

The Role of Enterprises' Digital Transformation in Promoting Green Development

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Abstract. Nowadays, environmental problems become a big challenge in the world. It has become essential to solve environmental problems. To solve this problem and change this situation, governments in many nations request enterprises begin to do digital transformation. In this passage, the author will discuss the role of enterprises' digital transformation in promoting green development from three industries: the manufacturing industry, the human resource service industry, and the logistics industry. In the manufacturing industry, this paper takes Tesla as an example. In the human resource service industry, this paper discusses three different aspects. Finally, in the logistics industry, this paper takes forklifts as an example. At the end of the passage, this paper will give some conclusions and advice to help enterprises to improve green development through digital transformation.

Keywords: Digital transformation, green development, manufacturing industry, human resource service industry, logistics industry.

1. Introduction

Nowadays, with the development of society and the shortage of resources, many enterprises begin to do a digital transformation. Digital transformation is about companies using new technologies to redesign and redefine their relationships with customers, employees, and partners. Enterprise digital transformation covers everything from modernizing applications and creating new business models to building new products and services for customers. In 1954 when the computer was invented, digitization and digitalization emerged, which refers to the process that information change from analog format to digital format by using digital technology. Digitalization refers to Digitalization is the process of applying digital technology to business processes and helping enterprises achieve management optimization. It mainly focuses on integrating optimization and improving business processes with digital technology. And this concept was first suggested by the international business machines corporation (IBM) in 2012. Emphasis was placed on applying digital technologies to reshape customer value propositions and enhance customer interaction and collaboration. Digital transformation has some characteristics that are customer-centric, diversified capability, intelligent brain, agile capability, AI blessing, 5G, and IT organizing ability. Green development is a new sustainable development model based on green and low-carbon recycling. Its basic connotation refers to reducing the damage to the natural environment or improving the condition of natural resources at the same time while maintaining sustained economic growth. Nowadays, green development has become an important trend. Many countries have taken the development of green industries as an important measure to promote economic restructuring. The global layout of green infrastructure is accelerating. For example, China has undergone a series of policy improvements for green development. China attended the 1972 United Nations Conference on the Human Environment and began dealing with pollution in the process of industrialization. Eco-civilization was regarded as one of the five key aspects of overall development at the 18th Party Congress. New development concepts were created. The 13th Five-Year Plan (FYP) put forth the concept of innovative, coordinated, green, open, and shared development. The 14th FYP period was a crucial stage for China's ecological conservation. Carbon neutrality and carbon peaking were incorporated into the overall plan of ecological conservation and sociology of economic development. 1+N policy framework for comprehensive green transition and high-quality growth. Besides, today, a number of studies have

shown that the development of digital transformation and green development are mutually reinforcing, which also provides a reference for the direction of future digital transformation of enterprises.

2. The Multiple Dimensions Role of Enterprises' Digital Transformation in Promoting Green Development

2.1. Take Telsa as an Example of Analyzing the Role of Enterprises' Digital Transformation in Promoting Green Development.

In the digital aspect, the promotion of digital transformation by enterprises presents multiple dimensions and multiple aspects of effects. It also has a different reflection in different industries. This paper takes Tesla as an example, which is a successful enterprise in the digital transformation of the new energy manufacturing industry as an example to analyze. As a traditional industry, the manufacturing industry should strengthen the promotion of value creation and data support to promote digital transformation [1]. Tesla started to do the digital transformation in 2011 and also began to use design studio to develop digital twin. Tesla's digital transformation mainly has three parts: research and development, marketing and service, and product.

Research and development: in the industry 3.0 era, Tesla already have production information systems, research and development systems, and service systems. However, these systems are isolated. Now, in the industry 4.0 era, Tesla uses a digital transformation to break this parclose, and mainly reflect on these aspects. Tesla is the leader in electronic and electrical architecture development, the leader of the automatic drive, also Tesla realized almost all the information in the interactive business is implemented. Tesla uses warp to integrate all information in research and development and management. The same information be used many times, to reduce the waste of resources, and improve green development. Also, in the new energy design industry, Tesla uses a digital transformation to improve the design level and design efficiency and uses data platforms to improve the quality of research and development and help green development [2].

