

Financial Digital Transformation and Exploratory Practice of Mengniu Group

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Abstract: With the rapid development of the digital economy and the continuous innovation and widespread popularization of science and technology, enterprises are facing an urgent need for transformation and upgrading. As one of the core functions of an enterprise, financial management, its digital transformation is crucial. As a leading enterprise in China's dairy industry, Mengniu Group has actively adapted to market changes and leveraged financial digital transformation to improve management efficiency, optimize decision-making processes, and enhance competitiveness. Mengniu has continuously explored the application of digital technologies, striving to achieve intelligence, automation, and data-driven financial management, and has achieved certain results. However, the transformation process has also encountered many challenges, such as pressure from system integration and technology iteration, data security and compliance issues, and talent adaptation difficulties. Studying Mengniu Group's financial digital transformation practice can summarize its successful experience, provide valuable references for other enterprises, and promote the digitalization process of the entire industry.

Keywords: Mengniu Group; Financial Digitalization; ERP System; Financial Shared Service Center

1. Introduction

With the wide application of emerging technologies such as big data, cloud computing, and artificial intelligence, China's economic form has undergone a development stage from the information economy to the digital economy. Under such circumstances, enterprises' digital transformation is an inevitable choice to meet the needs of current development and a strategic action for future competition. The state has issued many policies and measures to strengthen support for the digital transformation of small and medium-sized enterprises. For example, in 2021, the 14th Five-Year Plan for the Development of Intelligent Manufacturing clearly stated that it would promote the digital transformation, networked collaboration, and intelligent transformation of the manufacturing industry, and put forward the requirement that "by 2025, most large-scale manufacturing enterprises will realize digitalization and networking, and key industry leaders will initially apply intelligence". In addition, due to the impact of the COVID-19 pandemic, more small and medium-sized enterprises have realized the importance of information construction and actively adopted digital transformation methods to cope with challenges.

In recent years, with the improvement of national requirements for dairy product quality and more brands entering the dairy industry, how to improve dairy product quality to maintain an advantageous position in industry competition has become a problem for many enterprises. As the core function of an enterprise, the digital transformation of finance has become the key to enhancing core competitiveness. The global digital transformation market is expected to reach 3 trillion US dollars by 2025, with an average annual growth rate of over 20%. This article takes Mengniu Group as a research case to elaborate on the specific practical measures and existing problems of its financial digital transformation, and puts forward countermeasures and suggestions.

In recent years, as various enterprises have carried out large-scale digital transformation, especially in finance, and achieved certain results, many scholars have conducted research on the financial digital transformation practice of enterprises, including the concepts and theories emerging with financial digital transformation, as well as the measures and inspirations of financial digital transformation. Li Lingling^[1] briefly stated that financial digital transformation can start from three aspects: business

processes, organizational structure, and information systems. Zhang Feiming^[2] proposed to apply artificial intelligence to financial digitalization by building a financial shared service center, integrating ERP systems, and realizing business-finance integration. Wu Shuyan et al.^[3] elaborated on the practices of financial digital transformation from three levels: management decision-making, basic business efficiency improvement, and business-finance integration construction. Most of the existing studies focus on theoretical analysis, and relatively few are combined with specific enterprise cases. The possible marginal contribution of this article is to take Mengniu Group as a typical case, based on the enterprise's financial digital transformation, analyze the current problems in Mengniu Group's financial digital transformation, further improve the practical content of financial digital transformation, and enable enterprises to better utilize surrounding resources and give full play to their advantages in the production process and industrial chain.

Founded in 1999, Mengniu Group is headquartered in Hohhot, Inner Mongolia, and is a leading dairy product manufacturer in China. After years of development, Mengniu has emerged in China's dairy industry, with products covering multiple categories such as liquid milk, yogurt, milk powder, and cheese. According to the 2022 financial report, Mengniu Group's annual sales revenue reached 100 billion yuan, and its market share has always been at the forefront of the industry. Mengniu Group has built multiple modern production bases across the country, equipped with advanced production equipment and a strict quality control system. The company focuses on product innovation and technological research and development, and has launched a number of high-quality dairy products that meet consumer needs. Mengniu's brand influence continues to improve, and it has become a representative of high-quality dairy products in the minds of consumers. Mengniu Group's success relies on its strong market operation capabilities, as well as its continuous exploration and practice in financial management and digital transformation.

