

Research on Digital Business Model Development

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Abstract. During the outbreak and spread of the epidemic, the global economy was severely hit. However, the digital economic model has achieved certain developments, and this trend has attracted widespread attention from society. This study will analyze the development process of digital business models at different time points and evaluate and predict future trends. Through a segmented analysis of different derived business models, the process of enterprise digital transformation will become clear. Some representative companies will be studied as examples, which are an important part of the digitalization process. After a series of analyses, the development of the digital economy is completely showing an upward trend. Through the analysis of people's gradually mature and perfect digital lifestyle during the pandemic, companies must use digital transaction models to increase sales if they want to achieve progress in an era of rapid development of digital technology. The global development of the digital economy and its contribution to GDP are inevitable.

Keywords: Enterprise digital transformation, The formation and application of e-commerce, The inevitability of economic digitalization trends.

1. Introduction

1.1. Background

After the spread of the new coronavirus epidemic, new business models have attracted much attention. Taking e-commerce as an example, digital businesses are advancing globally. These processes are based on the digital economy, and digital transformation drives global economic development. The development of trade digitization has become an internal driving force to promote global trade. The formation of the digital economy has broken the traditional way of business transactions, and the way consumers obtain information and services has changed. The innovation of business models has achieved good results through the support of communication technologies such as the Internet. For this kind of e-commerce, consumer demand is gradually increasing. This is because industrial intelligence makes it more convenient to obtain goods and services, and big data analysis of personal preferences reduces unnecessary communication costs. The development of IT technology has even changed the employment direction of many people. However, there are also many problems in the process of integrating the digital economy with industry. Not all industries can complete digital transformation.

1.2. Related Research

Barefoot et al. emphasized that the digital economy lacked an accurate data measurement method. The existing measurement methods used by BEA, although not covering all products, have shown a high degree of overlap. BEA's ICT department utilizes a series of network tools to calculate, including the internet and digital media. The authors finally presented various types of data used in the digital economy through an analysis of data and charts [1]. Günter and Ingo compared widely used contemporary digital technology applications. The authors found that the main characteristic of digital technologies is that different platforms provide similar types of services. Different government regulations and interventions in digital media affect the competitiveness of platforms. The authors found that the output of contributors is inversely proportional to the number of licenses. Telecommunications regulation is moving towards consolidation and several issues have been highlighted [2]. Borremans et al. analyzed the development trends and impacts of the digital economy.

The cornerstone of the digital economy is the network, and there is a close connection between the two. Analyzing employment rates, the authors found a gradual increase in the number of jobs related to processing information. In the process of opening up new markets, many models derived from the digital economy have been put to good use. IT strategy systematically determines some company changes and models [3].

Kobilov et al. compared the characteristics of digital economic development and key technologies between regions. The authors mainly examine the benefits of information technology for the agricultural sector as well as for social welfare systems. The unique detection system brought about by the digital economy can improve agricultural production efficiency and increase yields. Some data platforms make contributions to national security systems and railway systems [4]. Ayres and Williams explain the current status and development prospects of ICTs. Distance education and office work have greatly improved work efficiency, but they have also weakened people's ability to communicate face-to-face. The authors found that there were no major research breakthroughs in previous communication technologies, and these innovations require continuous accumulation. Future technology platforms should focus on the quality of goods [5]. Bencsik made connections with the digital economy by studying the development of industrial enterprises. These research results and analyses are based on surveys of companies. The author assessed employees' actual performance by measuring how often they spoke and what they remembered. Many advanced countries are preparing to develop cutting-edge technologies, and almost 89% of companies have created data analysis departments [6].

Litvinenko examined the impact and applications of the digital economy on the mining industry globally. The author found that there is considerable room for improvement in the development of the mining industry due to construction costs. The production costs of this industry cannot promote the development of digitalization, such as manpower. The development of science and technology will reduce costs and improve the competitiveness of the mining industry [7]. Mulyadinov mainly studied the relationship between business and the digital economy in developed countries. In many top companies in the United States, data analysis and integration are well-used. The author also found that many remote areas lack various communication technologies such as the Internet, and economic development is relatively slow. This shows that the digital economy industry can help improve people's quality of life [8].

Chen examined the impact of various platforms on consumers and merchants. With the rapid development of the digital economy, the author finds that much of the expanded market capacity relies on platforms as media. Search costs are becoming lower and lower, and the digital economy has made a great contribution to the innovation of the era. In this process, both consumers and merchants have improved their utility, making transactions faster and more efficient [9]. Ahmedov studied the impact of digital economic technologies on the form of international trade. Taking the country of Uzbekistan as an example, the author found that the development of the digital economy can lead to rapid GDP growth. The transaction method in trade has changed to real-time communication, which reduces costs and increases efficiency. The digital economy provides people with many invisible employment opportunities and improves social welfare [10].

1.3. Objective

This study will discuss the innovative development of specific business models and the problems encountered. Through the analysis of different industries in various countries, the chain analysis of the digital transformation system will be completed.