Tesla is the inventor of the direct-selling model. Tesla separate exhibition, sale, delivery, and after-sale. Figuer1 shows the different types of Tesla stores which include two business circles, the core business circle and the outer business circle. In other business circles there are different kinds of stores, experience store and central store, and after-sale shop. Besides, Tesla also uses big data to expand its marketing channel.

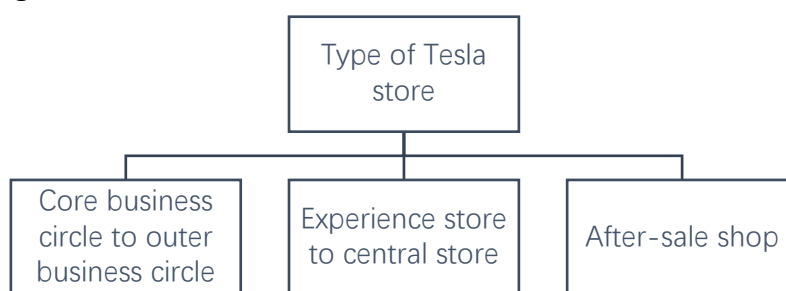


Figure 1. Type of Tesla store

Experience stores often distribute in business circles. Although the cost is high, there is a huge flow of people, which can be a good publicity function. After-sale centers often distribute in traditional car sales gathering areas. The cost is low and also close to entrepot. The distribution of Tesla stores to meet the needs of people in different areas, and reduce the waste of resources. On the other hand, communication with customers is also an important aspect of marketing service. Tesla improves organizational efficiency through the digital transformation of their website and social media [1]. People can use Tesla's website and social media to communicate with Tesla's workers and even their CEO [3].

In the products aspect, enterprises can integrate information through the network of digital transformation to achieve an accurate allocation of demand and supply [4]. Tesla has done a very

good job in this regard. Tesla almost realized digitalization. Using big data to realize online test drives, custom vehicles, and promote resource use efficiency. Besides, Tesla uses a digital transformation to increase the utilization efficiency of solar energy. Tesla use a mobile phone program originally called using solar energy to charge a car. This also undoubtedly promotes green development.

2.2. Human Resources Service Industry

Nowadays, the service industry keeps growing. As the most important component, human resources have also begun to do digital transformation and promote the green development of enterprises. In the current digital form, the different parts of the human resource service industry are not independent but should be multi-faceted cooperation to promoting digital transformation to improve the green development of enterprises. Figure 2 shows the steps of realized green development.

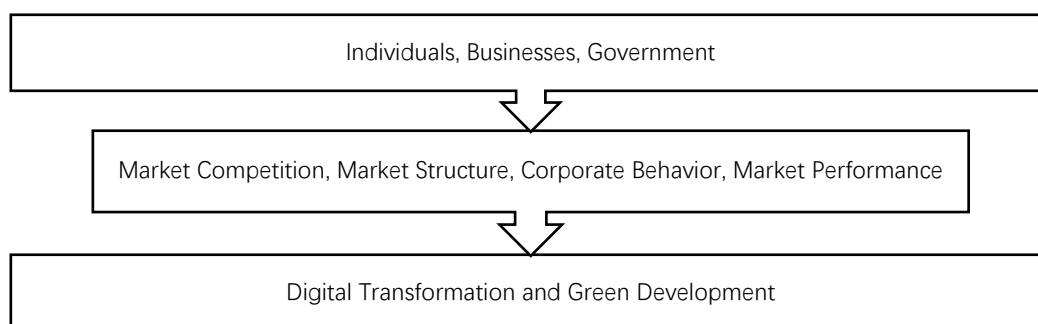


Figure 2. Human resource service industry development model

In the human resource service industry, digital transformation and green development are mainly promoted in the following ways, digital talent innovation ability, enterprise digital transformation impetus, and digital development government capacity [6].

Digital talent refers to industry insiders with complementary skills, in the knowledge-intensive human resource service industry, who have highly innovative abilities digital talent is essential. Digital talent people use their professional knowledge and innovative ability to integrate, process, and share to form the enterprise's advantages and then transform them into services. In this process, digital talent people use the internet and data brought by the digital transformation, reducing the waste of resources.

