The Research on Strategies for Financial Digitalization of Small and Medium-sized Enterprises in the Era of Digital Economy

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Abstract: In the era of the digital economy, financial digitization can assist SMEs in enhancing production efficiency, lowering operational expenses, and responding rapidly to market demand. Additionally, it can aid enterprises in achieving cross-border integration, exploring new business fields, boosting innovation capabilities, and improving market competitiveness. However, in the process of financial digitization transformation, small and medium-sized enterprises are faced with such problems as uneven application degree of financial digitization, shortage of financial digitized technical talents, difficulty in data integration and high information security risk, etc. Therefore, this paper puts forward the countermeasures from four aspects of enhancing the financial digitization consciousness, optimizing the financial process, strengthening the data security and training the financial digitization talents, aiming to provide reference and inspiration for the small and medium-sized enterprise finance digitization.

1. The importance and necessity of financial digitization for small and medium-sized enterprises under the background of the digital economy era

In the era of digital economy, digital assets have become important resources for enterprises, and financial digitization is crucial for the refined management of SMEs and the promotion of enterprise value.

1.1 To create value for the enterprise and enhance its competitiveness

Financial digital transformation is a crucial link in the data assetization of small and medium-sized enterprises. It can improve production efficiency, reduce operational costs, and quickly respond to market demands, thereby creating value. Through financial digital technology, companies can not only automate financial management work, reduce manual errors, and improve work efficiency. At the same time, they can also conduct scientific analysis and precise positioning of customer demand data, product data, etc. through financial digitalization, providing necessary conditions for improving product quality and service level.

1.2 Improve the efficiency and accuracy of enterprise finance to make enterprise operation and management more scientific and efficient.

In the era of digital economy, large data, cloud computing, mobile internet, and other new infrastructure provide the basic conditions for SMEs to transform their traditional finance and undergo financial digital transformation. This helps enterprises automate and standardize their financial processes, improving the efficiency and accuracy of financial handling. At the same time, financial digital transformation can also help enterprises achieve real-time monitoring and analysis of financial data, enabling them to detect and address financial risks in a timely manner. Financial digital technology enables SMEs to establish direct contact with clients, integrating data flow, capital flow, and business flow into one, truly realizing a customer-centric business model. Through financial digital platforms, enterprises can obtain timely customer demand and feedback information, enabling them to promptly adjust product and service strategies, formulate precise marketing strategies, optimize supply chains, reduce inventory costs, and improve logistics efficiency.

1.3 To give SMEs stronger independent innovation capabilities.

"Financial digital transformation has a significant role in promoting innovation for SMEs and can deeply tap into their development potential. Financial digital technology can help enterprises collect, organize, and analyze financial data better, accurately grasp the cash flow of enterprises, and comprehensively grasp enterprise data through platforms such as financial sharing systems and data platforms to gain insights into market trends and develop new products and services. At the same time, financial digital transformation can also help enterprises achieve cross-border integration, expand new business areas, and improve their innovation capability and market competitiveness."

2. The Current Situation and Challenges of Financial Digital Transformation in Small and Medium-sized Enterprises

Although small and medium-sized enterprises have started to adopt financial digital technology for finance, there are still some issues in terms of the degree of financial digital application, technical talent, data integration, and information security.

2.1 Disparate Degrees of Financial Digital Application

Although many small and medium-sized enterprises have started to adopt financial digital technology for finance, there are differences in the degrees of financial digital application between different enterprises. Some enterprises have achieved a high level of financial digitalization, while others still use traditional manual methods for finance.[1]

2.2 Lack of Financial Digital Technology Talents

Small and medium-sized enterprises often lack financial digital technology talents, which makes it difficult for them to overcome the technical problems encountered in the process of financial digital transformation and effectively improve the application effect of financial digital technology.[2]

2.3 Difficulty in Data Integration

In the process of financial digitalization, many small and medium-sized enterprises face challenges in data integration. Due to different system vendors and different go-live times, there are difficulties in connecting different systems, making it challenging to share and integrate data. Additionally, differences in data management rules also increase the difficulty of data integration.[6]

2.4 High Information Security Risks

While financial digital technology brings convenience to a company's finances, it also introduces information security risks. Some hackers may exploit network vulnerabilities or virus attacks on the company's finance system, causing data leakage or damage. Therefore, small and medium-sized enterprises need to strengthen information security management during the financial digitalization process to ensure the safety and stability of data.[5]

