

Small and Medium-Sized Enterprises Digital Management Facing Difficulties and Solutions

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Abstract: The advent of the digital era has provided strong technical support for the high-quality development of the social economy. The integration of the social economy with Internet technology has given rise to new industries. However, the traditional development model of small and medium-sized enterprises (SMEs) is increasingly unable to meet the demands of economic growth, and digital management has gradually become a key approach for these enterprises to achieve their development goals. Currently, SMEs face challenges such as talent shortages, insufficient funds, and a lack of awareness regarding transformation. This paper will analyze the difficulties SMEs encounter in implementing digital management and explore potential development paths for their digital transformation.

Keywords: Small and medium-sized enterprises; Digital management; Market economy

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1. Introduction

Small and medium-sized enterprises (SMEs) are a vital part of China's economic growth, playing a key role in increasing employment, promoting economic expansion, driving technological innovation, and ensuring socio-economic stability. In the context of the digital economy, the traditional management models of SMEs have become increasingly unsustainable, making digital transformation imperative. Digital management not only reshapes existing business models but also provides a new direction for enterprise transformation. However, SMEs face limitations in areas such as staffing, operational scale, and technological capacity. When implementing digital management, they must explore pathways that involve lower costs and minimized risks, aligned with their specific circumstances and market demands ^[1]. Digital management enables SMEs to undergo economic transformation, better compete in the market, and contribute to the construction of a modern economic system.

2. The current state of digital management in SMEs

To successfully implement digital transformation, SMEs must focus on training their employees. On one hand, to enhance employees' awareness of digital management and improve their management capabilities, enterprises should organize regular workshops or training sessions to promote effective digital management practices. On the other hand, SMEs can establish dedicated management departments, actively introduce various information management platforms, and facilitate comprehensive transformation in areas such as finance and human resources.

2.1. Flattening organizational levels

The application of digital management in modern enterprises has significantly improved work efficiency and introduced fundamental changes to organizational structures and internal management processes. To better adapt to a digital management model, enterprises need clear, well-defined strategies. By leveraging advanced technologies such as the Internet of Things (IoT) and big data, enterprises can streamline vertical control processes, thereby creating flatter organizational structures and reducing reliance on manual oversight ^[2].

2.2. Enabling intelligent sharing

Under a digital management model, enterprises are transforming key areas such as human resources, finance, and procurement. By adopting shared service center models, businesses can centralize the management of critical functions, allowing for large-scale, standardized operations that improve both efficiency and quality. Additionally, digital management helps break down "departmental silos," fostering greater collaboration among internal systems ^[3].

2.3. Accurately meeting customer needs

In the digital age, information technology and data analytics are instrumental in improving service quality for SMEs. These tools allow businesses to better understand customer needs and enhance service efficiency, providing a more personalized and effective customer experience. Digital information technology and big data analytics enable SMEs to gain deep insights into customer behavior, preferences, and needs, allowing them to develop tailored service strategies. By collecting, organizing, and analyzing customer data, SMEs can uncover valuable insights into customer consumption habits and preferences. This data-driven approach enables them to develop customized products and services. Furthermore, SMEs can center their strategies around the customer, utilizing information technology to conduct in-depth research into customer needs and drive product development efforts.

3. The necessity of digital management for SMEs

3.1. Increasing demand for enterprise management

Small and medium-sized enterprises (SMEs) often face challenges in areas like information management, business process optimization, and human resources management. Due to their smaller size, SMEs have limited resources and management capabilities, which requires them to be more cautious regarding management efficiency and cost control. Through digital management, SMEs can significantly enhance operational efficiency and reduce costs. On one hand, digital management optimizes information processes. By adopting a digital management system, SMEs can centralize information storage, enable quick retrieval, and provide

real-time updates, thereby improving the accuracy and reliability of information ^[4]. On the other hand, digital management fosters information sharing and enhances collaboration between various departments. By incorporating digital technologies, enterprises can redesign their business processes, achieving automation and speed. This not only reduces manual operations and increases efficiency but also lowers the error rate, improving the overall quality of business operations.

3.2. Changes in cost structure

With the rapid development of the digital economy, profitability for enterprises is declining, and the capital flow of SMEs has been severely impacted. Some companies have been pushed to the margins due to shifts in their cost structures. Concurrently, mergers and expansions by large companies have intensified market competition. In this context, leveraging digital technology to reduce costs and improve efficiency has become crucial for SME transformation. First, SMEs should prioritize the introduction and application of digital technologies. By adopting advanced digital tools and platforms, enterprises can optimize their operational processes and enhance production efficiency, thereby lowering costs ^[5]. For example, through cloud computing and big data technologies, SMEs can achieve real-time data collection, analysis, and application, improving decision-making accuracy and efficiency. Second, SMEs should focus on expanding online channels. By establishing their own e-commerce platforms or utilizing third-party platforms, enterprises can overcome the limitations of offline traffic and expand market share. Additionally, online channels provide valuable insights into consumer demand and market trends, offering strong support for product development and marketing strategies ^[6].

3.3. Rising consumer demand

With changes in China's market economy, consumer demand has grown, and personalized, customized services have become more popular. This shift places higher demands on SMEs. To meet consumer needs, SMEs must more accurately understand their preferences and provide personalized, diversified products and services. Digital management offers powerful support to help SMEs meet these requirements. First, digital management enables SMEs to deeply analyze consumer purchasing behaviors, preferences, and needs through data analysis. By leveraging information technology, they can identify potential demands and consumption trends, adjusting product design and marketing strategies to align with consumer needs. Second, digital management facilitates personalized and customized production for SMEs. By integrating advanced technologies such as smart manufacturing and flexible production, enterprises can cater to individual consumer needs more effectively.

