

# Discussion on the Informatization of Financial Management in the Context of the Big Data Era



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**Abstract:** In the ever-evolving big data era, the financial industry in our country has been demonstrating a consistent and positive growth trend. The brisk pace of development in the financial sector has also cast a spotlight on the importance of robust financial management. One of the key tools in effective financial management is a sophisticated financial information construction system. By building and enhancing such a system, we can facilitate the stable growth of the financial industry and ensure its sustainability. This is a particularly important approach in the age of big data, given its capacity to handle vast amounts of information and extract valuable insights from it. The focus of this article is to elucidate the crucial role that information construction plays in financial management. It explores some of the challenges and shortcomings that currently exist in the construction process, which are potential impediments to the system's efficacy. To address these issues, it is imperative to start by refining and augmenting the financial credit system and the financial economic policies. The article proposes a number of pertinent measures for the development of financial management information, which are designed to cleanse the environment of Internet finance. These measures would not only address the existing issues but also ensure that the system is future-proof, capable of responding effectively to the ever-increasing complexity and sophistication of financial transactions and regulations. The article serves as a guide for policy makers, financial managers, and other stakeholders in the financial industry to understand the importance of information construction in financial management and the steps that can be taken to enhance its effectiveness. It emphasizes the need for the financial industry to keep pace with the technological advancements and leverage them to stay competitive and relevant in the digital age. The insights and recommendations presented in this article are based on thorough research and analysis, and they aim to contribute to the ongoing discussions on how to harness the power of big data for the benefit of the financial industry.

**Keywords:** Big Data Era; Financial Management; Informatization; Discussion

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## 1 Introduction

The efficient and stable operation of a market economy hinges significantly on the robust growth of the financial industry, a crucial component of the market framework. As we transition into a new developmental phase, the advent of big data has ushered in a wave of new opportunities for the financial industry. However, it has also introduced substantial challenges that demand our attention and strategizing. This underscores the

importance of reinforcing financial management, enforcing order, enhancing existing systems, and aligning these initiatives with the continued growth of the market economy in our country.

In an era progressively dominated by digital transformation, enterprises relevant to this field must take proactive measures to bolster the informatization management of the financial industry. This involves the exploration and development of platforms that facilitate the digitalization of financial management operations. The task extends to the systematic collection of financial

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management information via more formalized and reliable channels. [1]

This shift towards increased reliance on data necessitates the scientific planning and establishment of management indicator systems. Such systems would serve as barometers for measuring and monitoring the progress and efficacy of the implemented strategies. Moreover, they will aid in identifying the areas that require improvement or modification in line with the evolving market trends and industry demands.

The integration of modern information technology into financial management is another significant aspect that requires thorough consideration. This integration has the potential to streamline operations, enhance transparency, and support informed decision-making. It can bring about a paradigm shift in how the financial industry functions, driving its growth and reinforcing its role in the market economy.

The interplay of the market economy, the financial industry, and big data is becoming increasingly intricate in the new development period. As such, a multi-pronged approach is required—one that involves strengthening financial management, enhancing systems, and leveraging technology—to navigate the complexities and harness the opportunities that this new era presents.

## 2 The Role and Existing Problems of Financial Management Informatization

The role of financial management informatization (FMI) is critical in today's era of big data. It serves as the backbone of strategic decision-making, enabling businesses to better comprehend their financial position, analyze trends, and make informed decisions. The implementation of FMI should align with the principles of scientific management, guiding the actions of businesses, speeding up its construction, and enhancing the foundational functionality of financial management. This, in turn, propels the growth of the national economy.

In the journey of building FMI, it is crucial to establish a set of development objectives for each stage. These should be synergized with the prevailing socio-economic conditions, thereby facilitating a systematic and progressive approach towards the realization of the set goals. The integration of these objectives within the

broader economic context serves to continuously construct and refine the relevant laws and regulations.