2. Theoretical Basis and Related Concepts

2.1 Concept of Financial Digital Transformation

Financial digital transformation refers to the process in which enterprises reshape financial management processes, improve decision-making efficiency, and enhance financial transparency by applying information technology, especially advanced technologies such as big data, cloud computing, and artificial intelligence^[4]. Currently, the traditional financial management model can hardly meet the enterprise's needs for flexibility and real-time performance, while transformation can improve the speed and accuracy of data processing and provide forward-looking decision support through data analysis. Its macro key dimensions are reflected in four aspects: In-depth integration of financial management systems to promote data sharing and automated processing between financial and other systems; Electronic financial reports replacing paper forms to realize real-time data updates and improve sharing efficiency; Relying on advanced technologies to efficiently analyze complex financial data and provide accurate insights for management; Building electronic payment and settlement systems to improve transaction efficiency and accuracy, and reduce costs. To promote the process of financial digital transformation, enterprises need to make systematic investments in organizational structure restructuring, process reengineering, operation model innovation, and intelligent technology application. Specific measures include establishing a financial shared service center and building a financial capability center. These measures will effectively promote data-driven business decision-making and provide strong support for the overall digital transformation of enterprises.

2.2 Overview of Organizational Change Theory

Organizational change theory plays a key role in the field of management. It is a systematic theoretical framework used to analyze how organizations adapt to changes in the internal and external environment, achieve dynamic adjustment, and achieve sustainable development. This theory focuses on how organizations, in the face of external pressures such as technological innovation, intensified market competition, social and cultural changes, and policy and regulatory adjustments, as well as internal needs such as strategic transformation, efficiency improvement, and cultural reshaping, adjust elements such as organizational structure, management processes, personnel allocation, technical means, and cultural concepts through active or passive methods, break the original balance, and build a new order. This theory holds that the necessity of change stems from the dual needs of organizational survival and development: to adapt to the uncertainty of the external environment to maintain competitiveness, and to release potential through internal optimization to achieve long-term goals. Its

core logic is that change is not a single event, but a cyclic process including goal setting, plan formulation, interest coordination, resistance overcoming, and effect evaluation. It is necessary to balance stability and flexibility, individual needs and organizational goals, and ultimately achieve organizational efficiency improvement, employee capability development, and stakeholder value co-creation through change. This theory emphasizes that organizational change is not only the update of technology, but also the in-depth transformation of management concepts and culture.

3. Analysis of Mengniu Group's Financial Digital Transformation Path

3.1 Strategic Planning Phase

Mengniu has adopted the "dual-drive of internationalization and digitalization" and taken financial digital transformation as an important strategy, aiming to achieve intelligent, transparent, and efficient financial management, and improve operational efficiency and competitiveness. When the transformation was launched in 2015, Mengniu set three goals: Shorten the financial statement preparation time by 50% within three years; Realize that 80% of financial decisions are based on real-time data within one year, and reduce financial management costs by 20% within five years; Achieve collaboration between 80% of business and financial departments after the transformation. In 2021, the digital strategy was incorporated into the group's "FIRST Strategy", and promoted in three phases: realizing the "digital journey of a drop of milk", providing "personalized services based on the same consumer", and advancing the "AI-driven dual flywheel" strategy. In terms of organizational structure, Mengniu made adjustments centered on "flattening" and "cross-functional teams": Established a digital finance center to coordinate the transformation; Formed cross-functional teams including finance, operations, and other departments; Optimized management levels and enhanced the decision-making power of grass-roots levels to improve collaboration efficiency and innovation capabilities.

3.2 Technology Implementation Phase

The core of Mengniu's financial digital transformation lies in the construction of core systems and the application of intelligent financial tools. In terms of core systems, with ERP and big data platforms as the core, it has built a digital platform covering the "pasture-factory-channel-consumer" chain, and deeply integrated CRM, SRM, and MES to realize real-time collection of financial data and barrier-free connection between business and finance. This improves data accuracy and transparency, enables real-time monitoring of financial indicators, rapid report generation, and supports scientific decision-making by management. In terms of intelligent tools, in December 2018, Mengniu first piloted Robotic Process Automation (RPA) in the financial shared center, and later promoted it to business operations to automatically handle repetitive tasks such as invoice processing and reimbursement. This shortened the invoice processing time by 60% and reduced the error rate by 50%. Artificial intelligence (AI) is applied to data analysis and prediction, reducing the reimbursement process from 30 minutes to 2.4 minutes, which reduces manual errors and improves efficiency, laying a foundation for the sustainable development of the enterprise. The specific reimbursement process is shown in Figure 1. In addition, Mengniu has built a training system based on "tool implementation + scenario practice", and improved employees' digital capabilities through training, talent introduction, cross-departmental projects, and skill competitions (accounting for 30% of promotions) to promote digital transformation.

