

Research on the Impact of Digital Transformation on Corporate Performance——Based on Mengniu’s Digital Transformation in 2015

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Abstract. This study explores the impact of the digital transformation implemented by Mengniu Group since 2015 on corporate performance. With the rapid development of China's dairy industry, market competition is constantly increasing, and consumer demand is constantly changing. Mengniu decided to improve its market competitiveness through digital transformation. By introducing the key measures taken by Mengniu in the early stage of transformation, including financial shared center, product traceability system and big data precision marketing, and using the company's financial data and some non financial data for auxiliary analysis, it reveals how Mengniu has improved the company's operating efficiency, reduced costs and improved both financial and non-financial performance in the five years after the transformation. The conclusion of this study shows that successful digital transformation can significantly improve the competitiveness of enterprises in the market and the speed of response to market changes, especially for those large enterprises that have the ability to make large investments, and can also provide reference value for other enterprises when considering digital transformation.

Keywords: Digital transformation; Corporate Performance; Mengniu Enterprise.

1. Introduction

Since 2015, with the rapid development of China's dairy industry, the competition faced by enterprises is intensifying, and the needs of consumers are also changing. How to improve the competitiveness of enterprises in the market has gradually become a very important issue for corporate executives. In the face of fierce competition in the market and the information age, if a company want to maintain their leading enterprises, they must take the lead in making changes and move away from some traditional management methods that are no longer applicable. Only enterprises that transform into new-era strategies that maximize market demand have a chance to break through. For small enterprises, if they want to survive in the market, it is also an indispensable part to learn from the operating strategies of leading enterprises in a timely manner.

As one of the leading enterprises in the dairy industry, Mengniu proposed digital transformation in 2015, actively promoted the progress of transformation, implemented a five-year reform plan, and achieved great success. This study aims to explore the measures taken by Mengniu in the first phase of digital transformation and the impact on financial performance. By analyzing the financial data before and after the transformation, this study reveals the impact of digital transformation on Mengniu. Other companies can also better understand digital transformation through this study, so that they can better avoid some potential risks brought by digital transformation. Let corporate managers have a full understanding of the driving force of digital transformation. At the same time, based on the cited literature, this study has sorted out and expanded corporate indicators to a certain extent, which can provide certain reference ideas for researchers who study digital transformation in the future.

2. Literature Review

Enterprise digital transformation refers to the use of digital information technology by enterprises to reshape their business processes, organizational structure, customer experience and business models to cater to the rapidly changing market and survive in the new era of big data market.

Bharadwaj et al. pointed out in their research that enterprise digital transformation is not only the application of information technology, but also a process of enterprise strategic transformation, which may involve many aspects such as core operations, competitiveness improvement and interaction with the external environment [1]. Although the core goals of digital transformation are the same, different enterprises can choose the transformation that best suits them according to their own development.

2.1. Frameworks involved in digital transformation

Digital transformation is the process by which enterprises improve operational efficiency, continuously innovate products, and optimize business models through technological innovation and reshaping of business processes when faced with the rapidly changing technological environment and market demands in the information age. Different scholars have different research and analysis on the framework of digital transformation.

Bharadwaj et al. emphasized in their research that digital transformation is not only the application of technology, but also a strategic transformation. Their framework focuses on how to integrate information digital technology with the business operation model of the enterprise to promote the rapid development and multi-dimensional innovation of the enterprise [1]. This framework is mainly divided into three areas: customer experience, operational efficiency and business model innovation. For customer experience, digital transformation allows enterprises to use technologies such as big data and artificial intelligence to improve the quality of personalized services and effective communication with customers and enhance enterprises to make timely judgments in the face of rapidly changing markets. For operational efficiency, enterprises can use cloud platforms, the Internet and other technologies to optimize financial management, supply chain management and resource allocation. At the same time, digital transformation can also provide enterprises with new business models. Koumas et al. pointed out that digitalization is not limited to technological upgrades, but the company's strategic goals and corporate culture should also be taken into consideration as key factors [2].

In summary, building a digital transformation framework requires comprehensive consideration from many aspects, including technology selection, process optimization, and even whether it is consistent with corporate culture and core values.

