

The Development of Financial Management in The Digital Age

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Abstract. In recent years, with the rapid development of information technology, it has entered the era of digitization. Emerging information technology concepts have gradually entered people's vision, and various new industries, formats, and models continue to emerge, greatly changing the socio-economic environment. A large number of digital applications have also received widespread attention and begun to be applied to actual enterprise operations. In order for enterprises to respond more calmly to changes in the market environment, the pace of transformation must be accelerated, especially for financial management, and the ability to improve digital applications and services must be accelerated. The digital transformation has put forward higher requirements and brought greater challenges to financial management. This article takes this as a starting point to analyze the specific requirements of financial management in different application scenarios, and briefly analyzes the challenges and opportunities faced by enterprise financial management in the digital age, in order to explore the development of financial management under the trend of digitalization.

Keywords: Digitization; Financial management; Challenge; development direction.

1. Challenges

Financial management is the lifeline of enterprise management, and the functional characteristics of the finance department determine that the information of the entire business process of the enterprise will be continuously gathered here along with the inflow and outflow of funds. The manifestation of these information is mostly in the form of numbers, so the speed and quality of processing these data information directly reflect the management level and competitive strength of the enterprise. The financial system holds a large amount of core data of the enterprise, which serves as an important indicator and decision-making basis for measuring and evaluating the operational performance of the enterprise, and is an important foundation for the enterprise to achieve informatization and digitization. As the foundation of management accounting, the financial shared center is widely regarded as a breakthrough point for the digitization of financial management. The financial sharing center plays a bridging role in the enterprise's financial and management system: it undertakes the management intentions and requirements of management accounting, implements them into the management of financial sharing processes, planning, and master data, and provides feedback on the value data in the management process to support managers' management of the business process; Provide accounting information for basic financial accounting downwards.

However, currently, most Chinese enterprises lack long-term, comprehensive, and systematic information integration planning and practical information processing models. There are multiple traditional information collection and processing systems in the enterprise, but they cannot be efficiently connected to each other, and each data system is independent of each other. At the same time, due to the different inclusion standards and dimensions of data information in various systems, it is impossible to effectively integrate and analyze data based on a unified standard. The budget management system of the enterprise is not perfect, which cannot provide a data foundation for the shared center to leverage its core advantages of informatization and intelligence. The establishment of most enterprise financial shared centers is still in its early stages, and the functions of the shared centers are relatively single. There is no closed-loop information processing process formed, and no three-dimensional information processing model has been established to support the online and data-

driven business of the enterprise. In addition to the aforementioned prominent issues, there are still many aspects and areas that need to be continuously improved and upgraded in the construction of the financial shared center.

The traditional financial management takes too long to sort out information, and the operation of enterprises is a continuous and changing dynamic process. Under the "Internet plus" environment, enterprises are always faced with various and rapidly changing information. The opportunities or challenges carried by this information are crucial to the survival and development of enterprises. At the same time, because we are in the era of information explosion, the duration of information value is getting shorter and shorter, and the processing efficiency of financial data is too low, which will make the financial data information unable to play its due role within its validity period. Financial data is just the basic function of "recording the past", unable to provide forward-looking prediction for the actual operation of enterprises, and from another perspective, increasing the risk of enterprise operations.

The cognitive bias of accounting information is also a common problem encountered by enterprises when making economic decisions. Influenced by this cognitive bias, accounting managers tend to focus on simplified accounting information; Overemphasizing accounting information that occupies prominent positions while neglecting important but inconspicuous accounting information; Neglecting accounting processing costs, confusing accounting truth and economic truth, etc. At the same time, due to the roughness and high granularity of traditional information data, it cannot accurately reflect the corresponding information, resulting in these data being unable to provide timely and effective guidance and prediction for the actual operation of the enterprise's business.