The enterprise digital transformation impetus, is mainly divided into two following points, the financial support ability of the enterprise and the development space of the enterprise. In the financial support ability of the enterprise, as the new style industry, traditional investment areas such as venture capital and loan at the bank are more difficult. Through digital transformation, enterprises can find or innovate new ways to finance and attract more financing to improve green development. In the development space of the enterprise, if the service industry enterprise is gathered, it will cause the siphonic effect. Enterprises can attract more service industry enterprises to gather, then enterprises can improve green development through industrial upgrading, and information sharing.

Digital development government capacity is the government's regulation of enterprise behavior in digital development and digital transformation. In the role of regulating the market and enterprise, the government has a very big influence on digital transformation by enterprises to improve green development. By setting the standard of digitalization, improving the enterprise's ability to digital transformation, subsidizing enterprises, and other ways, the government can help to reduce the waste by enterprises. Also, the government can subsidize enterprises to develop new technology to do energy conservation and emission reduction, help them realize green development.

2.3. Logistics Industry

In this sector, this paper takes the Chinese logistics industry as an example to discuss this promoting effect on green development. Although China has experienced a severe economic downturn after the new coronavirus, it has also made Chinese enterprises start to think about how to

improve their emergency response capabilities, and what changes should be made [7]. According to 2022 China logistics industry research, China's total amount of social logistics is increasing from 219.2 trillion to 335.2 trillion. The overall trend is still in continuous growth. With the digital transformation, the importance of 5G, intelligent device, and other technologies to the logistics industry are increasing.

In the logistics industry, forklifts are essential. In the Chinese forklift market, because of the digital transformation, the forklift market is also becoming more digital and intelligent. Figure 3 shows three kinds of forklifts.

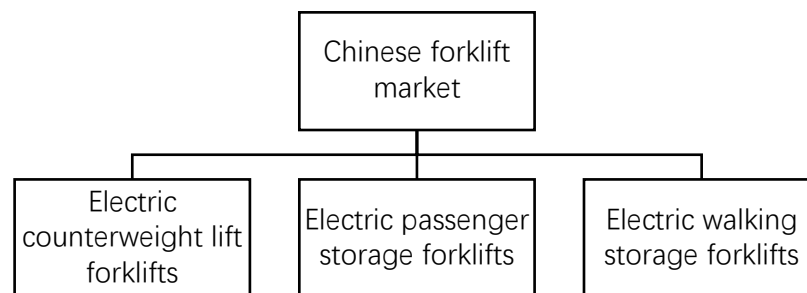


Figure 3. Chinese forklift market

Nowadays, forklifts in China are mostly changed to new energy resources forklifts, gradually replacing traditional internal combustion forklifts. This change helped save resources and energy and help improve green development.

In the 5G aspect, China uses the logistics intelligence system to save energy and help improve green development. In the Chinese logistics intelligence system, there are four components, unitized logistics technology, intelligent logistics equipment, internet of things technology, and intelligence logistics information system. With 5G technology, these components combined not only save cost but also reduce the waste of energy.

In addition, the binding force of standardization is also necessary for the green development of the logistics industry [8]. The proposal of such binding policies requires the government to see the development trend when enterprises carry out digital transformation to promote green development, form a joint force through multiple policies, and regulate the green development behavior of enterprises [8].

From these two examples in the Chinese logistics system, this paper consider that technological innovation ability is very essential to the digital transformation in the logistics industry [9]. At the same time, use multiple channels and platforms to promote digital transformation and green development [10].

3. Conclusion

In this passage, this paper came to a few different conclusions. First, in the manufacturing industry, the improvement of efficiency of information brought by digital transformation can improve the enterprise's green development. In the human resources service industry, the upgrading and improvement of various resources brought about by digital transformation, as well as their cooperation, have greatly promoted green development. In the logistics industry, technology innovation brought by digital transformation can improve green development. In the future, enterprises should continue to deepen digital transformation, improve green development and help to solve environmental problems. This passage helps to sort out the role of digital transformation in promoting green development in different industries and provides the direction for the future development of enterprises.

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