Further, it is pivotal to explore and develop innovative financial products, which stem from the implementation of FMI. These products not only cater to the evolving needs of businesses but also contribute to the diversification of the financial market. Moreover, the use of FMI paves the way for scientific risk management, enabling businesses to mitigate financial risks and secure their assets effectively. [2]

The role of big data in FMI cannot be overstated. Big data tools and technologies are instrumental in transforming the traditional methods of financial management. They provide more accurate and real-time insights into financial data, facilitating strategic decision-making and increasing productivity. Therefore, major efforts should be concentrated on harnessing the power of big data to actualize the informatization of financial management.

However, FMI is not without its challenges. The rapid pace of technological advancements and the complexities associated with big data management pose significant hurdles. Data security and privacy are also major concerns that need to be addressed. Thus, while the prospects of FMI are promising, it is imperative to acknowledge and address these issues to fully realize its potential. [3]

## 3 Unfavorable Status Quo of Financial Management Informatization

### 3.1 Information Construction Lacks Unified Planning in Financial Management

With the continuous development and progress of society, my country has achieved considerable results in the process of financial information construction. However, compared with developed countries, my country's information construction is in its infancy, and the relevant rules and regulations are not enough. Therefore, our country must accelerate the development pace of financial informatization construction and enhance the international status of the financial industry.

In the process of informatization construction, we must be good at discovering problems in a timely manner,

analyze specific problems in detail, and propose targeted solutions. Due to the late start of my country's financial information construction and lack of development experience, many financial institutions are actively developing their own development financial systems.

This means that its own development system will have strong independence, will be isolated from other information systems, and will not be able to communicate and share with each other. My country's financial management system is imperfect, resulting in a lack of uniformity in the degree of financial informatization construction and a lack of institutionalized management standards, which can easily lead to adverse factors. [4]

### 3.2 Many Problems Arise in the Process of Informatization Construction

Over recent years, the financial industry in my country has witnessed robust development, leading to the emergence of various new financial structures. However, the journey towards financial informatization construction is fraught with numerous challenges, many of which stem from the industry's reluctance to share developmental insights and foster communication and exchange. [5]

Several institutions, especially the more established ones, are often unwilling to share their development experiences. This reluctance is rooted in the fear of giving away trade secrets and strategies that could potentially compromise their competitive edge. This lack of collaboration hampers the collective progress towards financial informatization.

On the other side of the spectrum, budding small businesses also face their set of challenges. Without seasoned guidance or established models to emulate, these enterprises often lack the requisite experience in management and construction. This deficiency makes their journey towards informatization more arduous and fraught with potential errors. [6]

Interestingly, even though these institutions - both established and emerging - face common hurdles in the path towards informatization, they are bound by a competitive relationship. This competition, instead of fostering an environment of shared growth and progress, results in a lack of uniformity in the development of information construction within the financial industry.

This non-uniform development further induces unfair competition. The more established institutions, with their

wealth of resources, often overshadow the smaller businesses struggling to find their footing. The dominance of these larger institutions can inadvertently turn the smaller ones into mere stepping stones, or "wedding dresses," for the growth of larger entities, including foreign companies.

This dynamic not only hinders the overall development of the financial industry but also promotes the financial development of foreign companies over our own. This situation underscores the urgent need for a more collaborative and inclusive approach to informatization, one that ensures equal opportunities for all players in the financial industry. [7]

### 3.3 Financial Products Cannot Keep Pace with the Times

In the current era of big data, some financial institutions unfortunately do not prioritize financial informatization. These institutions continue to perceive informatization merely as a tool to assist with their existing business operations, rather than as a catalyst for innovation. They remain firmly rooted in their traditional service model, with counter services continuing to be their primary mode of conducting business. [14]

Such reluctance to innovate within the traditional service model not only hampers the innovative development of financial products but also puts these institutions on a path fraught with significant challenges. The process of information construction, or the lack thereof, can directly impact the growth trajectory and overall advancement of financial institutions.