Although the emerging profession of management accounting has developed rapidly in recent years and is highly sought after by many enterprises, due to the late start of China's information-based financial management and its short development time, it has not yet established a complete theoretical system. Currently, there are no relevant practical standards or industry requirements, and more are still being explored and revised. At the same time, financial management talents of relevant digital types are gradually being cultivated. The shortage of new financial management talents who can adapt to big data and informatization has to some extent delayed the pace of enterprise financial management digitalization construction.

2. Prospects and Opportunities

Affected by global emergencies, there are increasing uncertainties in the business environment for enterprises worldwide, hindering the circulation of industrial and supply chains, resulting in sluggish global economic growth. The downward pressure on China's economy continues to increase. Faced with increasingly severe situations and challenges, Chinese enterprises need to further improve their management capabilities and levels in order to continuously enhance their economic competitiveness, innovation, influence, and risk resistance. China's discussion and practice of enterprise financial management reform under the "Internet plus" environment are also gradually refined and improved. During the "13th Five Year Plan" period, the SASAC clearly proposed that state-owned enterprises should find their own gaps against world-class enterprises and industry advanced enterprises, and take targeted measures to strengthen the construction of management systems and management capabilities, so as to promote the significant improvement of state-owned enterprises' financial management level. The 14th Five Year Plan also explicitly proposes to "fully leverage the advantages of massive data and rich application scenarios, promote the deep integration of digital technology and the real economy, and empower the transformation and upgrading of traditional industries." Enterprises have put forward their own strategies and plans for "cloud computing, data empowerment, and intelligence" to drive the overall transformation of production, lifestyle, and governance through digital transformation. Due to the aforementioned reasons, digital transformation has become a consistent strategy adopted by major Chinese enterprises in the chaotic global economic outlook.

Digitization is bound to bring about significant changes in various aspects for enterprises. Based on the internet, enterprises need to establish a truly customer-centric operational model by directly connecting with customers. The core problem that digital transformation needs to solve is how to meet the massive, fragmented, real-time, and multi scenario customer demands. To achieve rapid response to customer needs and effectively solve customer demands, it is necessary for the speed and quality of enterprise information processing to meet both fast and accurate standards. Digitization has directly completed the onlineization of business, enabling many tasks to be automatically completed by machines, thereby greatly reducing errors and improving efficiency. In short, digitalization has driven a disruptive change in the operational mode of enterprises.

The essence of financial management is to conduct refined analysis of data based on data collection, providing decision support for enterprise managers and promoting the refinement of enterprise management. However, whether it is the realization of its functions or value, digital transformation of enterprises has become a major strategy that urgently needs to be implemented. The core of digital transformation is connectivity, data, and intelligence. The breakthrough development of emerging technologies such as mobile Internet, Internet of Things and blockchain has provided powerful technical support for enterprises to realize all business online and all business data, making it possible for enterprises to mirror their business in the digital space. Links have brought about a qualitative breakthrough in the flow rate of enterprise information. When enterprises move all their business online, all business data, financial data, and big data related to the enterprise will be stored in the digital space simultaneously, forming a massive database. Enterprises can conduct multidimensional data analysis based on data governance, data computing, data modeling, data processing, and other methods, enabling data to truly empower business and management, and create value for the enterprise.

3. The Connotation of Digitalized Financial Management

In the new situation, China's financial management is constantly developing towards digitalization. In the past two years, relevant professional terms and concepts have emerged continuously. Many people in enterprises may have confusion about some concepts, which may lead to incorrect ideological guidance and practice when carrying out digitalization financial management work, affecting the development of China's financial management digitalization process. Therefore, it is necessary to first clarify the true connotation of financial intelligence, understand the main content of its digital financial management work, and use correct theories to guide practice and promote the process of financial intelligence in Chinese enterprises.

