

Digital Transformation Analysis of Retail Enterprises: A Case Study of Tianhong

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Abstract: In the context of the digital economy, digital transformation is an inevitable trend for the future development of retail enterprises. Based on a case analysis of the digital transformation of Tianhong, this study presents a digital path for retail enterprises. Additionally, the study identified several general issues that retail enterprises encounter during digital transformation. These include a need for more clarity regarding the digital transformation strategy. This organizational structure needs to be aligned with the digital transformation, a shortage of digital talent, and the existence of short boards that oversee the digital transformation of enterprises. Based on this, and in conjunction with the case of the digital transformation of Tianhong, this study puts forward several recommendations for the digital transformation of retail enterprises. Firstly, enterprises should develop a clear digital transformation strategy. Secondly, they should speed up organizational change and reshape the corporate culture. Thirdly, they should strengthen the cultivation of composite talents. Fourthly, they should build a good team of digital talents. Finally, they should adhere to the nature of consumer-centric business.

Keywords: Digital Transformation, Retail Enterprises, Tianhong

1. Introduction

The continuous development of science and technology has profoundly impacted how people produce and consume goods and services. Artificial intelligence, big data, Internet of Things (IoT) [1], and other technologies have become integral to the economy, and digital transformation is an inevitable consequence of this [2]. Enterprises increasingly recognize the necessity of digital transformation and are integrating digital technology with their business operations to adopt new, efficient operational models [1]. This further intensifies competition among enterprises in the provision of value, and traditional enterprises face serious survival challenges. The digital transformation of retail enterprises represents a crucial issue, given that it is one of the industries most deeply affected by digitalization and plays an important role in the market and meeting consumer needs [3].

This study will summarize the potential issues that may arise during the digital transformation of retail enterprises, present a case study of Tianhong's digital transformation, propose a framework for the transformation of retail enterprises, and discuss the transferable insights from Tianhong's transformation journey for other retail enterprises. This study aims to introduce new theoretical perspectives on digital transformation and to provide practical ideas for the digital transformation of retail enterprises.

2. Problems in the Process of Digital Transformation of Retail Enterprises

Overall, the retail industry's digital transformation still has some general problems, such as unclear transformation strategy, mismatched organizational structure, lack of digital talent, and the existence of shortcomings in the transformation.

2.1. The Absence of a Clear Strategy for Transformation

A literature review reveals that approximately 58% of enterprises lack a clear transformation strategy and do not have a clear focus on digitalization [4]. This phenomenon can be attributed to a need for more understanding among retail enterprises regarding the nature of digital transformation. Rather than embracing a holistic approach to integrating digitalization into their business models, many enterprises prioritize the digitalization of customers and marketing while neglecting the organic integration of digitalization into their operations. This lack of strategic perspective hinders the ability of enterprises to leverage the potential of digitalization. This situation typically manifests in the absence of a comprehensive digital transformation development plan at the managerial level and the inability of department heads to incorporate digitalization into their respective business development blueprints.

2.2. The Discrepancy in the Organizational Structure of the Enterprise

In the digital transformation process, traditional enterprises need help adapting their organizational structures and corporate cultures to the demands of the digital age. The slow pace of organizational change in some enterprises has significantly hindered digital capacity development [4]. Although some enterprises have initiated organizational restructuring and implemented relevant measures, the reality is that enterprises need help to transform completely in terms of their habits and working methods [5]. In addition to the lengthy process of organizational change, enterprises with rigid organizations and processes need to be revised to adapt to agile transformation.

2.3. Lack of Digital Expert

Insufficient reserves of digital talent is a major dilemma faced by most traditional enterprises; 52% of enterprises are limited by the need for digital experts [4]. More experts in the business need to possess a comprehensive understanding of the intersection between digital technology and retail knowledge. The capacity of enterprises to select, train, employ, and retain digital talents still needs to be improved. With digital talent, enterprises can carry out the transformation work smoothly due to the lack of intellectual and professional support, which is a problem that enterprises need to solve.

2.4. Insufficient Transformation in Middle and Upper-Value Chain

Retailers are still focusing on digitalization near the consumer end, with 70% of retailers focusing on online channels, their platforms, and Omni-Channel membership operations [4]. The upper and middle reaches of the value chain, which are more difficult to transform, are still the defects of digitization, with less than 40% of retailers focusing on data-driven merchandise management (selecting and organizing goods, displaying, and fixing sales) and digitized supply chain as the focus of their transformation [4]. Intelligent store operation decision-making (location, replenishment, staffing, and scheduling), which has higher requirements for data and algorithms, only about 20% of retailers are focusing on it as a key direction of development [4].