Comparatively, if we look at financial institutions in other parts of the world, we observe a contrasting scenario. These institutions have not only recognized the potential of informatization but have also exploited its advantages and opportunities in a timely manner. They have found the right direction for their development in an increasingly digital world.

These proactive institutions have made significant strides in developing and innovating their financial products, focusing on utilizing the potential of informatization rather than relying solely on conventional methods. This has led to the promotion of financial product innovation, setting a precedent for other institutions to follow.

Failure to keep pace with the evolving times and

clinging onto traditional practices can lead to a competitive disadvantage. To remain relevant and competitive, financial institutions must therefore strive to be on par with the times. They must fully embrace financial informatization and use it as a stepping stone to promote innovation and development of their financial products. Only then can they expect to navigate the future of finance successfully. [8]

### 3.4 There Are Potential Risks in the Financial Information System

While the financial information system significantly enhances the efficiency of financial management, it also presents potential risks. The system is primarily oriented towards business processing, and it is during this process that various problems can emerge. [15]

In the current era, Internet technology is evolving at an unprecedented pace, making it a double-edged sword for financial systems. On one hand, it opens up a myriad of opportunities for streamlining operations and enhancing service delivery. On the other hand, it presents significant challenges and risks, particularly in terms of data security and privacy. Cybersecurity threats pose significant risks to financial systems, with potential for data breaches, unauthorized access, and misuse of sensitive financial information.

Furthermore, the advent of these advanced systems necessitates the need for highly skilled financial professionals who can navigate the increasingly complex landscape. However, there is a notable shortage of such talents in the field. The lack of professionals with the requisite skills and knowledge not only hampers the effective implementation of financial information systems but also exacerbates the risks associated with their use.

The dearth of professionals well-versed in both finance and technology is a significant challenge. It raises the risk of incorrect system usage, misinterpretation of data, and poor decision making. Moreover, without adequate understanding and proper management, these systems can be susceptible to errors and malfunctions, which could have far-reaching implications on a financial institution's operations. [9]

Additionally, the dependence on these systems also poses a risk of over-reliance. In the event of system failure or downtime, the organization's operations could be severely disrupted, leading to financial losses and reputational damage.

Therefore, while the financial information system presents numerous benefits, it's crucial to recognize and proactively manage the potential risks it brings. This necessitates a comprehensive approach that combines robust system design, effective risk management practices, and continuous staff training and development.

## 4 Specific Measures for the Construction of Financial Management Informatization

### 4.1 Increase the Supervision of Financial Management

In the era of rapid technological advancement, a heightened emphasis on financial supervision becomes a crucial pillar for the sustainable evolution of the financial industry. The financial market, with its open and accessible nature, is constantly evolving and undergoing transformations. Despite the continuous improvement of various financial management systems, there are instances where the systems lag behind in adapting to these changes. [10]

Moreover, in this age of interconnectivity, the adoption and influence of information technology is profound. Internet-based financial services, for example, are growing at a rapid pace. This swift evolution of financial services necessitates a shift from the traditional financial supervision models, which may no longer be apt for managing the complexities of today's financial industry.

Given the context of the era of big data, the need to reinforce the supervision of financial information infrastructure has never been more prominent. It is of utmost importance to align with the pace of technological progress, take into account the macroeconomic environment, and impose stricter regulations on the virtual world of the Internet. The goal should be to continually optimize related management operations, while simultaneously enhancing and refining the relevant institutional systems. [16]

Such a robust framework of supervision not only aids in maintaining the integrity of the financial industry but also actively propels economic development and social progress. By adopting a forward-thinking approach to financial supervision, we can ensure the stability of the financial system, protect consumers, and foster the

healthy growth of the financial industry in the face of rapid technological changes. [11]