4. Current difficulties in digital management of SMEs

4.1. Cognitive misconceptions about digital management

Some enterprises have a limited understanding of digital management, believing that digital transformation is solely a technological innovation. They assume that simply introducing advanced information technology will complete the transformation. This represents a significant cognitive misconception. Digital management is not just about technological change; more importantly, it involves a comprehensive overhaul of the enterprise's entire management system. Additionally, some enterprises exhibit a "lazy" mindset. While they recognize that digital management is the future trend, they are reluctant to embrace change, often maintaining a wait-and-see attitude ^[7]. Due to a lack of understanding of relevant policies, many enterprises' grasp of digital management remains superficial, which hampers the progress of their digital transformation.

4.2. Lack of funding for SMEs

As digital management deepens, many SMEs struggle to complete the transformation. The primary obstacle is a lack of funds, which significantly impairs their development. Increased banking requirements for financing have heightened credit risk and financing debt for SMEs, making it difficult for them to invest in technological innovation or market expansion. Moreover, due to their smaller scale, limited funding, and lack of talent, SMEs find it challenging to compete with larger enterprises.

4.3. Insufficient talent reserve

In the context of digital management, a strong talent reserve is critical in determining the direction and speed of an enterprise's development. It is key to the successful transformation of SMEs. Currently, most employees in SMEs focus on practical work, and there is a shortage of highly skilled, knowledge-based professionals capable of driving technological innovation. Many SME employees lack higher education qualifications, and there are few versatile talents with an innovative mindset. Compared to large enterprises, SMEs struggle to attract innovative talent due to their limited resources and smaller scale, which affects the speed and efficiency of their digital transformation.

5. Development path of digital management for SMEs

5.1. Introducing management talent and establishing innovation mechanisms

In the era of big data, innovation serves as the internal driving force for enterprise development, guiding the transformation of small and medium-sized enterprises (SMEs). Today, enterprise management has evolved beyond traditional experience-based approaches and is gradually shifting toward a digital management model. The rapid flow of information across departments allows businesses to respond more flexibly to market changes and business challenges^[8]. Therefore, SMEs must establish innovative mechanisms to streamline and accelerate digital management.

First, establishing innovation mechanisms is not solely the responsibility of research and development (R&D) personnel but requires collaborative efforts across the entire enterprise, particularly from management talent with expertise in big data. These individuals can help businesses leverage big data technologies to optimize management activities while fostering a culture of knowledge sharing and training within the company, thus enhancing overall innovation capabilities^[9]. Additionally, through systematic knowledge learning, employees can continuously improve their professional skills and competencies, providing more opportunities for innovation within the enterprise.

Moreover, intelligent digital management is a crucial tool for driving innovation. By adopting advanced technologies and tools, companies can efficiently collect, analyze, and utilize data to optimize business decisions and processes^[10]. This approach not only enhances operational efficiency but also provides valuable data support and a solid foundation for informed decision-making and innovation.

5.2. Strengthening vocational training and focusing on talent development

In the digital age, enterprises must effectively utilize human resources to build a solid foundation for the long-term development of digital management. Small and medium-sized enterprises (SMEs) can bridge the gap in innovative talent through vocational training. First, for in-service digital composite talents, SMEs can help employees acquire comprehensive skills and knowledge in operations and information systems through job rotation and specialized

training, providing a stronger talent base for digital transformation. Second, SMEs should collaborate with professional institutions and industry experts to jointly cultivate digital composite talent^[11]. These institutions and experts bring extensive experience and expertise, assisting enterprises in setting standards for digital composite talent, refining training programs, and ensuring that the content is aligned with the actual needs of the business. Third, SMEs should actively establish deep partnerships with higher education institutions, vocational schools, and technical institutes to implement joint training programs. By collaborating with these educational institutions, companies can create experimental, practical training scenarios tailored to digital transformation, helping students gain a better understanding of the real-world operations and requirements of enterprises during their learning process.

5.3. Embracing cutting-edge technologies and refining transformation strategies

To accelerate the process of digital transformation and upgrading, SMEs must gain a deep understanding of the advantages that cutting-edge digital technologies offer in operation management. The digital industry is currently experiencing strong growth and is expected to provide even more opportunities for development in the future. As profit-driven organizations, SMEs need to identify their own development direction to define their business scope and optimize management models in a targeted way^[12].

First, managers of small and medium-sized enterprises should actively innovate their digital concepts and ways of thinking. They should also adopt forward-looking thinking, broaden their global perspective, and focus on long-term business development goals rather than short-term interests. Learning from the successful digital transformation cases of large enterprises, adopting best practices, and implementing advanced technologies are essential steps toward formulating high-quality strategic plans^[13] that align with the specific circumstances of each enterprise, such as its scale and operational characteristics. In addition, enterprises should increase their investment in capital and resources for digital transformation and upgrading to maximize the benefits of digitalization, ultimately reducing marginal costs and improving marginal benefits.

Second, to ensure the security of digital technology, SMEs must assign professional personnel to research cutting-edge technologies, ensuring a comprehensive understanding of their advantages and limitations. This will enable the effective use of digital technologies to drive enterprise development and promote digital transformation^[14]. At the same time, SMEs should explore more advanced production tools through the application of these technologies, converting them into productive forces. By gradually expanding the application of digital technologies in enterprise management, SMEs can further advance digital transformation and upgrading^[15].

6. Conclusion

As a vital part of China's market economy, SMEs are crucial in promoting economic development. In the digital era, SMEs must seize transformation opportunities, stay attuned to market trends, strengthen talent training mechanisms, absorb management systems and technologies from larger enterprises, and strive to capitalize on new economic shifts. By accelerating the implementation of digital management, SMEs can contribute to the development of China's market economy.

Disclosure statement

The author declares no conflict of interest.

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