3. Analysis of Digital Transformation Paths of Retail Enterprises: Case of Tianhong

Through the analysis of Tianhong's digital transformation experience, this study concludes that a complete digital transformation of a retail enterprise can be divided into three phases: single-point breakthrough, integration of multiple business segments, and ecological interconnection.

3.1. Single-point Breakthrough Stage

First, select a single key business activity, build a digital infrastructure, and apply data resources to facilitate business reengineering. This requires enterprises to comprehensively assess the cost, risk, and return of digitalization investment and their resource capacity and consider selecting a key business activity for priority investment. By realizing the closed loop from data to decision-making to model reconstruction at a single point, enterprises can, on the one hand, improve the operational efficiency of the business activity and enhance their confidence in digital transformation; on the other hand, they can accumulate digital experience and capabilities, and then expand them to other business activities [6].

In the early stage of its digital transformation, Tianhong made various attempts. At that time, Tianhong needed to have the right technical talent internally. There was no successful transformation experience in the industry to learn from, so Tianhong decided to work with a third party to outsource its digital business and worked with the third party to build the company's first e-commerce platform for retailers in China, "Online Tianhong" [7]. The company's first e-commerce platform for retailers in China was built with a third party. However, due to various reasons, this attempt was not successful.

However, Tianhong did not give up the pace of digitalization because of the failure in the early stage but rather gained valuable experience from it. Since 2015, Tianhong has taken sales as a pilot for digital transformation, formed an internal technical team to develop "Tianhong APP" based on the mobile Internet architecture, and opened an online and offline multi-channel sales model [7]. This initiative enabled Tianhong to achieve profitability in the early stage of digital transformation, strengthening its determination to continue the transformation and laying a solid foundation for the subsequent transformation.

3.2. Multi-business Integration Stage

Many businesses face the challenge of extending from a single point of breakthrough business activities to integrating multi-business activity data. By doing so, they can access the data coupling value, which solves the problem of "data islands" during enterprise digitalization. Multi-business activity data integration can comprehensively enhance digital decision-making capabilities, support cross-business decisions, and create greater value for the enterprise. Enterprises must set up corresponding departments for overall coordination and planning to integrate multi-business activities successfully.

In 2016, Tianhong prioritized digital transformation with supply chain transformation and business innovation. Starting from the second half of 2016, Tianhong renovated its offline physical stores by introducing smart parking and self-service ordering. These renovations focused on key user touchpoints to improve the consumption experience and operational efficiency. More importantly, they transformed offline users into Tianhong's digital members, creating a dual traffic pool that integrates with online traffic and transforms mono-habitat users into bi-habitat users with higher repurchases and richer data.

Meanwhile, Tianhong is developing a digitized middle stage that integrates and connects customers, marketing, service, sales, supply chain, and other related businesses. This integration and connectivity aim to digitize the entire chain and improve the support of the picking and distribution systems for front-end businesses.

3.3. Ecological Interconnection Stage

Ecological interconnection refers to focusing on the digital transformation of one's business activities and exporting digital capabilities to empower the industrial ecosystem and support decision-making. Expanding the digital boundaries and network externality can further enhance the value of data coupling. Ecological interconnection helps to improve the digital capabilities of other stakeholders in the ecosystem and consolidate the barriers to the enterprise's digital capabilities. In this process, the enterprise needs to tap into the resource capabilities of both parties and look for cooperation opportunities to co-create value.

At present, Tianhong's strategic design is to integrate into the ecology and develop it by utilizing the digital accumulation of each business chain in the early stage. Tianhong aims to empower the ecosystem, co-create value with it, and enjoy the incremental benefits of the ecological connection. This stage focuses on changing the business model and outputting digital capabilities such as traffic and technology resources to brands. Furthermore, Tianhong aims to construct a digital ecosystem with itself at its core.

4. Management Insights from the Tianhong Case

Based on the above analysis, combined with the case of Tianhong's digital transformation, this paper gives the following suggestions for the digital transformation of retail enterprises:

4.1. Develop Clear Digital Transformation Strategy

Digital transformation of enterprises and strategy formulation are inseparable [1]. In the era of the digital economy, enterprise managers should establish digital thinking, actively embrace transformation, and strategically take it as an important development direction. However, although many enterprises know the importance of digital transformation, they need clear strategic planning. In this case, enterprise managers should think from a holistic perspective, combining digital technology with their specific situation, and formulate a clear path of development planning from the perspective of infrastructure construction, business model, operation model, organizational structure, personnel training, etc.

