# View of Financial Development and Transformation under the Background of Digital Intelligence

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# Abstract

With the vigorous development of digital technology and the rapid increase in the degree of application, the definition of "digital intelligence" is constantly enriched and extended. The rapid development of digital society with information technology as the core has promoted information exchange and information sharing among multiple subjects, technological progress has brought about the development and change of intelligent finance, which is a great inspiration and help to social and economic activities nowadays. Nowadays, digital intelligence management is more valuable and has many economic benefits and positive effects on promoting the development of new business models in the Internet industry. At the same time, the dilemma faced by intelligent finance in the context of digital intelligence should be solved in the process of technology development, system integrity, and market environment improvement.

#### **Keywords**

Digital Intelligence; Financial Development; Transformation; Challenge; Development.

# **1. Introduction**

At present, the concept of digital intelligence has been widely used in the world, and countries around the world are gradually recognizing the role of intelligent finance in economic development. The digital intelligence of finance is more obvious for giving full play to the function of basic resources and technological innovation engine of data in economic and social development, promoting the development of digital economy and society, and maintaining the sustainable prosperity of digital economy and society. China has become the world's digital power, the digital economy has become a new economic growth point. In this context, traditional finance should break through the existing dilemma, better stimulate its vitality and ensure its ability to harness data to bring more business value.

# 2. Development and Transformation of Finance under Digital Intelligence

Traditional finance is built based on traditional economic activities, and in the age of information technology, it is faced with problems such as time-consuming and high error rates in handling too much complex data. Unlike traditional finance, digital finance can be more easily understood as intelligent finance, where traditional finance is informationized and intelligently integrated to establish a financial information-sharing platform, share data and information processing, increase efficiency and improve interaction with customers. Digital transformation involves more than just deploying digital technology; it also requires more hands-on organizational work. Most organizations are now deploying transformation initiatives aimed at reducing time to market, staying competitive, and optimizing the customer experience. According to a recent report by Meticulous Research, the digital transformation market is very large and is expected to reach \$3.2 trillion by 2025.

In the era of digital development of information, digital has long become one of the most important production resources in enterprises. In the era of information technology, the formation of big data wisdom will be able to activate the creative vitality of enterprise market players, thus promoting the disclosure, flow, and sharing of enterprise data. This transformation is both an opportunity and a challenge, and by actively promoting the transformation of SMEs' data intelligence, SMEs will be able to take the lead in future market competition. 2021, according to a research report from the U.S. IDC (Internet Data Center), 67% of the top 1000 companies in the world and 50% of the top 1000 companies in China will take digital transformation as the core of their strategies. This shows that digital transformation has become an inevitable trend. In the Internet era, the technological change of China's SMEs is usually led by the government's Internet informatization department to promote. The digital transformation of enterprises is the informatization of business processes and the comprehensive information of various business management links. Through digital information to promote the company's operation and support the company's Decision-making. As the two core data sources of enterprises, business, and financial branches, will become the main part of the company's digital transformation, more should play a leading role in the digital transformation strategy.

#### 3. The Difficulties and Challenges of Finance under Digital Intelligence

#### 3.1. Lack of Composite and Professional Talents

Generally speaking, the knowledge structure that finance personnel needs to include in the information environment mainly includes four levels, which are conventional knowledge, accounting professional knowledge, and information technology knowledge and business knowledge. Digital intelligent finance requires finance personnel to have a fairly high professional operation of frontier technologies such as big data information discovery, cloud computing, artificial intelligence, and blockchain, it needs to complete the transformation from traditional finance to a new model of data sharing, information processing intelligence and business process automation. At present, as the finance within the company is mostly graduated from financial management, and the knowledge structure is relatively simple, they do not have professional knowledge and practical experience in big data analysis, model building, and digital intelligent finance, which causes difficulties in implementing digital intelligent finance. Enterprises urgently need to build a public network platform for finance, reduce the demand for basic staff, free finance from the basic industry, and gradually carry out digital transformation. In addition, in the face of big data analysis, cloud computing, and other cutting-edge technologies, there is no effective docking knowledge and ability with traditional finance work, which may also cause traditional accounting staff can not accurately understand and be competent in the ability to work under intelligent finance, which is very much in need of composite or professional staff support.

