

The Influence of Digital Transformation on the Quality of Enterprise Financial Accounting Information and Its Optimization Path

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Keywords: Digital transformation; Enterprise financial accounting; Information quality; Optimized path

Abstract: With the rapid development of digital technology, enterprises are actively promoting digital transformation. Under this background, the quality of financial accounting information has attracted much attention. This article focuses on the influence of digital transformation on the quality of enterprise financial accounting information and discusses the optimization path. Through theoretical analysis, this article deeply analyzes the influence of digital transformation on the generation, transmission and use of financial accounting information. It is found that although digital transformation brings technical assistance to improve information quality, such as improving the efficiency and accuracy of data collection and speeding up information transmission, it also brings challenges such as information security. Based on this, this article draws the conclusion that it is necessary to strengthen the construction of financial digital system, improve the digital literacy of financial personnel and improve the financial information management system in order to improve the quality of financial accounting information based on digital transformation. This research can provide theoretical reference and practical guidance for enterprises to ensure the quality of financial accounting information in the digital wave.

1. Introduction

With the rapid development of information technology, digital transformation has become a key strategic choice for enterprises to adapt to the changes of the times and enhance their competitiveness [1]. Enterprises actively introduce digital technology at all levels of operation and management, aiming at optimizing business processes, improving efficiency and innovating value creation mode [2]. As the core part of enterprise management, the financial field is also inevitably impacted by the wave of digital transformation.

From the macro environment, the process of global economic integration is accelerating, the market competition is becoming increasingly fierce, and enterprises are facing a more complicated and changeable internal and external environment [3]. In this context, accurate, timely and high-quality financial accounting information has become an important basis for enterprises to make scientific decisions, effectively allocate resources and meet market challenges [4]. At the same time, emerging digital technologies such as big data, artificial intelligence and cloud computing are constantly emerging and widely used, which brings new opportunities and challenges to corporate financial accounting [5]. From the micro level, the traditional financial accounting work mode mainly relies on manual operation and relatively simple information system, which has some limitations in the efficiency and accuracy of information processing and the deep mining and analysis of information [6]. Digital transformation has changed the way of collecting, sorting, analyzing and transmitting financial data by introducing advanced technical means, which has a far-reaching impact on the quality of enterprise financial accounting information.

High-quality financial accounting information has many key characteristics, such as reliability, relevance, timeliness, comparability and understandability [7]. These characteristics play a vital role in strategic planning, budgeting and performance evaluation of internal management, as well as investment decision-making and credit risk evaluation of enterprises by external investors, creditors and other stakeholders [8]. However, while digital transformation provides a new way to improve the quality of financial accounting information, it also causes a series of new problems. If these

problems are not handled properly, they may have a negative impact on the quality of financial accounting information. This study is helpful to enrich and improve the relevant theoretical system in the field of financial accounting, and further clarify the internal relationship and mechanism between digital transformation and the quality of financial accounting information.

2. Digital transformation and enterprise financial accounting information quality theory

Digital transformation means that enterprises use digital technology to reshape and optimize business models and operational processes to meet the development needs of the digital economy era. Its core lies in promoting the innovation and development of enterprises through deep mining and application of data. In this process, big data, cloud computing and other technologies provide enterprises with massive data processing capabilities and strong storage support, enabling enterprises to obtain and analyze all kinds of information in real time, thus improving the scientific and timely decision-making.

The quality of enterprise financial accounting information refers to the sum of the characteristics of financial accounting information to meet the needs of users [9]. Reliability requires information to be true, objective and verifiable, which is the basis for users to trust financial information. Relevance emphasizes that information is related to users' decisions, which can help them predict future trends or confirm and correct previous decisions. Timeliness requires information to be transmitted to users within a specified time to ensure the timeliness of decision-making. Comparability and understandability ensure the comparability of information between different enterprises and the same enterprise in different periods, and the information can be clearly understood by users.

Digital transformation is closely related to the quality of enterprise financial accounting information. Digital transformation provides technical support for improving the quality of financial accounting information, changing the traditional information processing methods and improving the accuracy and timeliness of information. High-quality financial accounting information is an important guarantee for the successful promotion of digital transformation, which provides reliable basis for enterprises' digital decision-making, guides enterprises to rationally allocate digital resources, and realizes the goal of digital transformation.

3. The influence of digital transformation on the quality of enterprise financial accounting information

3.1. The impact of digital transformation on the generation of financial accounting information

Table 1 Comparison of Data Collection Between Traditional and Digital Transformation Modes

Comparison Item	Traditional Mode	After Digital Transformation
Data Collection Entity	Manual recording and reporting by personnel	Real-time uploading by sensors and automated collection systems
Collection Frequency	Once a day	Once every 15 minutes
Data Entry Error Rate	Approximately 5%	Less than 1%
Data Update Cycle	2 days	1 hour
Data Coverage Scope	Main business data	Covers data across the entire business chain
Collection Cost	High (labor and time costs)	Relatively low (mainly initial equipment investment)

In the traditional financial accounting mode, information generation mainly depends on manual collection and data entry, which is not only inefficient, but also prone to human error [10]. Digital transformation introduces automatic data collection system, such as real-time collection of production equipment operation data and supply chain logistics data through Internet of Things technology, which greatly improves the efficiency and accuracy of data collection. Table 1 shows a manufacturing enterprise as an example. In the traditional mode, workshop production data need to

be manually recorded and reported regularly by workers. The average daily data input error rate is about 5%, and the data update cycle is 2 days. After the digital transformation, with the help of sensors and automatic acquisition system, the data is uploaded in real time, the error rate is reduced to less than 1%, and the update period is shortened to 1 hour.