## 4.2 Improve the Internet Financial Credit System

The problems that arise in the process of financial informatization construction have diversified characteristics. If not handled properly, they will directly affect the development of my country's macroeconomics. Among them, the insufficient credit reporting system in the financial system is one of the important problems. To improve this problem, a feasible and effective credit system needs to be developed to promote the long-term development of the financial industry. Specifically, we can start from the following two points: First, improve the credit reporting system and carry out strict management, which requires relying on the functions of the government to ensure the security of citizens' personal information, create a healthy Internet environment, and build a credit reporting system with a high safety factor, to ensure the safety of citizens in the process of handling financial services. Secondly, improve the docking and exchange of financial information across the country, improve the inconvenience of docking and incomplete information acquisition caused by regional differences, build an efficient information system, provide guarantees for the effectiveness and perfection of financial data, and contribute to the realization of Internet finance. lay a solid foundation for the long-term development of the industry. The improvement of the Internet financial system can effectively improve the efficiency of financial management.

## 4.3 Improve Economic Policies

There is an inseparable connection between financial informatization construction and economic policy. The improvement of economic policies will directly affect the probability of risks in the construction of financial informatization. To formulate corresponding financial policies, the financial regulatory authorities need to adopt scientific and effective relevant policies to ensure the orderly development of financial activities. Constrain and supervise various related work in economic development to reduce the probability of risk occurrence. For example, in commercial banks, the bank will formulate corresponding policies based on the fluctuation range of

interest rates and implement basic account requirements management methods to control the company's account opening threshold. Carry out relevant controls on securities trading and the price limit system to avoid the risk of poor economic performance and enhance the operability and enforceability of economic policies. [12]

## 4.4 Purify the Internet Financial Environment

On the road to development of Internet finance, it is necessary to prevent changes in the financial environment from having adverse effects on the macroeconomy. Therefore, creating a healthy Internet finance environment is conducive to long-term development. The Internet finance industry itself is a high-risk, high-return industry. The convenience and speed of the Internet have led many institutions to place funds on the Internet. However, due to the sharing and openness of the Internet finance industry, many uncertain factors will be faced in the process of fund operation. In the Internet financial industry where fish and dragons are mixed, some merchants will conduct false propaganda to deceive consumers in order to seek more profits. In the process of actual operation of Internet finance, there is also a lack of sound rules and regulations to restrain unscrupulous businesses, which has a certain impact on the development of the macro economy. Therefore, relevant departments should create a healthy Internet financial environment, and carry out financial business in a healthy environment, so that all businesses can follow rules and laws. [13]

## 5 Conclusion

Financial management is a fundamental pillar in the development of any market economy. The interplay between this discipline and the economy's growth is a critical component that can't be overlooked. To fully harness the potential of the financial management market and maximize its actual value, there is a pressing need to enhance the level of financial management information.

In this era of rapid technological advancement, financial managers must adopt a proactive stance towards the incorporation of information technology in their operations. They need to pay more attention to the informatization construction, which involves the



integration of advanced information systems in managing financial resources. This is a critical aspect that requires an in-depth understanding of the ongoing technological trends and the ability to adapt quickly to the changing landscape. [17]

Constant reform and innovation are vital in this endeavor. The dynamic nature of the financial industry calls for innovative approaches that can effectively address the emerging challenges. Through the adoption of avant-garde information technology, financial enterprises can streamline their operations, enhance efficiency, and ultimately improve their overall performance. This not only gives these enterprises a competitive edge in the market but also contributes to the broader economic growth.

The level of informatization construction in the financial industry is a key determinant of its ability to respond to market changes, make informed decisions, and drive economic development. Therefore, improving this level should be a strategic priority. By leveraging cutting-edge technology, financial enterprises can unlock new possibilities, optimize their processes, and offer better services to their clients. This, in turn, contributes to a more robust and resilient market economy.

In conclusion, the impact of financial management on the development of the market economy is significant. It's therefore crucial for financial managers to continually evolve with the changing times, embracing the power of information technology to enhance the efficiency and effectiveness of their financial management practices. As they do this, they not only promote the growth and sustainability of their enterprises, but also drive the overall development of the market economy.

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