2.2. The impact of digital transformation on enterprises

Digital transformation has a great driving force for the innovative development of enterprises. Zhao pointed out that for manufacturing enterprises, promoting digitalization can greatly enhance the innovation capabilities of enterprises [3]. Wang et al. found through empirical research that digital transformation has a positive impact on the overall performance of enterprises [4]. Specifically, digital transformation can reduce production costs, improve enterprise R&D capabilities, and manage human resources. These factors were summarized in the study of Leão et al. as being able to enhance the value chain activities of enterprises, allowing them to gain an advantage over traditional enterprises in the global competitive market [5]. In addition to significantly improving a company's own performance, successful digital transformation can also strengthen connections with customers. Ziółkowska found that digital transformation can affect marketing performance thus help to build better relationships with customers [6]. However, at the same time, digital transformation may also disrupt the existing market. Verhoef et al. believe that due to digital transformation, while business models are innovatively changing, consumer expectations will also change accordingly. Enterprises cannot blindly carry out digital transformation but need to seriously consider the measures that should be taken, otherwise it will be difficult to achieve the expected results [7].

2.3. When and how to digitally transform

Boneva showed in his research that digital transformation can now be applied as a business formula, and because the challenges faced by transformation have been systematized, he proposed an

algorithm that companies can use to formulate strategic goals and short-term strategic priorities that are in line with their own corporate development. Using this algorithm can help corporate managers better understand potential risks and provide support for their management work [8].

3. Introduction to Mengniu's digital transformation case in 2015

3.1. Company introduction

Founded in 1999, Mengniu Dairy Group is headquartered in Hohhot, Inner Mongolia, and is one of China's leading dairy product producers. The company's products include liquid milk, yogurt, milk powder and cheese. The company's goal is to provide high-quality dairy products to meet the needs of different consumers. With its strong brand influence and extensive sales network, Mengniu has occupied a major share of the domestic dairy market. Their products are distributed throughout the country, including first-tier cities and remote areas. In addition, Mengniu has successfully entered the Southeast Asian and Australian markets through strategies such as mergers and acquisitions and joint ventures.

3.2. Drivers of digital transformation

3.2.1 External market pressure

With the continuous development of the times, the competition in China's dairy market has become extremely fierce. The rise of domestic brands such as Yili and Bright, as well as the intervention of foreign high-quality dairy product companies, will compete for the market share of dairy products. In such a fiercely competitive market, the traditional operating model will greatly limit the company's development and market share grabbing ability. Especially in the ever-changing competitive market environment, if companies want to maintain their core competitiveness, they must have more efficient management strategies, more flexible responses to market changes, and streamlined and detailed management of the supply chain. Another reason why Mengniu chose digital transformation is that with the continuous expansion of its business, the complexity of the company's financial management and supply chain management is increasing. This forces Mengniu, which wants to continue to seize market share, to actively take digital transformation measures to meet these challenges.

3.2.2 Changes in customer needs

At the same time, with the continuous development of the Internet, consumers are gradually deepening their views on protecting their own rights and interests. People are beginning to pay attention to product safety and health issues. Once a product has safety, health problems or scandals, it will be a huge blow to the company. In addition, consumer demand is also becoming personalized. Traditional marketing models are difficult to accurately capture the needs of the new generation of consumers.

3.2.3 The need for national policy

The last reason is to respond to national policies. The Chinese government revised the Food Safety Law in 2015 to clarify the supervision of the entire process of food production, transportation and sales. It particularly emphasized the indispensability of establishing a food traceability system. At the same time, the country is also vigorously promoting the digital transformation of enterprises and providing technical and policy support to Mengniu.

3.3. Digital transformation measures taken

After a series of analyses, Mengniu Group decided to adopt the three main approaches to digital transformation in the first phase of digital transformation (table 1).

Table 1. Digital transformation measures taken

Area	Digital Transformation Method	Specific Functions and Benefits
Financial Management	Financial Shared Center (CE+SSF+Opentext)	<ul style="list-style-type: none"> - CE System: Standard document design and approval process configuration - Opentext: Scanning and archiving of bills - SSF: Shared center service platform - Integrated fund management and accounting, standardized and centralized financial processes, reduced errors from manual operations, and greatly improved real-time financial data accuracy and reliability for decision-making.
Supply Chain Management	Product Traceability System	<ul style="list-style-type: none"> - Enables real-time monitoring of product quality and quick resolution of risks - Improved product safety and enhanced consumer trust - Optimized the supply chain in real time, reducing disruptions and inventory costs, and improving operational efficiency.
Marketing	Big Data Real-Time Market Analysis and Precision Marketing	<ul style="list-style-type: none"> - Uses big data algorithms to observe consumer preferences - Achieves precision marketing and enhances consumer loyalty through differentiation - Launches products that meet current market demands in a timely manner, responding quickly to market changes.

4. Analysis of the financial impact of Mengniu’s digital transformation

This reaserch selected the period of Mengniu’s first five-year digital transformation plan to analyze financial data. All the data in the paper are extracted from the annual report published by Mengniu on its official website.