Digital technology has improved the ability of data processing. Big data analysis tools can quickly process massive financial and non-financial data, and tap the potential relationships between the data. Intelligent financial software can automatically complete accounting processing, report generation and other work, reduce manual intervention, reduce the risk of accounting errors, and ensure the reliability of information.

3.2. The impact of digital transformation on financial accounting information transmission

Digital transformation has changed the transmission mode of financial accounting information, making it more timely and convenient. Traditional information transmission mainly depends on paper documents or e-mail, which has some problems such as slow transmission speed and easy loss. Nowadays, enterprises have built a real-time shared financial information platform with the help of cloud computing and mobile Internet technology. All departments can upload and obtain relevant financial information in real time, and the management can view financial statements at any time and place through mobile terminals, grasp the financial situation of enterprises in time, and provide timely support for decision-making.

The security of information transmission has also been paid attention to in the digital transformation. Enterprises adopt encryption technology, identity authentication and other means to ensure the confidentiality and integrity of financial information in the process of transmission. However, digitalization has also brought new security risks, such as network hacking and data leakage, which puts forward higher requirements for information security management of enterprises.

3.3. The impact of digital transformation on the use of financial accounting information

Digital transformation has brought new changes to the use of financial accounting information, and improved the relevance of information and the usefulness of decision-making. Through data analysis tools, enterprises can dig and analyze financial information from different dimensions, and provide more targeted decision support for management. Visualization technology enables financial information to be presented in a more intuitive and understandable chart form, which reduces the understanding difficulty of information users. If the financial indicators are displayed in the form of histogram and line chart, it is convenient for management to quickly grasp the financial change trend of enterprises. However, the digital transformation also highlights the problem of information overload, and a large amount of complex information may interfere with users' accurate decision-making. Therefore, enterprises need to train professional financial analysts, improve the ability of information screening and analysis, and give full play to the positive role of digital transformation in the use of financial accounting information.

4. The path to improving the quality of enterprise financial accounting information

4.1. Strengthen the construction of enterprise financial digital system

Under the background of digital transformation, in order to effectively improve the quality of enterprise financial accounting information, it is necessary to start from multiple dimensions and build a comprehensive and systematic optimization path. Enterprises should focus on optimizing the architecture design of financial digitalization system. A scientific and reasonable system architecture is the basis of ensuring accurate and efficient processing of financial information. In terms of hardware, servers and storage devices with excellent performance should be selected according to the business scale and data processing requirements of enterprises to ensure that the system has strong data carrying capacity. On the software level, advanced financial software should be adopted and customized development should be carried out according to the actual business

process of the enterprise. For large manufacturing enterprises, it is necessary to embed modules closely related to production management and supply chain management in financial software to realize seamless connection between financial and business data. It is very important to continuously update the system functions.

With the continuous progress of digital technology and the expansion of enterprise business, financial digital system needs to follow up in time. Taking the tax management module as an example, the tax policy is constantly adjusted, and the system should have the function of automatically updating the tax calculation rules to ensure the accuracy of tax treatment. Figure 1 shows an enterprise's updating of financial digitalization system functions according to business requirements in different time periods. Through regular function updates, the enterprise financial digitalization system has always maintained a high degree of adaptation to the business, providing strong support for the quality of financial accounting information.