3. Strategies for Financial Digitalization

3.1 Enhance Financial Digitalization Awareness

Raising the financial digitalization awareness of managers and finance staff in SMEs requires multiple approaches, including conducting financial digitalization training, establishing a financial digitalization mindset, strengthening financial digitalization management, and promoting financial digitalization culture. Only by continuously improving the financial digitalization awareness of managers and finance staff can SMEs better promote their financial digitalization process, enhance their competitiveness, and increase their market share.[4]

3.1.1 Conduct financial digitalization training

Financial digitalization training can be conducted for managers and finance staff in SMEs to improve their financial digitalization awareness and skill level. The training content can cover basic financial digitalization principles, applications of financial digitalization technology, and practices of financial digitalization management. Through the training, managers and finance staff can gain an understanding of the advantages and application methods of financial digitalization technology, allowing them to better apply it to enhance the enterprise's financial performance.

3.1.2 Establish financial digitalization thinking

Financial digitalization thinking is needed for managers and finance staff in SMEs to better apply financial digitalization technology to improve the enterprise's financial level. This includes valuing data, utilizing information technology, understanding network economy, and recognizing financial digitalization management. By establishing a financial digitalization mindset, managers and finance staff can better grasp market changes and customer demands, thereby enhancing the enterprise's competitiveness and market share.

3.1.3 Strengthen financial digitalization management

SMEs can strengthen financial digitalization management to improve managers' and finance staff's financial digitalization awareness. This includes developing a financial digitalization strategy, establishing a financial digitalization system, and building a financial digitalization platform. By strengthening financial digitalization management, managers and finance staff can have a deeper understanding of the application and practice of financial digitalization technology, thus better promoting the enterprise's financial digitalization process.

3.1.4 Promote financial digitalization culture

SMEs can promote financial digitalization culture to help managers and finance staff better

understand and accept financial digitalization technology. This includes publicizing financial digitalization technology, endorsing financial digitalization management, and placing importance on data security. By promoting financial digitalization culture, managers and finance staff can better recognize the importance and necessity of financial digitalization technology, thus better promoting the enterprise's financial digitalization process.

3.2 Optimize Financial Processes

To optimize financial processes for small and medium-sized enterprises (SMEs), several measures can be taken. These include establishing a financial digitalization strategy, building a financial digitalization platform, improving financial digitalization technology, attracting talent with expertise in financial digitalization, and prioritizing data security management. By implementing these measures, SMEs can enhance their financial efficiency and accuracy, reduce costs, and strengthen their competitiveness in the market.

3.2.1 Establish financial digitalization strategy

SMEs need to develop a financial digitalization strategy to guide their financial digital transformation process. When formulating the strategy, companies should consider factors such as the development trends of financial digitalization technology, business needs, investment budgets, and set clear objectives, timelines, and implementation plans for the digitalization transformation.[7]

3.2.2 Build a financial digitalization platform

A financial digitalization platform serves as the infrastructure for realizing financial digital transformation. SMEs need to construct a platform that includes financial systems, accounting systems, and fund management systems. When building the platform, companies should consider factors such as usability, security, and scalability to ensure stability and sustainability.

3.2.3 Improve financial digitalization technology

Financial digitalization technology can help SMEs optimize their financial processes. By leveraging financial digitalization technology, companies can automate, standardize, and streamline financial processes, thus improving efficiency and accuracy. For example, by utilizing RPA (Robotic Process Automation) technology, companies can automate repetitive and tedious tasks, enhancing productivity; using artificial intelligence technology, companies can apply financial forecasting and analysis, improving precision.

3.2.4 Recruit talent with expertise in financial digitalization

SMEs need to hire professionals with expertise in financial digitalization to drive the digital transformation process forward. These professionals can help companies overcome technological challenges encountered during the transformation process, promote the application and innovation of financial digitalization technology, and improve enterprise finance capabilities.

3.2.5 Prioritize data security management

While optimizing financial processes with financial digitalization technology, companies should also pay attention to data security management. Establishing a comprehensive data security management system is crucial. Companies should implement necessary technical measures and management strategies to ensure data security and stability. Examples include regular data backups, encryption techniques, and access controls to ensure data safety and stability.

In conclusion, optimizing financial processes through the use of financial digitalization technology entails developing a financial digitalization strategy, building a financial digitalization platform, improving financial digitalization technology, attracting talent with expertise in financial digitalization, and prioritizing data security management. By implementing these measures, SMEs can enhance their financial efficiency and accuracy, reduce costs, and strengthen their competitiveness in the market.