Firstly, financial digitization mainly includes two aspects, namely financial digitization and intelligence. It involves integrating modern artificial intelligence technology and information technology into financial management, using advanced technology to guide the financial management work of enterprises, promoting the intelligence of financial management work, forming intelligent financial management within enterprises, and promoting the smooth progress of related management work. Secondly, by using artificial intelligence technology within the enterprise, some financial and accounting work can be more automated and intelligent, which can replace traditional manual labor to a certain extent, liberate human labor, effectively reduce talent investment and management costs of the enterprise. At the same time, the use of artificial intelligence technology can also expand and extend human cognition to a certain extent, and modern information technology can be used to carry out digital management, integrating new information technology into the company's financial management work. For example, the latest fifth generation mobile communication technology can greatly assist enterprises in upgrading and restructuring their financial management work, and has a significant impact on their operations and financial management. In China, the informationization development of enterprises mainly goes through three stages. Currently, it is mainly the era of digitization and intelligence aimed at achieving social goals. Therefore, combining intelligent technology and information technology with the development of enterprises can promote the intelligence of financial management. The stage of financial digitization is mainly based on advanced

information technology, constructing a systematic management system, promoting the upgrading of enterprise financial management technology, fully integrating enterprise operations and information technology, and enabling enterprise development to shift from informatization to digitization. Financial intelligence is not about downplaying financial accounting, but about strengthening management accounting. Financial personnel need to enhance their core competitiveness and improve their ability to apply digital intelligence. The transformation of financial intelligence is an inevitable trend, and enterprises must actively embrace digital transformation in order to achieve high-quality development.

4. The Importance of Developing Digital Financial Management

Digitization combines the advantages of digitization and intelligence, utilizing the wisdom of professionals to organically integrate the two, establish a data analysis platform, better aggregate and analyze complex data, improve the value and efficiency of data use, and serve all aspects of people's work and life. Specifically, integrating digitalization into financial management and utilizing financial management to support digitalization has the following important significance:

4.1. Data Driven Decision-making to Improve Management Efficiency

The current era is becoming driven by data and intelligence, and utilizing the advantages of data to drive decision-making is one of the most important features of the digital age. Therefore, mining data in financial management is beneficial for analyzing and measuring the effectiveness of the financial management system, and providing specialized analysis solutions based on this can promote more efficient financial management work, better control the quality of enterprise management, activate other resources, and improve efficiency.

4.2. Mining Data Value and Empowering Business Value Creation

The key strategic goal of the current financial management department and even the entire management team of the enterprise is to find business growth points from multiple perspectives and achieve high-quality development of the enterprise. For the finance department, it is important to actively participate in the formulation of the company's strategic goals in order to become more familiar with the nature of the business and gain insight into its pain points; To provide targeted financial planning solutions and countermeasures that match strategic goals, effectively utilize limited financial resources to efficiently leverage the value of other resources, improve production efficiency, diversify product types, enhance service levels, and support business growth. Digitization empowers financial management and helps enterprises build data analysis platforms. With the timely, accurate, and high-quality data provided by the platform, the process of "discovering problems, analyzing problems, and solving problems" is continuously repeated to conduct intelligent enterprise development planning and analysis, thereby achieving the goal of helping managers think more efficiently about strategic business execution and innovation.

Taking the hotel industry as an example, digitization has already swept the entire industry. According to Deloitte China's "The Future of Tourism" analysis report, 85% of travelers use smartphones during their travels, and wireless networks have become the main touchpoint for hotel services, providing travelers with a more comprehensive and objective visual experience. The entry of such new technologies requires major hotel management groups to adjust their business strategies, especially marketing strategies, in a timely manner. For a time, Zhiketong, Meituan, and Dianping have become the top positions that major hotel groups are competing for. It has been proven that the use of such new technologies has indeed brought new growth points to the hotel industry during difficult times.

