multi-dimensional, and companies must continue to update their cultural concepts and value orientations to meet the needs of the digital economy era.

6. The impact of digital transformation on corporate marketing strategies

6.1 Market positioning and personalized marketing

Digital changes give companies the ability to more precisely grasp and determine the distribution of consumers. Using the tools of big data analytics and artificial intelligence, companies have the ability to collect vast amounts of consumer information and use this information to make precise market positioning. Through this data, companies have the ability to make more precise target customer positioning, so as to personalize marketing campaigns. With the help of personalized promotion strategy, the company can more effectively meet the needs of customers, expand market share, enhance brand loyalty, but also bring greater marketing revenue.

6.2 Multi-channel marketing and user experience

The progress of digitalization has opened up various marketing paths for companies, such as social media, e-commerce platforms, mobile applications, etc.^[5]. These novel approaches give companies more possibilities to reach consumers and expand the scope of marketing. In addition, through the analysis of data and cross-path integration, the company can better understand the behavior habits and preferences of consumers, improve user experience and enhance user satisfaction. In an environment of digital transformation, companies must deeply explore the possibilities of various ways to create a consistent user experience that responds to the diverse needs of consumers.

6.3 Innovative marketing model and content marketing

In the digital transformation of enterprises, the innovation of marketing methods has been stimulated. With the help of digital technology and network platforms, enterprises can carry out a variety of innovative marketing actions, such as virtual reality experience marketing, live sales, etc., to further attract more consumers. In addition, content marketing has become a key strategy in digital transformation. The company has the ability to use high-quality information to attract the attention of customers, enhance the influence of the brand, build the brand image, and finally promote the sales of products. The transformation of digitalization has brought more innovative marketing opportunities for companies, inspiring companies to break through traditional ways of thinking and find more attractive and influential marketing strategies.^[6]

6.4 Data-driven decision-making and marketing ROI improvement

The digital revolution has brought rich data resources to companies, making business decisions more scientific and precise. Companies can use big data analytics to gain insight into market trends, consumer behavior, and what their competitors are doing to design more efficient business strategies. In addition, the digital revolution also gives companies the ability to more accurately measure the effectiveness of business activities and achieve a precise match between business input and output, thereby increasing business ROI.^[7]

Digital reform has had a multi-angle impact on the company's marketing strategy, including market positioning, promotion path, user perception, promotion methods, content promotion, and data-driven decision-making. The company must make full use of the opportunities brought by digital reform, flexibly use digital technology, and continuously improve the promotion strategy to adapt to the changing market environment and achieve the maximum promotion effect.

7. Case Study

This paper takes a certain type of enterprise as an example to explore the impact of digital transformation on enterprise resource planning. The company, which belongs to the equipment category, has fully demonstrated the process of leveraging technological innovation to help enterprise resource planning in the process of digital transformation. The company has taken a number of key measures in the process of digital transformation, which not only promoted the production and operation efficiency of the company, but also had an important impact on enterprise resource planning. In the process of digital transformation of the enterprise, data analysis technology is used to further optimize production and inventory management, and also greatly improve the efficiency of the supply chain. In the process of enterprise resource planning, big data technology is used for data analysis to help enterprises accurately predict market demand conditions, optimize and adjust production and inventory levels based on this, and further optimize logistics arrangements based on data analysis results. Managers should improve the production management and inventory management level of

enterprises, which can not only enable enterprises to better meet the market demand, but also avoid a large number of inventory squeeze, reduce the inventory risk and inventory costs of enterprises, but also better meet the needs of the market and customers. In addition, in the process of digital transformation, enterprises also use the network platform to expand their own business, further expand the market share of enterprise products, enhance the influence of enterprise products, highlight the competitive advantage of enterprises, and strengthen the digital influence of enterprise brands. In addition, the company has also taken a series of measures to strengthen production management in the production process, such as real-time monitoring of the production process with the help of information technology, the use of sensor technology to monitor the operating status of production equipment. Through these measures, the production quality and production efficiency of the enterprise are better guaranteed, which is of great significance for enhancing the competitiveness of the enterprise and enhancing the brand influence of the enterprise. At the same time, through the monitoring of the production process, the utilization rate of enterprise resources can be further improved, which can effectively reduce the waste of resources, help enterprises reduce operating costs and improve economic benefits. It is not difficult to see from this case that digital transformation will have an important impact on enterprise resource planning. In the process of enterprise resource planning, more development perspectives should be applied to look at problems, improve the adaptability and foresight of enterprise resource planning, and make digital transformation become the help of high-quality development of enterprises.

8. Conclusion

In summary, the digital transformation has many impacts and challenges on the corporate structure. Companies need to redesign their structures to break through hierarchical constraints and create more open and flexible ways of communicating. At the same time, it is also necessary to enhance the cooperation of various departments, build a digital human resource management system, and improve the education and training of employees. With these improvement strategies, companies are able to more effectively meet the demands of the digital age, enhance work efficiency and innovation capabilities, and maintain their competitive advantage.

Acknowledgement

Cen Feng: orcid.org/0009-0007-0588-1045.

Dhakhir Abbas Ali: orcid.org/0009-0000-6842-0157.

References

- [1] Pei Xuan, Liu Yu, Wang Wenhua. *Enterprise digital transformation: Driving factors, economic effects and strategy choices* [J]. *Reform*, 2023,(05):124-137.
- [2] Liu Chang, Pan Huifeng, Li Pei et al. *Research on the impact and mechanism of digital transformation on the efficiency of green innovation in manufacturing enterprises* [J]. *China Soft Science*, 2023,(04):121-129.
- [3] Duan Huayou, Yang Xingliu, Dong Feng. *Digital transformation, financing constraints and enterprise innovation* [J]. *Statistics and Decision*, 2023,39(05):164-168.2023.05.030.
- [4] Guo Feng, Yang Shangguang, Chai Zeyang. *Does enterprise digital transformation promote "incremental quality" of green technology innovation?-- Text analysis based on annual reports of Chinese listed companies* [J]. *Southern Economy*, 2023, (02):146-162.400349.
- [5] Xiao Tousheng, Sun Ruiqi, Yuan Chun et al. *Enterprise digital transformation, human capital structure adjustment and labor income share* [J]. *Management World*, 2022, 38(12):220-237.2022.0174.
- [6] Zongying Guo, Yuxiang Sun, Jingyi Li, Mengdie Lu, *The Influence of Business Analytics on Modern Management Accounting Informatization Decision under the Background of Big Data.*[J] *Accounting and Corporate Management* (2024) Vol. 6: 101-107.
- [7] Yuxiang Sun, Jingyi Li, Mengdie Lu, Zongying Guo (2024). *Study of the Impact of the Big Data Era on Accounting and Auditing.* [J]. *Frontiers in Business, Economics and Management*, 13(3), 44-47