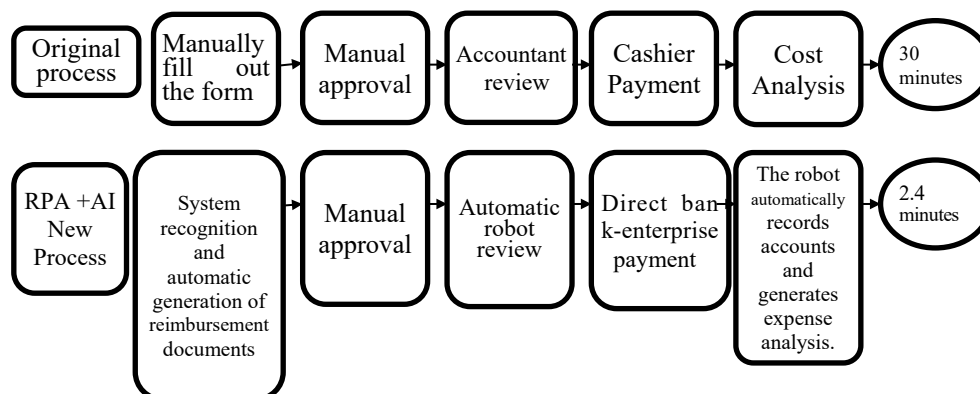


Figure 1: Reimbursement Process Comparison Diagram.

3.3 Construction of Financial Shared Service Center

Mengniu proposed the strategic plan for the financial shared center in 2009, refined the implementation plan in 2012, and divided financial management into three modules: strategy, operation, and sharing. In November 2015, Mengniu's financial shared center was fully operational, covering 49 subsidiaries and launching the SAP system, laying the foundation for business-finance integration. In 2016, Mengniu migrated the shared services of 59 legal entities, completed the transformation in sales regions and other fields, upgraded the ERP system, launched the SRM system, established a cross-departmental working group, disassembled 137 process nodes to unify standards, and built a BI system to optimize resource allocation. In 2017, Mengniu was in a critical period of improving operational efficiency, established an internal key customer system and promoted it to the market; in 2019, it restructured the financial structure of 72 sales companies, promoting the shared center to transform from a cost center to a profit center. At the same time, it built a data center and launched a secure cloud management system to support the digital strategy and improve efficiency and business value. The development history of Mengniu's financial shared center is shown in Figure 2:

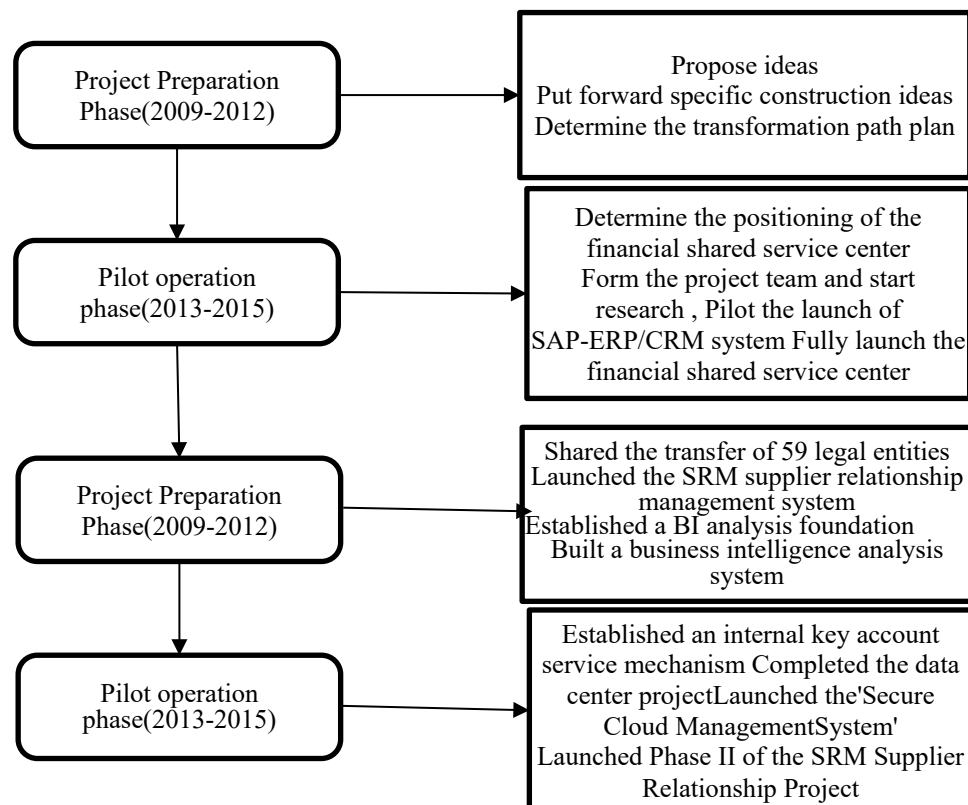


Figure 2: Development Process of the Financial Shared Services Center.

The construction of the financial shared service center has significantly optimized financial management efficiency. By breaking the organizational boundary barriers between traditional departments, it has promoted the efficient transmission of financial data and cross-organizational collaborative integration, thereby effectively achieving economies of scale. Through the innovative application of technology, Mengniu Group has fully connected the business and financial systems, built a financial shared center integrating capital sharing and accounting sharing, which not only promotes the transformation of financial functions but also opens a new chapter of intelligent financial transformation^[5].

3.4 Optimization of Business-Finance Integration Process

In the process of financial digital transformation, the optimization of the business-finance integration process is a key link to improve enterprise management efficiency. Based on the financial sharing platform, Mengniu Group's system standardizes business activities and their economic transactions. By restructuring the collaboration mechanism between business and finance, it has realized the in-depth integration of information flow, capital flow, and business flow. It has established a cross-departmental collaboration mechanism to ensure information sharing and real-time communication between various business units and the financial department^[6], and adopted an

advanced ERP system to monitor various business indicators in real time, feed back financial data in a timely manner, and form a closed-loop management. Based on the SAP data warehouse platform, Mengniu Group has realized the organic collaboration of systems such as budget management, capital management, financial shared center, invoice management, tax sharing, and consolidated statements by integrating RPA and artificial intelligence technologies, thereby building a comprehensive intelligent financial system centered on the flow of business and financial data, as shown in Figure 3:

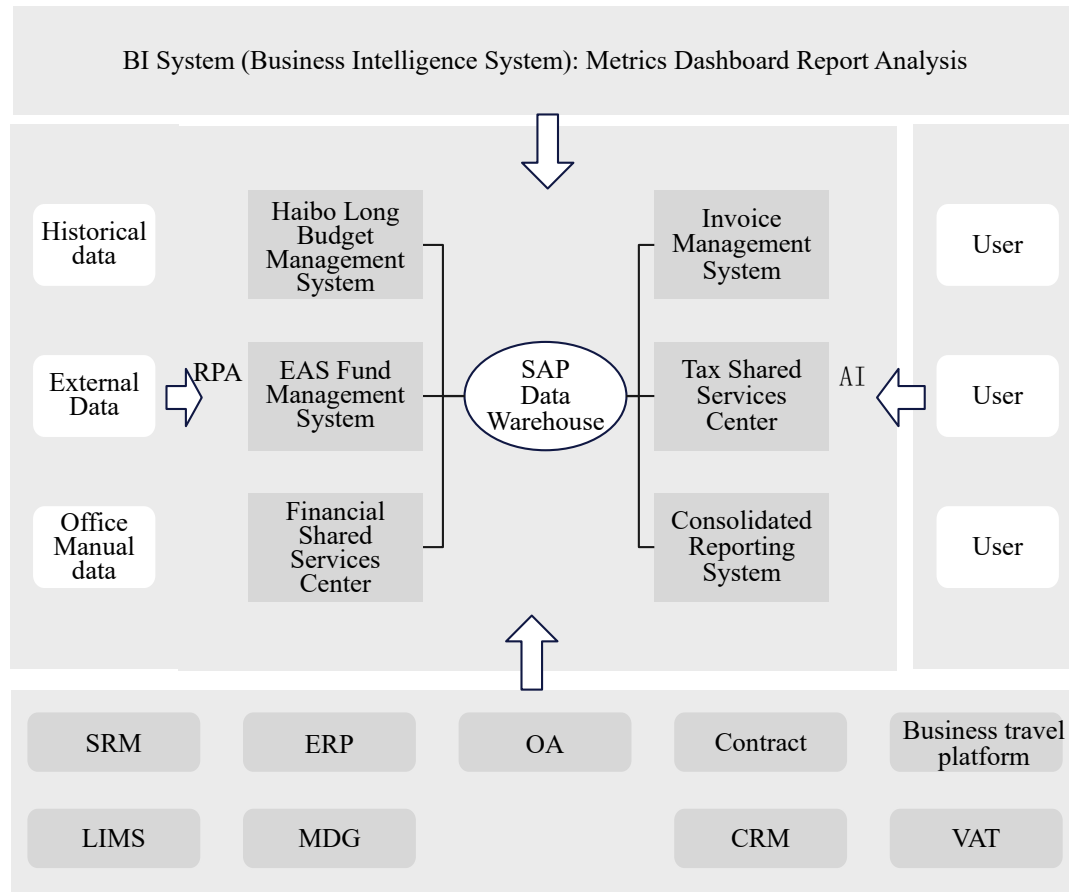


Figure 3: Business-Finance Integration System.

Through the above measures, Mengniu Group has realized the in-depth optimization of business-finance integration, improved overall operational efficiency, and enhanced market competitiveness. Mengniu Group will continue to explore more intelligent business-finance integration models to adapt to the rapidly changing market environment.

3.5 Construction of Data Governance System

In the process of financial digital transformation, the construction of a data governance system is crucial. Mengniu Group's management has realized that data is not only the basis for enterprise decision-making but also the key to improving management efficiency and business innovation. To this end, Mengniu Group has built a data middle platform, integrated financial data of more than 350 legal entities and over 45,000 employees worldwide, covering 170 trillion data nodes in supply chain, production, sales, and other fields, and established a complete data governance framework covering data collection, storage, processing, analysis, and application. For example, in the Ningxia Factory, the data middle platform has realized the real-time linkage of production, transportation, and financial data, and the accounting cycle has been significantly shortened from 3 days to 4 hours. In addition, Mengniu Group has formulated data standardization specifications and established a "Master Data Management (MDM) System for Finance" to standardize the definition of core indicators such as "market share" and "channel expenses", ensuring data consistency and comparability between different departments and systems. For instance, regarding the financial indicator of "dealer rebates", the sales department used to record it as "sales expenses" while the financial department recorded it as "revenue deduction". Now, with the establishment of MDM, unified rules have been formulated to eliminate conflicts in report standards. Mengniu has also established a data quality management mechanism, with AI-driven data

cleaning. Through regular data auditing and cleaning, it automatically identifies and corrects format errors (such as inconsistent dates, format errors, and confused amount units), improving data accuracy and reliability. Mengniu has also introduced data security management measures to protect sensitive information and prevent data leakage and abuse.

4. Analysis of Problems in Mengniu Group's Financial Digital Transformation

4.1 Pressure from System Integration and Technology Iteration

Although Mengniu has largely integrated processes and realized automation through technologies such as RPA and AI, the collaborative efficiency of many systems still needs to be improved. For example, Mengniu's global capital management platform has realized "12+6 bank direct connections", but the phenomenon of data silos (a situation where data cannot be interconnected due to the lack of sharing mechanisms or technical compatibility in the system) still occurs frequently in different business systems (such as SAP, CRM, and SRM). The SAP system performance optimization project carried out by Mengniu in 2024 shows that the continuous growth of database data volume has led to a decline in system response speed, and it is necessary to compress the database space to 45% through historical data archiving. This exposes the insufficient scalability of the early system architecture. In addition, with the increasing number of cross-border businesses involving various languages and currencies, manual intervention is still required for financial processing of cross-border businesses in most cases. Although the online processing of international letters of credit has improved efficiency, manual analysis is still needed for foreign exchange position monitoring and exchange rate risk management, resulting in breakpoints in the in-depth integration of technology and business.

4.2 Data Security and Compliance Risks

As a multinational enterprise, Mengniu needs to comply with multiple domestic and foreign regulatory requirements such as China's Data Security Law and the EU's General Data Protection Regulation (GDPR). Although Mengniu's capital management platform implements centralized management of global funds, the compliance of cross-border data transmission needs to be further confirmed, and the risk of data transmission has not been completely eliminated. For example, cases of U.S. export controls on logistics enterprises show that if the financial system is negligent in transactions with sensitive countries and fails to implement effective screening, it is very likely to trigger compliance risks. In addition, the 2011 hacking incident of Mengniu's official website is well-known. As a leading enterprise in China's dairy industry, although this incident did not directly involve financial data, it reflects the vulnerability of the network security protection system. Currently, the dependence of intelligent financial tools on AI models has led to new risks such as algorithmic bias and data leakage^[7]. In the field of tax compliance, if the related-party transaction pricing of Mengniu's overseas subsidiaries does not follow the arm's length principle, it may trigger cross-border tax disputes, requiring additional resources for transfer pricing audits.