4.1. Business Capability

From Figure 1, it can clearly see that since Mengniu announced and began to implement digital transformation in 2015, its operating income and sales costs have been increasing year by year. This roughly shows that during the first five-year period of digital transformation, Mengniu's market share has been increasing and its competitiveness has been strengthened.

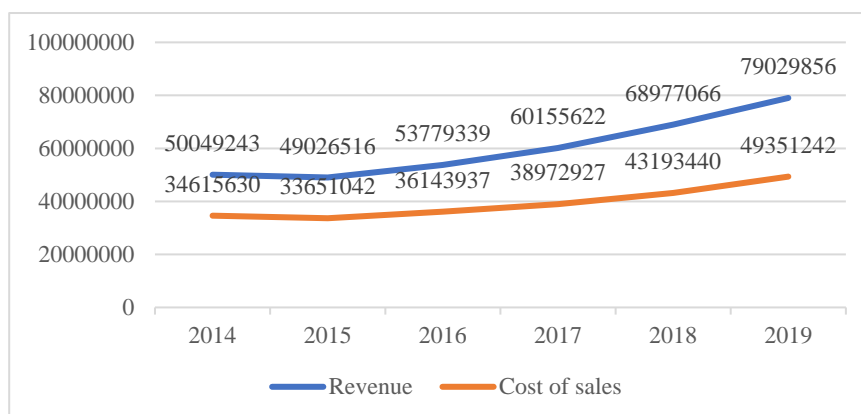


Fig. 1 Revenue and cost curve from 2014-2019 unit:1,000rmb

4.2. Operational efficiency

An important feature of digital transformation in the market is that it can accurately analyze consumer habits through big data and reduce unnecessary marketing expenses. Therefore, this research selected the sales expense ratio to verify whether Mengniu’s digital transformation is positive and effective.

Through the sales expense ratio curve, it can see that the sales expense ratio has decreased year by year from 68.64% in 2015 to 62.45% in 2019. This shows that although Mengniu’s market share has been increasing during the past five years, it has reduced some unnecessary sales costs due to the use of big data market analysis methods and precise marketing, thereby improving the company’s profitability.

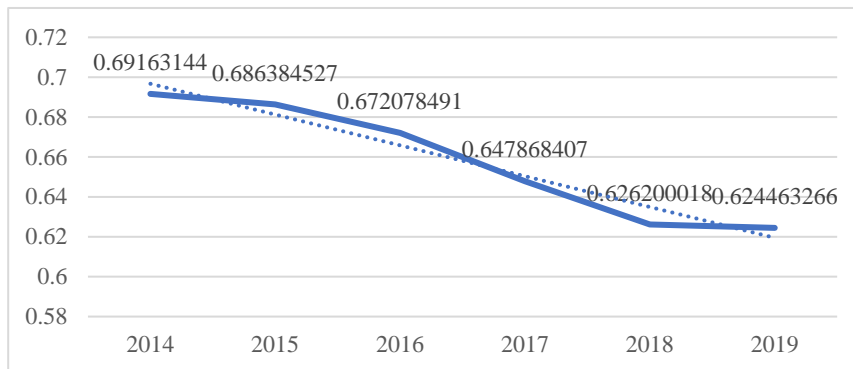


Fig. 2 Sales expenses ratio from 2014 to 2019

4.3. Liquidity and Cash Flow

At the same time, the net cash flow generated by operating activities can also have the same idea. From this chart, it can be seen that with the steady advancement of digital transformation, cash flow has increased dramatically, which may also indirectly indicate that the efficiency of business operations has been greatly improved.

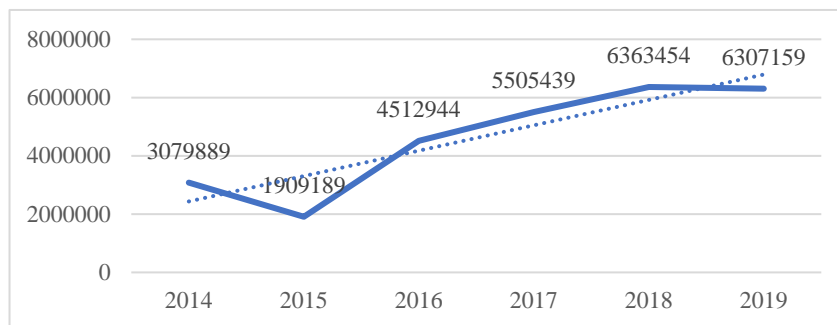


Fig. 3 Net cash flow from operating activities from 2014 to 2019

Unit: 1,000RMB

4.4. Cost Control

Digital transformation can also generally improve production efficiency, which can be verified by comparing the difference between the operating income growth rate and the sales cost growth rate. This article calculates the revenue growth rate and cost growth rate of Mengniu after digital transformation and finds that during the five-year period of Mengniu’s first digital transformation, the difference between the revenue growth rate and the cost growth rate was positive, indicating that digital transformation has helped Mengniu to better control the cost growth caused by the expansion of the enterprise and improve efficiency.