4.3. Empower Every Employee to Face the Transformation of Functions

When financial management undergoes a digital transformation, the technological means of financial management also need to undergo corresponding changes, and there are new changes in management

concepts, management thinking, and management directions. Using digital technology as an effective means of connecting employees and businesses, allowing employees to enjoy the efficiency and convenience brought by digital technology, can stimulate their value potential; Promote the coordinated development of enterprises and employees, consolidate and enhance core competitiveness, and improve enterprise performance. For highly specialized financial personnel, it is even more important to have the ability to understand technology and information flow, as well as the ability to interact with technology and information experts, making big data and artificial intelligence easy to manage, in order to better evaluate assets, make better and timelier operational and strategic decisions, and more effectively predict and reduce risks.

4.4. Simplify Financial Processes and Enhance Control Capabilities

The development of new technologies related to digitization has led to significant changes in financial accounting and management tools in the era of data economy. The integration of traditional measurement and reporting methods with new digital technologies has diversified the channels for obtaining financial information, such as cloud computing, big data, artificial intelligence, blockchain, etc. Enterprises can not only quickly access internal information, but also conveniently integrate information from external sources such as suppliers, customers, competitors, government departments, etc. The promotion and application of enterprise resource planning systems, decision support systems, business finance systems, online reimbursement systems, bank enterprise direct connection systems, financial sharing centers, etc. are assisted or replaced by financial robots and computer systems to complete programmatic, systematic, and mechanized financial basic work, making the collection, integration, and analysis process of financial information more convenient and standardized. While increasing information accuracy, it also greatly improves the efficiency of information recording and business processing.

5. The Development Direction of Digital Financial Management

In response to the challenges and shortcomings faced by financial management, enterprises should continue to promote the informatization of financial management processes, enhance the construction of a digital lean control system, and specifically build and improve from the following aspects:

5.1. Enhance the Level of Attention and Awareness among Management

The upgrade of digitalization is a top priority project, which requires a transformation of thinking before it can be implemented. Only when the management first believes in and recognizes the development of digitalization, and implements digitalization in a tangible way, can digitalization technology play a greater role, and enable digitalization, intelligence, and supply chain to help enterprises achieve the goal of expanding customer base and doubling benefits. In the context of the digital age, enterprises that actively accept and support technological innovation and expand their business areas are able to succeed. On the one hand, it has richer data resources than other enterprises; On the other hand, the management of these enterprises knows how to fully analyze the data they have and integrate it into decision-making. With the introduction of intelligent thinking, they can make management work more effective. Similarly, when applying digital innovation in the field of financial management, it must receive high attention and recognition from management, using digital technology to simplify management processes, activate enterprises, and improve efficiency. This is the concept of digital financial management, and it is also the most challenging job. The digital transformation brings about the overall upgrading of enterprises, permeating into various aspects such as production and operation, decision-making and deployment. The operation and management of enterprises can be achieved through digital frameworks, enabling them to quickly grasp comprehensive data, conduct decision analysis more accurately, and reflect market demand more quickly. In the production and operation activities of enterprises, the management should focus on digital construction, use accurate information data to closely integrate each business process, and achieve the integration of various links.

5.2. Strengthening the Cultivation of Professional Talents

In the era of digital intelligence, higher requirements have been put forward for professional talents. To cultivate financial talents with Internet thinking, they are required to be able to master the data analysis tools required by the industry, and be able to combine the trend of data changes with the search for business innovation opportunities. However, such talents are rare at present. In the process of building and improving a digital lean control system, enterprises should not only maintain and improve the relevant management system, but also focus on cultivating the thinking and awareness of financial personnel in the digitization of management accounting. They should organically integrate theoretical learning and practical operation, use theoretical knowledge to guide actual accounting management work, and verify and improve relevant theoretical learning through practical work experience.