3.3 Strengthen Data Security

Protecting the data security of an enterprise during the financial digitalization process requires multiple approaches, including establishing a comprehensive data security management system, enhancing network and system security, controlling data access permissions, and strengthening employees' data security awareness. Only by establishing a comprehensive data security protection system can enterprise ensure the security and stability of their data during the financial digitalization process.[8]

3.3.1 Develop strict data security management systems

Companies should develop strict data security management systems that include regulations for data classification, data access permissions, data backups, and recovery. Simultaneously, relevant work processes and approval procedures should be established to ensure that all employees understand and comply with these regulations.

3.3.2 Strengthen protection of sensitive data

For sensitive data, companies should use encryption technology for protection and select reliable data storage devices and service providers to ensure that data is not leaked or stolen. Additionally, regular data backups should be conducted to prevent data loss or damage.

3.3.3 Enhance network and system security

Companies should strengthen network and system security by using measures such as firewalls, intrusion detection, and prevention systems to protect data from unauthorized access and use. Concurrently, systems and software should be updated regularly to prevent hackers from exploiting vulnerabilities for attacks.

3.3.4 Control employees' access to data strictly

Companies should strictly control employees' access to data by allowing authorized personnel to access sensitive data only. At the same time, a sound permission management mechanism should be established to timely revoke permissions from retired employees and those no longer needed to access data.

3.3.5 Strengthen employees' data security awareness

Enterprises should strengthen staff awareness of data security through training and education, so that employees understand the importance of data security and their own responsibilities. In addition, a reward and punishment system should be established to recognize and discipline employees who protect data security while punishing those who cause data breaches.

3.3.6 Establish emergency response plans

Companies should establish emergency response plans to prevent confusion and delays in the event of a data security incident. The response plans should include provisions for response timelines, handling processes, and responsible persons.

3.4 Cultivate Financial Digital Talents

3.4.1 Leadership Talent Development

The first leader responsible for digital transformation is often the CEO or owner. To initiate digital transformation, they must first understand the changes in the company's core competitiveness and business model under digitalization scenarios. Learning methods include searching on Baidu, following industry digitalization official accounts, attending training sessions, sharing forums, consulting with professionals, and visiting industry solutions.[3]

3.4.2 Recruitment of Digital Talent

Companies can enhance their digitalization level by recruiting talents with digital skills. These individuals typically have degrees in computer science, information technology, or related fields and possess extensive experience in software development and project management.

3.4.3 Training and Education

Enterprises can improve employees' digital literacy and skills through training and education. These trainings can take various forms, such as online courses, workshops, and seminars, to help employees stay informed about the latest digital technologies and trends.

3.4.4 Establishing a Digital Team

Companies can establish a dedicated digital team composed of professionals responsible for driving the enterprise's digital transformation. These individuals typically have extensive experience and skills in digitalization and are capable of working collaboratively with other departments to ensure the smooth implementation of digital transformation initiatives.

4. Conclusion

The digital economy poses new challenges to the financial management of small and mediumsized enterprises (SMEs), but also provides new opportunities. The small and medium-sized enterprises must adapt themselves to the development trend of financial digitization, improve their financial digitization consciousness and skill level, strengthen data security management, and train high-quality financial talents, which can make the SMEs obtain the better development in the digital economy time.

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References

[1] Fang Fang. Research on the Challenges and Strategies of Digital Finance Management in SMEs in the Digital Economy Era [J]. Finance and Economics, 2021 (17): 96-97.

[2] Wang Yuhan, Li Cunfang, Qiu Ran. Barriers and Strategies to the Digital Transformation of Financial Models in SMEs [J]. Accountant, 2021 (13): 14-15.

[3] Cheng Xianggan. Research on the Digitalization of Financial Management in SMEs [J]. Business Story, 2023 (2): 4-6.

[4] Xu Lingling. Exploration of Financial Strategy Transformation in SMEs in the Digital Information Era [J]. Chief Financial Officer, 2021 (21): 214-215.

[5] Zhang Mingfang. Preliminary Study on Issues and Measures for the Digital Transformation of Finance in Small and Medium-sized Enterprises in the Big Data Era [J]. Modern Marketplace, 2023 (2): 162-164.

[6] Liu Jialin, Zhang Mengjie. Barriers and Strategies for the Digital Transformation of Financial Management in SMEs [J]. Shandong Textile Economy, 2023, 40 (5): 5-8.

[7] Yang Manhui. Research on the Digitalization of Accounting in SMEs [J]. Journal of Economic Research Outlet, 2022 (31): 10-12.

[8] Zhang Jing. Practical Strategies for the Practice of Financial Transformation in SMEs in the Digital Economy Era [J]. Modern Marketplace, 2022 (2): 155-157.