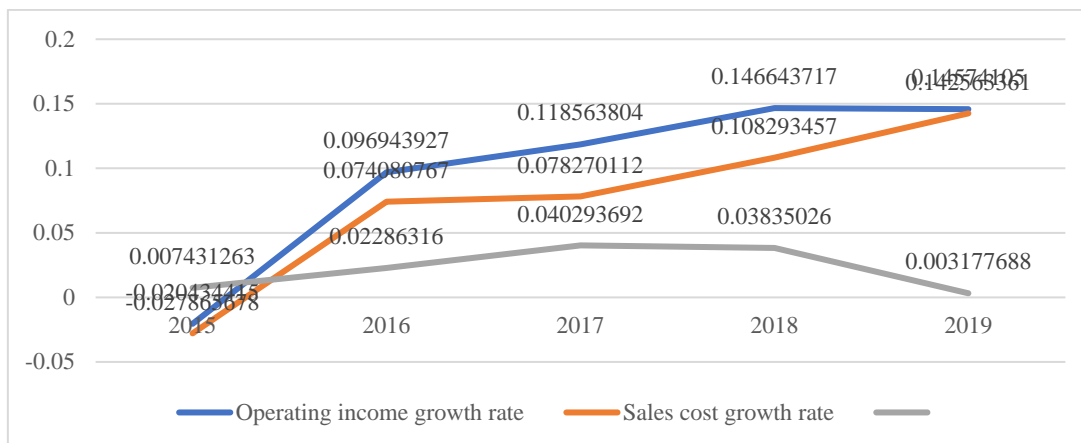


Fig. 4 Sales revenue and production cost difference ratio

4.5. Non-financial performance

At the same time, Mengniu's digital transformation has also made outstanding achievements in non-financial performance. Mengniu's first digital transformation period was mainly aimed at the digitization of goods. Mengniu's 2018 financial report pointed out that the digital traceability system helped the company to track and monitor each batch of products produced, from the company's purchase of milk raw materials, production, and finally delivery to customers, and the entire process achieved real-time data feedback. In an era when people are paying more and more attention to food safety, it can greatly enhance consumers' trust in brand products.

Mengniu's digital management also makes the company's employees satisfied. Through the establishment of a digital management system and an online training system, Mengniu has strengthened its ability to share real-time information among employees. According to Mengniu's 2019 financial report, employee satisfaction and work efficiency have significantly improved. For example, employees can check the layout of new work and the completion status of old work in real time through the mobile terminal, which greatly improves work efficiency.

5. Conclusion

Mengniu's first digital transformation period was undoubtedly very successful. During this transformation period, Mengniu made special transformation arrangements in supply chain optimization, financial sharing, and big data consumer analysis based on its own situation. Through digital transformation, Mengniu has greatly increased its market share and profitability, while also reduced sales costs and improved production efficiency. From the perspective of cash flow, digital transformation has also greatly improved the company's responsiveness to the market and appropriately reduced potential financial risks.

For any company on the market, Mengniu's digital transformation is a very good case study. During the transformation, Mengniu accurately analyzed which aspects of itself could be digitally transformed and what methods could be used to achieve it. For example, in terms of improving operational efficiency, Mengniu established an online financial sharing system. For supply chain management, Mengniu's optimization and traceability system also played a very good role. At the same time, the use of big data to accurately analyze consumers also makes marketing more accurate and efficient.

However, all companies need to have a clear understanding of their own strengths before deciding on digital transformation. Mengniu's success in digital transformation is inseparable from the strong support of shareholders. The cost of digital transformation is relatively high, so it should always be considered as one of the prerequisites. For large companies, whether they can obtain the support of all shareholders and whether shareholders think that the money spent on digital transformation is worthwhile must be properly evaluated. For small companies, they must weigh the cost of digital

transformation and the benefits they may get after the transformation. Therefore, in this information age, although successful digital transformation can greatly enhance the competitiveness of enterprises, it is also necessary to act within one's means and make a good trade-off analysis.

This study is a case study. Although it provides an overall study of Mengniu's digital transformation, it also ignores the impact that some internal data may have on financial performance. Future scholars can also conduct more in-depth research on Mengniu's first phase of digital transformation after obtaining more and more sufficient Mengniu's internal data.

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