At the beginning of its transformation, Tianhong clearly defined the goal of digital transformation and made a series of attempts. After the initial failure of outsourcing its digital business, Tianhong's management reflected deeply, summarized the reasons for its mistakes, and immediately adjusted to formulate a development strategy that suited its actual situation. According to the results, Tianhong first selected the key business segment for digitalization and then carried out multi-business digital integration. Finally, the transformation of the industry's success was used to provide a reference for the transformation of the way. On the contrary, Wanda did not choose the above approach in the initial transformation but invested a large amount of cost in building a comprehensive online e-commerce system in the early stage of transformation, and this blind approach not only increased the financial burden of the enterprise but also slowed down the digitalization process of the enterprise [6].

4.2. Accelerate Organizational Change Reshape Corporate Culture

Under the background of digital transformation, the traditional business model has been undermined, which requires enterprises to carry out the corresponding change of organizational structure and corporate culture [8]. Enterprises need to flatten the traditional "pyramid" type organizational structure, break down the internal barriers, and build more flexible and agile cross-functional teams

[9]. At the same time, enterprises can also set up a special digital operations team to help them make decisions.

Tianhong has actively carried out organizational changes in the digital transformation process, establishing a dedicated digital operation center at the beginning of its transformation to provide management with operational data for decision-making and support its stores' digital transformation nationwide. At the same time, Tianhong's management also actively promoted the flattening of its organizational structure, reducing the number of departmental levels and accelerating the efficiency of information transfer and communication. In addition, Tianhong has also actively introduced the task team model, in which employees from different departments form a team for cross-departmental cooperation to accomplish a specific task. This model allows employees to utilize their strengths better and allows employees with different characteristics to complement each other, thereby improving work efficiency and employee creativity. After adopting this special organizational structure, Tianhong's cross-border e-commerce business grew by leaps and bounds, and it took only one and a half years for all stores to go online [7].

Digital transformation is more than just a technology-driven challenge. It also requires a profound cultural shift. Everyone in the organization needs to be equipped with adaptive skills and digital literacy [10]. In this context, business leaders should integrate digital construction into the corporate culture to increase employee engagement and attention to digital transformation.

4.3. Strengthen the Cultivation of Complex Talents. Build a Digital Talent Team

The rapid changes in technology have weakened the role of talent in the high-quality development of retail and put more demands on cultivating digital talent. In the era of digitalization, enterprises need composite talents who can combine digital technology and retail. Therefore, to better embrace digitalization, enterprises should introduce digital talents, actively recruit professionals with relevant skills and experience, and develop talent training programs, as well as regular training and assessment of employees' digital technology to improve the overall level of employees' digital technology.

Tianhong, in the transformation process, to open the minds of employees to enterprise digitalization, invited scholars from major well-known institutions, including China Europe Business School, Cheung Kong Graduate School of Business, and Peking University, to give a team of more than 40 digital transformation courses to enhance the cognition of employees digitalization [6]. If the employees of an enterprise have a better understanding of digitalization, the process of transforming the enterprise will be smoother. This is because they will have a deeper comprehension of the new direction of the enterprise's development.

4.4. Return to User-centered Business Essence

With the continuous application of new technologies in the retail industry, traditional retail scenes, channels, and models have radically changed in recent years. However, no matter how the retail industry changes, consumer-centeredness is still the way of development on which retail enterprises rely. Consumer-centeredness means taking consumers' practical needs as the core thinking content and carrying out retail activities accordingly. Consumer-centric thinking means considering consumer preferences, maintaining effective communication, and gaining insight into consumer pain points. To develop retail activities with consumers as the core, it is necessary to start from every detail of retailing to provide more goods and services in line with consumers' consumption wishes, cultivate consumers' cultural identity, value identity, and brand identity, and then improve consumers' loyalty. Therefore, only by returning to the consumer-centered business nature and providing consumers with more high-quality goods and services can retailers survive the wave of change in the retail industry and gradually promote the development of the entire retail sector in the direction of higher quality.

Throughout its transformation process, Tianhong has always considered putting the consumer at the center of its thinking. For example, during the COVID-19 epidemic, to protect customers' needs for fresh food and daily necessities, Tianhong's managers went to the front line of the supermarket to support customers at risk of infection. At the same time, Tianhong also carried out "contactless distribution" during this special period and strictly controlled the sterilization of the back office to ensure the safety of goods.

5. Conclusion

This study provides an overview of the digital transformation journey of a retail enterprise by analyzing the case of Tianhong's digital transformation. The company first focused on transforming a single business, expanded to different businesses, and established an industry-wide ecological interconnection. The paper also identifies some common problems that retail enterprises may face during digital transformation, such as having an unclear digital transformation strategy, organizational structure mismatch, lack of digital talents, and gaps in digital construction. To address these issues, the paper suggests that companies should develop a clear digital transformation strategy, speed up organizational changes, invest in digital composite talent cultivation, and prioritize consumer-centric business essence.

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