# 3.2. Solidification of Traditional Thinking

Traditional financial thinking is no longer able to meet the needs of digital intelligence, but many small and medium-sized enterprises are still constrained by traditional finance. There are many levels within the enterprise, and the accounting units are wide-ranging, spanning a wide range of difficulties. Traditional thinking has existed and gradually solidified, for example, the perception of finance is only simple bookkeeping, and in the era of information technology, not willing to make new attempts and changes to their own business. They are not sensitive to the construction of financial digital intelligence. The change of roles and responsibilities requires finance staff to actively master new professional knowledge and big data analysis skills by the reformed and solidified orientation thinking, and actively adapt to the new changes in digital intelligence work to adapt to the new financial ways and methods.

#### 3.3. Low Degree of Financial Informatization

The overall financial informatization of the company is low and the information system is not perfect. Currently, the accounting construction is relatively complete, except for the absence of other information systems, which leads to an unbalanced construction of the entire information system. The use of accounting management information systems that are still kept at a simple low level of efficiency can lead to low benefits for the company, which can negatively affect the effective development of the company. In addition, the various departments are not closely linked, the management level is uneven, the information technology differs greatly, and the additional impact on data at all levels is large, which also reduces the efficiency of information resource sharing. In addition, many organizations do not know enough about the importance of financial informatization system integration and interconnection, they believe that financial informatization construction knowledge is specialized for the finance department. It often does not pay enough attention to the importance of financial information integration and interconnection, thus neglecting to invest energy in the construction of an informatization system.

# 4. The Role of Digital Intelligence Technology in the Development of New Finance

#### 4.1. Reduce Personnel Costs and Overhead

In the past, most of the financial management aspects of the work need to be done manually, many of the contents of the difficulty are low, it takes a huge amount of energy and time, which will increase the workload of employees, talent utilization efficiency will be reduced. Intelligent financial systems can be more accurate for each financial flow of more detailed entry and audit, accuracy, and speed greatly improved at the same time, reducing the ineffective human time. At the same time, intelligent financial development also reduces the work pressure of the company's managers to a greater extent, thus greatly reducing the work time frame and cycle, so that the company's financial management work can be carried out more quickly and accurately.

#### 4.2. Improve Enterprise Management Mechanism

The digital intelligence of enterprise finance is an inevitable trend in the current social situation, and the application of digital intelligence can better strengthen internal control and improve the whole supervision system. With the continuous development of information technology and intelligence, digital intelligence can better help the whole enterprise to reconstruct and upgrade. Along with the rapid development of "big intelligence, things and clouds" (big data analysis, intelligence, Internet of things, mobile Internet, cloud computing, etc.), the company's operating data and financial information can be processed through intelligent computing, thus enriching the information for the company and simplifying its internal management mechanism, it reducing excessive and cumbersome management processes and material resources. They becoming an inevitable way for the company to realize the transformation from the traditional financial management model to digital intelligence. The path of transformation from traditional financial management model to digital intelligence. The purpose of the transformation of financial digital intelligence is to better serve the development of normal business operations so that business processes have supporting digital and intelligent financial support services. After the above elements are clarified, the direction and framework of the financial transformation of the enterprise will be built, and then it needs to be implemented step by step.

#### 4.3. Provide Timely Decision-making Information

The use of the new generation of information technology is breaking the pain points of the traditional enterprise financial management model. The development of digital intelligence provides SMEs with personalized in-depth financial services such as financial data analysis, big data Decision-making, and enterprise information consulting services to help SMEs operate with refined management. Finance, led by Digital Intelligence, will better help enterprise managers to make investment and strategic choices and lay a good foundation for accurate Decision-making. In addition, digital intelligence will also help enterprise finance to provide effective investment information and grasp opportunities in Decision-making thinking from "intuitive Decision-making" to "data Decision-making", and no longer simply rely on the intuitive judgment of managers. Accurate arithmetic, data, and algorithms will bring new impetus to enterprise digital intelligence. Enterprises pay for the range of financial budget data, and summarize and analyze the decision according to the data exported from the system, to avoid system errors caused by inconsistent information in each system, and to realize the healthy implementation of the financial system and effective analysis of the decision, to improve the accuracy of the decision.

# 5. Enterprise Digital Intelligence Transformation Example

Today, enterprises want to create a competitive advantage of differentiation, they inevitably need flexible business process processing, dynamic and variable organizational structure, and low-cost operating system. In terms of technology implementation, the transformation of digital intelligence is the way to go. To build an open, scalable, highly integrated, and connected cloud service platform, to closely connect various required capabilities and share various required resources in the cloud, this is the key thinking for enterprises to acquire digital intelligence capabilities. The following is an analysis of Wal-Mart as an example.