4.3 Imbalance between Organizational Adaptation and Talent Capability

Digital transformation has had a significant impact on the capability boundary of traditional financial teams. Although Mengniu has increased the average daily document processing volume per person to 400 through the financial shared center, grass-roots financial personnel still face the problem of "operational skill gaps". For example, the intelligent reimbursement system requires employees to master skills such as OCR recognition and electronic receipt matching, but some senior employees use the system less frequently due to insufficient training. In 2024, Mengniu implemented the "Digital Accountant" training program, but financial scenarios such as AI financial forecasting and blockchain auditing were not covered in this program. From a management perspective, the "data-driven command" model adopted by the Ningxia Factory shows that there is a conflict between the traditional organizational structure and the digital decision-making mechanism, and the collaboration efficiency between the financial department and the IT department will affect the speed of project implementation. After the introduction of AI technology, repetitive work has indeed decreased, but this puts forward higher requirements for financial personnel's data analysis and strategic decision-making capabilities. However, in the existing talent echelon, the proportion of interdisciplinary talents with both business insight and technical literacy is less than 20%, which restricts the value transformation of intelligent financial tools^[8]. In addition, employees' psychological problems have become increasingly prominent

in the financial digital transformation. At the beginning of the transformation, the change in work mode will inevitably lead to resistance among employees; after the transformation is implemented, most financial work is completed by intelligent tools, and employees repeatedly assist machines, which will lead to boredom.

5. Countermeasures and Suggestions

5.1 Multi-Dimensional Breakthrough in System Integration and Technology Iteration Problems

Starting from data connectivity, architecture optimization, and intelligent empowerment, establish unified data standards and sharing mechanisms, and open interfaces of systems such as SAP, CRM, and SRM to eliminate data silos; The enterprise shall address the problem of SAP system data growth by improving the historical data archiving strategy to compress the database space, and optimize the early architecture to enhance scalability; it shall rely on AI to develop automated modules to realize cross-border foreign exchange position monitoring and exchange rate risk early warning, fill the breakpoints in the integration of technology and business, and improve the efficiency of full-link automation.

5.2 Building a Full-Process Data Security and Compliance Protection Barrier

Construct a multi-dimensional compliance system in accordance with domestic and foreign laws and regulations, establish a whitelist system for cross-border data transmission, set up a dual screening mechanism for transactions with sensitive countries, monitor data flow in real time, and identify risks; The enterprise shall standardize the related-party transaction pricing of overseas subsidiaries, conduct regular audits based on the arm's length principle, and introduce third-party evaluation; it shall strengthen the security management of AI models, adopt federated learning to reduce data exposure, regularly detect algorithmic bias, and establish a data leakage emergency response plan to comprehensively reduce security and compliance risks.

5.3 Implementing Hierarchical Measures to Resolve the Dilemma of Organizational Adaptation and Talent Capability Imbalance

Build a "basic + advanced" training system: strengthen practical training such as OCR recognition for grass-roots employees, add courses on AI financial forecasting and blockchain auditing for management, and cooperate with external institutions to cultivate interdisciplinary talents in a targeted manner; The enterprise shall pay attention to employees' psychology: it shall explain the value of transformation through publicity before the transformation, conduct one-on-one communication to alleviate resistance during the transformation, optimize work content to reduce repetitive tasks after the transformation, add strategic support work, and match regular psychological counseling to alleviate employees' boredom.

6. Conclusion

Financial digital transformation is a key way for enterprises to cope with market changes and enhance their competitiveness. In this process, Mengniu Group has integrated advanced digital technologies with financial management, successfully improving management efficiency and decision-making capabilities. In addition, the success of transformation not only depends on the introduction of technology but also requires clear strategic planning and reasonable adjustment of organizational structure. Mengniu has clarified its digital vision in the strategic planning phase and ensured collaboration between various departments by optimizing the organizational structure. Talent training is also a key factor in the success of the transformation. Mengniu has improved the digital literacy of all employees through advanced training methods, promoting the smooth progress of the transformation. Although Mengniu has achieved certain results in financial digital transformation, it still faces problems such as pressure from system integration and technology iteration, data security and compliance, and talent adaptation. When carrying out digital transformation, enterprises should combine their own actual conditions and formulate systematic and full-process transformation strategies to achieve sustainable development.

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