2. Existing Digital Economic Models and Their Formation Processes

2.1. The Initial Construction of the Digital Economy

Digital transformation is closely related to information technology. It can even be said that information technology is the foundation of digital transformation. The concept of digitalization

originated in the 1950s when the creation and popularization of computers represented the beginning of digital transformation. Digital business models have many different forms, the most well-known of which is the electronic business model. Around the 1960s, American companies and individuals began to use telegraphs to send business documents. Then came the fax machine, which made electronic data more widely available. But it wasn't until the early days of e-commerce around 1990 that it took off. Due to the rapid development of Internet technology, the e-commerce model has been widely used by people. In 1995, China established its first electronic shopping mall, which marked that the entire society was developing toward informatization. Since then, e-commerce platforms in China have begun to develop rapidly, and the electronic transaction model has met the needs of consumers with its convenient and effective advantages. Around 2010, Alibaba launched the Taobao shopping platform, which made e-commerce more tangible and provided people with a cost-saving way of selling. The digital ecosystem model is another complex but profitable business model. It is mainly used by a company to build a digital ecosystem and then connect consumers to different services. One of the most famous examples is Amazon, which in 2000 rented servers to other companies through huge server systems. Finally, Amazon could obtain a huge database from it to meet consumer needs more accurately. Amazon was also gradually allowing external companies to participate in the ecosystem it had established, and e-commerce was the beginning of this union.

2.2. Different Manifestations of Digital Transformation During the Epidemic

The COVID-19 epidemic broke out at the end of 2019, and since then contactless consumption methods have been promoted. This has stimulated the development of digital business methods to a large extent. In 2020, the total scale of the digital economy in 47 countries around the world reached US\$32.6 trillion, accounting for 43.7% of GDP. The total scale of China's digital economy has reached 39.2 trillion-yuan, accounting for 38.6% of the country's GDP, currently ranking second in the world. People cannot go to the offline real economy to make purchases, so consumers' demand for online shopping will increase. This is mainly reflected in the fact that people have to buy daily necessities from online platforms. For e-commerce, this is an excellent opportunity to increase sales. However, due to the impact of the epidemic on the purchase and transportation of these stores, it is difficult for online stores to recover from the impact in a short time. Generally speaking, the overall situation of e-commerce has improved during the pandemic, because people's price elasticity for many online products has declined under such extreme circumstances. At the same time, many other digital lifestyles have also been integrated into people's lives. The emergence of health codes, itinerary codes, and online office work have affected our lives to a certain extent. This shows that digital life continues to develop during the pandemic and has formed a stable trend. As society fights the epidemic, many traditional companies have increasing demands for digital transformation. This is because digital technologies such as Internet technology and big data have shown great popularity and importance. During the outbreak, a new community business model developed rapidly. Community businesses did not receive much attention before the pandemic. However, during the pandemic, community commerce integrated online and offline. Many stores adopted contactless delivery methods and achieved considerable sales within the community. These evolving business models are closely related to digital technology, which fully illustrates the rapid development of the digital economy.

2.3. Rapid Development of E-Commerce and Digital International Trade After the Epidemic

After the epidemic ended, China's entire economy was hit hard. The retail industry has been greatly affected, with many small and medium-sized enterprises facing bankruptcy. This is because consumption power has dropped significantly due to the impact of the epidemic. But at the same time, the epidemic has also accelerated the digital transformation of enterprises, and many enterprises are digitizing according to their original operating models. After the pandemic, almost most people in society are familiar with and accustomed to digital life, which provides good opportunities for the digitalization of business. Taking e-commerce as an example, people have become accustomed to

purchasing daily necessities online during the pandemic, so this has formed a kind of inertia. The express delivery industry is developing rapidly, especially after the gradual lifting of the lockdown. Among them, the development of cross-border e-commerce also plays a major role in international trade. After the epidemic, by digitizing traditional foreign trade companies, foreign perceptions of Chinese products have also changed. If we use e-commerce, a fast and attractive way to trade, the inherent low-end impression of our domestic products will be broken, thus promoting the success of cross-border trade. The speed of online international trade allows countries to quickly and comprehensively grasp each other's information. E-commerce has also seen an influx of many different digital technologies, which are mainly online marketing and virtual marketing. Alibaba, a giant B2B company in China, held an online fair in June 2022, which attracted retailers from all over the world to participate. Through the promotion of new online trade business methods, small and medium-sized enterprises can directly participate in international trade through new international trade platforms. These companies can identify consumers' needs more quickly and accurately and provide optimal services, which has greatly helped the surge in online consumers. In summary, the digitalization of various enterprises has developed rapidly after the epidemic, but this is also a change based on adhering to some original strategies.