Wal-Mart has always led the development of retail technology. In 1972, Wal-Mart established the first worldwide data processing center, and in 1987, it first implemented the communication of data using satellite for the first time, so that the data of each store can be transmitted to the management in real-time through the satellite system for timely decision analysis.

And now, retail giant Walmart strives to transform into a technology and innovation company to make shopping easier for customers and provide new digital experiences. The focus is on rearchitecting their e-commerce business into a full transformation, and have set a transformation budget to achieve this, with them spending \$11.7 billion on technology in 2018. They have partnered with Microsoft in a strategic partnership to leverage their advanced computing capabilities to expand their artificial intelligence, machine learning, and data analytics initiatives, and with Google for voice shopping. They are also experimenting with instore delivery by drone, in-store inspections with robots, and several other new businesses. What's more. Walmart has accelerated its digital transformation efforts by building a hybrid cloud platform that also underpins its data lake, allowing it to run advanced analytics to gain insights about store operations and customer experience. Walmart is also using algorithms to optimize the location and quantity of inventory to better predict demand. All of these initiatives aim to better transform the company's digital intelligence and adapt to the information, digital society.

Walmart in digital transformation is becoming different: expanding its brands, investing more in building logistics supply chain, accelerating the layout of omnichannel, and planning to open 500 new stores and cloud warehouse in China in the next 5-7 years." Continuing to build differentiated core businesses, especially in private brands and fresh produce, accelerating the pace of omnichannel and format change are the three priorities of Walmart China's strategic

development." said Chen Wenyuan, president and CEO of Walmart China. These changes were evidenced in Walmart's third-quarter 2019 earnings report, where Walmart China sales grew 6.3 percent with comparable sales up 3.7 percent, the best sales performance in China in more than five years, amidst widespread margin compression in brick-and-mortar retail, and Sam's Club sales reached double-digit comparable growth, stemming from strong fresh food and omnichannel growth. These sales increases are inextricably linked to the company's successful digital intelligence transformation.

In addition, Walmart has been investing in digitizing all aspects of its business-from supply chain to sales, customer service, marketing, and store operations-to improve its operational and cost efficiencies. The digitization of Walmart's supply chain is integral to the success of its omnichannel strategy, which allows the company to serve customers via online mobile devices. Walmart's digital intelligence transformation has generated significant profits and solidified its position as a retail giant. At the same time, it proves that the transformation of enterprises into digital intelligence is an inevitable step for enterprises to move forward, expand their influence and increase profits. Walmart, as a typical case of ultra-digital intelligence of retailers, has been able to run ahead of the trend every time, which lies in its ability to step on the rhythm of market changes, and to respond to market changes flexibly and decisively from itself, and take strong measures to promote the transformation in time. A whole set of smart retail solutions, from unmanned payment to sweep code shopping, is believed to bring inspiration to more retail industries.

#### 6. Summary

Under the tide of modernization and transformation supported by three technologies of computing power, data, and algorithms, Chinese business is becoming a major trend of "digitalization of all business and digital business". Under the current situation of China's digital economy and intelligent social transformation, the accounting industry needs to actively comply with technological advances and take the initiative to innovate to keep pace with or even lead the times and usher in greater development opportunities. Enterprises need to always integrate digital intelligence into finance, and constantly update the corresponding system and management methods so that the financial work of enterprises can continue to advance in the direction of better. The relevant government departments should issue official policy documents and specific rules and regulations on the construction of digital intelligence in finance, to provide scientific reference standards for the systematic construction of relevant organizations, to prevent non-compliance with the rules and regulations in the direction and standards of system construction, which may delay the normal operation of the entire financial system. Relevant institutions should be guided by the relevant national policy documents, planning and arranging the general situation of information system construction according to local conditions, organically combining business characteristics with policy documents, timely introduction of the financial intelligent system, and interconnection of the institution can fall into place rules and regulations, to provide a solid foundation for the construction of financial information system. In addition, the construction of digital intelligence also needs to draw on the leading practices of the industry at home and abroad to promote the gradual development of enterprises to information technology, intelligence. And based on the development trend of financial technology and future digital transformation requirements, we provide intelligent financial system construction services to help customers optimize financial organization structure, processes, and systems, systems, and data, and build four capabilities of strategic Decision-making, business-driven, data management, and technology-enabled to promote the implementation of intelligent financial transformation.

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