To achieve the transformation of financial functions from information recorders to value integrators, it is necessary to enhance financial capabilities. The improvement of financial capabilities must rely on digital means to achieve two dimensional goals: one is to improve financial efficiency based on unified processes, data standards, digital technology, and shared models; The second is to improve data quality based on unified processes and data standards, and enhance financial insights based on accumulated data assets. In addition, it is necessary to enhance the digital transformation awareness of financial personnel, strengthen their initiative in integrating into enterprise business operations, and improve their enthusiasm for using information technology to intervene in enterprise management work. In addition, it is necessary to continuously improve the employee training mechanism and cultivate and reserve talents for the future transformation and development of digital financial management in enterprises.

5.3. Strengthen Infrastructure

A comprehensive and perfect information system that ensures information security is the technical foundation and prerequisite for the normal operation of financial management and business processes in the era of data economy. Enterprises should increase investment in information and communication technology and network infrastructure, and build information systems that cover all aspects of enterprise management. Information security issues need to be highly valued, and security mechanisms must be established in a timely manner. The network security system must also be established and continuously improved. In addition, it is necessary to continuously strengthen anti hacker technology and prevent the risk of information leakage. Regularly conducting information security training activities to continuously enhance the risk prevention and control capabilities and sense of responsibility of financial management personnel, enabling them to cope with the ever-changing development of new technologies.

5.4. Building a Digitalized System

Firstly, guided by values, establish a comprehensive budget management system. Starting from the business of the enterprise and taking the business objectives as the main line, define budget preparation rules, establish a comprehensive budget system from business planning to business budgeting, and establish a sound whole process budget system with financial budgeting as the core, in order to ensure the effective implementation of budget management system and objectives, standardize budget preparation work, continuously optimize budget management, provide data boundaries for the financial sharing center to play its own advantages, and preset a "comfort zone" for enterprise operation.

Secondly, in order to promote the digital transformation of finance, enterprises should build a new generation of financial sharing center under the guidance of "Internet plus" thinking. By combining shared processes with constantly changing data, enterprises can real-time understand the impact of changes in the business environment on decision-making at different nodes of the process, and make timely analysis and evaluation. Let the financial management of enterprises focus on decision support,

let data speak, use data management, make decisions based on data, and establish models to support business expansion and production operations; On the other hand, focusing on management improvement, relying on precise data to guide value tapping, innovating budget assessment, achieving independent management, and building a value creating financial system driven by value orientation, supported by business finance integration, and empowered by lean management as the core.

Finally, actively implement centralized financial accounting within the framework of the accounting shared center, achieving a high degree of integration between business and finance. Specifically, it includes digitization of original vouchers, intelligent document auditing, and automation of accounting.

6. Conclusion

In summary, the advent of the big data era brings significant opportunities and challenges to the survival of enterprises. Financial management, which is related to the lifeline of enterprise operations, must also make timely adjustments and developments in this transformation, fully utilize its own information advantages, actively carry out financial management digitization construction, continuously improve the lean control system of enterprises, provide timely, accurate, and high-quality information resources for enterprises, and help enterprises avoid risks and discover opportunities to the greatest extent possible, in order to cope with the changes in the future world economic environment and industry development trends, and contribute to the survival and development of enterprises.

In the era of intelligence, enterprises evaluate and judge the impact of emerging technologies by utilizing new methods and technologies, and effectively solve enterprise problems through the adoption of reasonable measures. The digital economy era presents new challenges and requirements for the goals, functions, content, and methods of financial management. The simple adjustment and aggregation of massive data module informatization is not digitization. Digitization is the organic integration of data collection and analysis with business, service, incentive, management, etc. from the perspective of system integration, promoting comprehensive changes in enterprises, including corporate vision, management philosophy, strategic development goals, corporate culture construction, etc., and building new fields and formats for future business operations. Enterprises should actively face the opportunities of digital economy development, integrate financial management innovation with information technology development, explore innovation and upgrading of financial management models, enterprise management ideas and methods, enhance the quality of financial management personnel, promote fine management within the organization and internal and external interconnection and cooperation through digital, intelligent and value creating financial management, and promote the successful transformation and sustainable development of enterprises in the digital economy era.

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