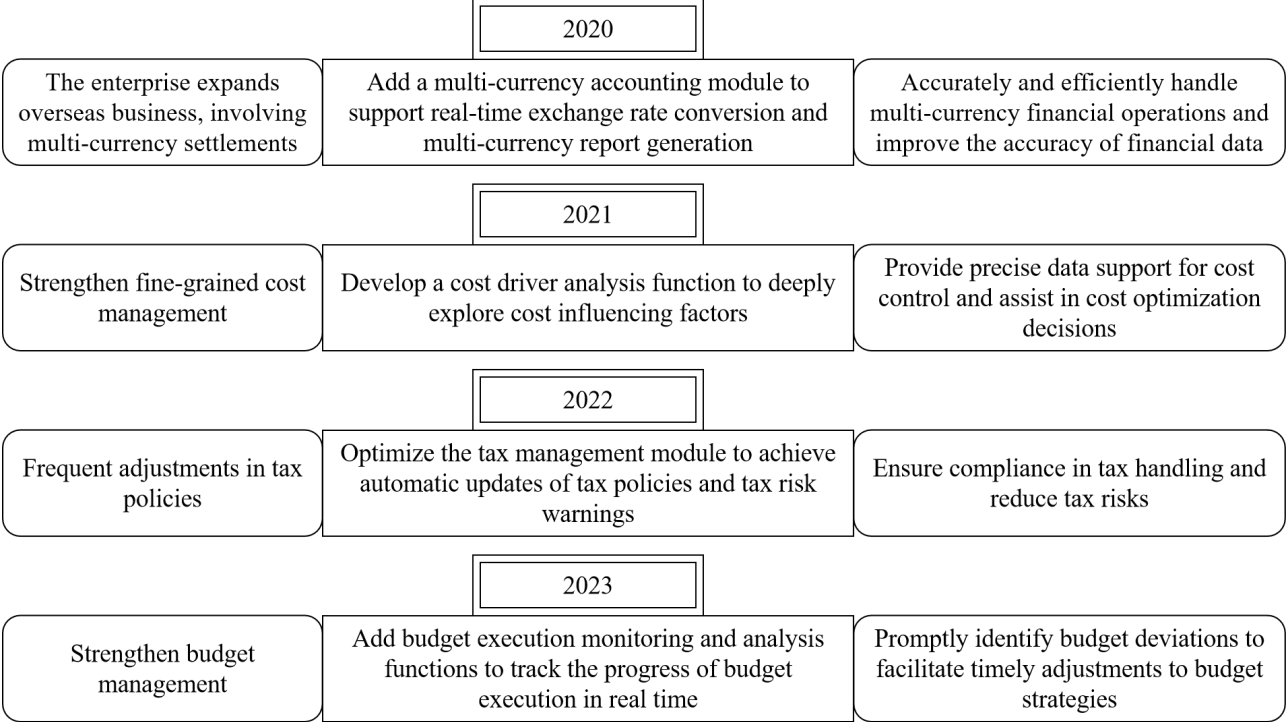


Figure 1 Example of function update of financial digitalization system

It is essential to strengthen the security protection of the system. Enterprises should invest enough resources and adopt technical means such as firewall and intrusion detection system to prevent network attacks. Enterprises should also establish a strict data backup and recovery mechanism, regularly back up financial data and store them in different places to deal with possible data loss or damage.

4.2. Enhance the digital literacy of financial personnel

Financial personnel are the core strength of enterprise financial work, and their digital literacy directly affects the quality of financial accounting information. Enterprises should build a perfect training system and formulate personalized training programs for financial personnel at different levels. For basic financial personnel, the company should focus on training them to use basic digital tools, such as operating financial software and advanced application spreadsheets. For middle and senior financial managers, it focuses on cultivating digital strategic thinking and data analysis ability, so that they can use big data analysis and other technologies to support enterprise decision-making.

Enterprises actively introduce financial talents with digital professional background to inject fresh blood into enterprises. Such talents not only have solid financial knowledge, but also are proficient in digital technology, which can quickly promote the digital transformation process of enterprise finance. At the same time, enterprises should establish an effective incentive mechanism

to encourage financial personnel to actively learn digital knowledge and improve their skills.

4.3. Improve the financial information management system

It is the key to establish and improve the quality control process of financial information. From data entry, processing to output, strict standards and specifications should be formulated. In information processing, data processing algorithm and logic are specified to prevent information distortion caused by improper processing. At the same time, enterprises should strengthen the internal audit and supervision mechanism. The internal audit department shall regularly audit the financial information system to check the security of the system, the integrity of data and the compliance of information processing flow. The internal audit department should put forward rectification suggestions on the problems found in time, and follow up the implementation of rectification to ensure the effective implementation of the financial information management system.

5. Conclusions

This article focuses on the influence of digital transformation on the quality of enterprise financial accounting information and the optimization path, and reveals the complex and close relationship between them. Digital transformation has brought multi-dimensional influence to the quality of enterprise financial accounting information. In terms of information generation, automatic data acquisition and powerful data processing capabilities have greatly improved the accuracy and reliability of information, but we also need to be alert to the data risks brought by technical failures. Information transmission has become more timely and convenient, and security has become a key challenge. Network security threats always test the protection ability of enterprises. In the use of information, data analysis and visualization improve the relevance of information and the usefulness of decision-making, but the problem of information overload needs professionals to deal with it.

In view of these influences, the proposed optimization path has important practical significance. Enterprises should strengthen the construction of financial digital system, from architecture design, function update to security protection, and lay a solid technical foundation for information quality. Enterprises should also improve the digital literacy of financial personnel, and build a professional team to adapt to the digital age through training, introducing talents and incentive mechanism. At the same time, it also improves the financial information management system, strictly controls the quality process, and strengthens internal audit supervision to ensure the compliance and accuracy of information processing.

Generally speaking, in the process of digital transformation, only by fully understanding and properly dealing with the influence of digitalization on the quality of financial accounting information and actively implementing the above optimization path can enterprises give full play to their digital advantages, improve the quality of financial accounting information and enhance their competitiveness.

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