3. Development Prospects and Suggestions

3.1. Government

The digital economy has developed rapidly in recent years, and the government has issued some policies for the future development of the digital economy. The proportion of the digital economy in the national GDP is increasing year by year, and its amount will reach 12.5 trillion in 2025. The introduction of policies undoubtedly protects the digital industry. On January 12, 2022, the State Council promulgated the "145 Digital Economy Development Plan". The main purpose of this plan is to establish a complete data system on the premise of developing basic digital Internet technology. The digital technology and production efficiency of the industry can be improved under this policy. And the government also intends to realize the digital transformation of some state-owned government industries. These plans are reasonable forecasts based on the national economic situation. However, according to statistics from the China Academy of Communications, in 2021, the scale of the U.S. digital economy ranked first in the world, reaching 1.53 billion. China's digital economy has a scale of 710 million, ranking second in the world. However, there is still a certain gap between China's overall digital development situation and European and American countries. Therefore, at this time, policy support from the government is very important. In February 2023, the State Council issued the "Overall Layout Plan for Digital China Construction". In this document, the government clearly stated that digital construction should be given top priority when carrying out regional construction. This has also become a major criterion for evaluating regional cadres, stimulating the development of the digital economy. This document also emphasizes the integrated development of the digital economy and other real economies in the digital era, and that the reform and innovation of digital technology is extremely important. These policies have accelerated the rapid development of the digital economy and laid a solid foundation for intelligent production. As digitalization matures and develops, agriculture also needs digital transformation to achieve market development. However, the instability of agricultural products and the immaturity of the transportation chain prevent agriculture from quickly integrating with digital technology. Therefore, government measures to support agriculture are extremely important. First of all, the development of electronic commerce for agricultural products is uneven in various regions, which means that the government needs to continuously optimize and balance the development of electronic commerce to prevent the occurrence of monopoly. Secondly, the supply chain, transportation chain and food preservation need to be improved.

3.2. Firms

In the current era of rapid development of the digital economy, enterprises have good development prospects. Since the epidemic, the global economy has recovered slowly, and the digital economy has become a major opportunity for economic development. The development of each enterprise must carry out blockchain upgrades based on industrial digitization, with the main purpose of allowing consumers to become the dominant party in the market. Decentralization can make the data system more complete and reduce the possibility of data confusion and loss. However, the digital transformation of the traditional real economy cannot be achieved by simply introducing digital technology. Instead, strategies must be formulated by the company's own operating system. The quickest way to achieve transformation now is to introduce an e-commerce platform. This method provides enterprises with great exposure and maximizes benefits by creating a virtual consumption platform. However, in the era of new e-commerce development, artificial intelligence technology and big data provide consumers with multiple consumption patterns. In a market where many companies want to achieve digital management, competition is inevitable. In order to gain a place in the future market, enterprises need to analyze and master big data. When a company can fully grasp consumer data in its own market, the transparency of the market will be greatly increased. Enterprises can formulate sales strategies more accurately and achieve precise marketing. Another important method of development is innovation. What stands out among many marketing methods must be a unique business model. For similar companies, becoming a category pioneer is extremely important.

3.3. Individuals

With the continuous advancement of innovative information technology, digital labor has become a major trend. This change has a huge impact on an individual's employment prospects. Then there are two main categories of digital talents, including professional talents who are proficient in digital technology and general talents. Professional talents have mastered the center's information technology, while general talents use various digital technologies in the platform. Employment flexibility will be improved under such circumstances. There are thousands of job opportunities derived from various digital platforms. This is an invisible way of employment. For example, when working on an e-commerce platform, people can freely choose their working hours and achieve an independent and free form of work. However, in this invisible employment mode, young people should have the ability to discover new business opportunities and cannot be limited to the present. Career choices have also become diversified. Due to the convenience of information technology, young people have more time and energy to choose personalized employment. Employment inclusion for young people is also increasing in digital industries. Regarding personal consumption habits, the digital transformation of major enterprises has changed our consumption of goods from offline to online. Through various consumption methods, consumers have gradually improved their comprehensive understanding of information. However, the amount of persuasive advertising received has increased, so individuals should make rational choices when consuming.

4. Conclusion

This article analyzes several previous research documents in the field of the digital economy and finds that the digital economy has developed significantly in many fields, the most noteworthy of which is the increasingly mature business system of digital transformation. This research is based on this topic. This research mainly focuses on the impact of different time stages and social changes on the digital economy. Among the global digital business models, the most rapidly developing category of trade is e-commerce. An analysis of the measures taken by Alibaba before and after the epidemic shows that the digitization of many companies is inevitable. Because companies with great influence like Alibaba and Amazon have become role models for digital transformation for other companies in the market. Especially after the epidemic, people began to focus on digital lifestyles, and even international trade was moving closer to online contract transactions. Companies had to extend digital

technology to expand the market to survive. Through multi-faceted research and analysis, the digital economy has great development prospects. However, the self-driving force and market efficiency of enterprises are key factors for the success of digital transformation. At the same time, the government's strong support and the issuance of various policies are also indispensable.

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