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The Impact of Digital Transformation on Corporate Performance: Case Study of Nike, Inc.

Hao Xu*

College of Business, Shanghai University of Finance and Economics, Yangpu District, Shanghai 200082, China

**Corresponding author: Hao Xu, ORCID: 0009-0002-9293-4750*

Abstract

Given the impacts of the digitalization models of similar sports brands and the digitalization of consumer behavior, Nike Inc. has actively pursued digital transformation. This paper employs a combination of a specific case study, literature review, and comparative analysis to synthesize relevant domestic and international information on digital transformation and corporate performance. It focuses on the current state, motivations, and corporate performance outcomes of Nike's digital transformation, specifically examining profitability, cost control capability, and operational capability. The study revealed that while digital transformation has positively impacted Nike's long-term performance, risks remain in terms of cost control and operational efficiency.

Keywords

digital transformation, corporate performance, Nike, Inc.

1. Introduction

The rapid development of new-generation information technologies such as big data, cloud computing, and artificial intelligence is driving a profound reshaping of production methods. By transforming traditional business models and market competition landscapes, digital technology brings both opportunities and unknown challenges to various industries (Sun and Teng, 2024). Digitalization has now permeated all sectors, with the digital economy becoming a new engine for global trade growth, making digital transformation an inevitable trend for corporate development (Zheng and Yang, 2025). The World Trade Organization's *2020 World Trade Report* points out that the world is transitioning toward digitalization and informatization. Coupled with the impact of the COVID-19 pandemic, an increasing number of governments are implementing incentive policies to promote the digital economy. Therefore, under the global wave of the digital revolution, the critical choices enterprises make regarding digital transformation are not only a core issue for their sustainable development but also hold practical significance for advancing national digital strategies (Huang et al., 2021, Qi and Xiao, 2020).

From the perspective of research focus and content, existing studies can be broadly categorized into two aspects. On the one hand, some scholars have used empirical research to explore the impact of digitalization on corporate performance. The results indicate that the degree of digital transformation has significant strategic importance for enterprise survival and development, actively driving corporate performance and improving results; On the other hand, some scholars employ case studies to investigate the impact of digitalization on corporate performance, proposing research paths and methods for studying the effects of digital transformation on performance across multiple industries. Overall, the mainstream view is that digital transformation positively impacts corporate performance. However, in addition to positive effects, digital transformation may also bring substantial derivative costs and potential risks, which could weaken its driving effect on corporate performance. Simultaneously, digital technology itself faces challenges such as difficulty in data acquisition and data devaluation[错误!未找到引用源。].

On the basis of the aforementioned research gaps, this paper selects Nike, Inc., from 2014---2023 as the research object and uses methods such as comparative analysis to evaluate its performance within the context of digital transformation.

2. Literature Review

The current domestic and international literature has verified that digital transformation impacts corporate performance. Li et al. (2021), using Python regression analysis, empirically tested and found that digital transformation has a significant promoting effect on corporate performance The empirical research of He and Liu (2019) also confirmed that digital transformation can significantly enhance business operating performance . With the respect to the mechanisms of action, Dubey et al. (2021)noted that digital technology can enhance a company's data analysis capabilities, allowing it to quickly grasp market demand, thereby improving performance levels. Athey (2017) from the perspective of operational efficiency, proposed that corporate digital transformation can help reduce labor intensity and enhance labor productivity. Chen et al. (2021) further added that digital transformation can use digital models to simulate and optimize operational processes, effectively improving enterprise asset utilization efficiency. Ciampi et al. (2021) also reported that digital transformation can drive business model innovation, which is also an important driver of performance improvement.

However, some scholars have questioned the positive role of digital transformation in corporate performance. Hajli et al. (2015) reported that not all enterprises profit from digital transformation; only a minority can truly enjoy the economic dividends brought by digitalization. Yu et al. (2017) proposed that enterprises bear high learning costs during digital transformation, which may weaken the advantages that digital technology should release, thereby hindering its positive effect on performance. Qi and Cai (2020)also noted that digital transformation results in high derivative management costs for enterprises, which significantly weakens the driving effect of digital transformation on corporate performance. In addition to cost issues, Hinings et al. (2018) analyzed this topic from a business transformation perspective and suggested that digital transformation requires adjustments to the fundamental structural modules of enterprise business, a process that may severely impact core operations. Indeed, alongside the risks associated with digital transformation mechanisms, enterprises also face negative impacts in the realm of data processing. As noted by Sun and Fang (2020) companies face challenges in defining data ownership during the data collection process, as they encounter both legal and technical barriers. Moreover, the processing of raw data demands considerable resource investment, which in turn increases operational costs. Furthermore, the digital era has introduced a series of challenges inherent to data management itself. As Zhao (2021) highlights, data now present numerous issues, including infringement of personal privacy rights, threats to data security, data falsification, data monopolization, widening wealth gaps, and data-driven discrimination.

Synthesizing existing research, discussions on digital transformation have focused mostly on its positive impacts; even when negative impacts are involved, related studies are primarily empirical and lack an in-depth analysis of specific corporate transformation practices. Accordingly, this study examines both the positive and potential negative impacts of digital transformation on corporate performance, aiming to provide references for similar enterprises formulating digital transformation strategies through concrete analysis.

3. Analysis of the Current State and Motivations for Nike Inc.'s Digital Transformation

3.1 Current State of Digital Transformation at Nike, Inc.

Nike, Inc., one of the world's renowned sports apparel manufacturers, has core businesses covering athletic footwear, apparel, equipment, and accessories. It owns three core brands: Nike, Jordan, and Converse.

In the digital wave, Nike Inc. has always been at the industry forefront. Research into its digital journey reveals that its digital transformation focuses primarily on three key areas. The first stage is the *product development stage*. Through acquisitions such as the consumer data analysis company Zodiac and the AI predictive analytics company Celect, Nike deeply integrates big data to predict consumer demand, effectively shortening product time-to-market and enhancing market response accuracy. The second stage is the *production and delivery stage*. Nike widely applied 3D design technology to reduce physical sample development costs. Simultaneously, within the supply chain, it uses automated sorting systems in logistics centers to optimize inventory management. The third category includes *marketing and promotion*. Nike implemented the "consumer direct offense" strategy, strengthening digital transformation by reducing traditional retailer channels and enhancing e-commerce sales. Furthermore, Nike builds ecosystems such as the Nike App, Nike Fit, NikePlus membership, and "NikeLand metaverse space" to deepen user brand loyalty.

Overall, Nike Inc.'s digital transformation has achieved certain results. Through full-chain digital integration, Nike has digitalized every stage from product design and production to logistics, operations, and sales across the entire industry chain. Its digital strategy will continue to deepen in the future to consolidate its technology-driven core competitiveness.

3.2 Motivations for Nike Inc.'s Digital Transformation

3.2.1 External Motivations

Consumer Demand. According to the *2024 Global Digital Economy White Paper*, the digital economy volume of the five countries—the U.S., China, Germany, Japan, and South Korea—exceeded $33 billion in 2023, a year-over-year increase of 8%, accounting for 60% of GDP. Furthermore, the World Economic Forum predicts that by 2025, digital transformation will create over $100 trillion in social and economic value. The IDC's *2024 Global Digital Transformation Spending Guide* also indicates that global digital investment is expected to reach $4.4 trillion by 2028. Notably, AI technology is becoming a key driver—IDC predicts that by 2030, AI will contribute $19.9 trillion to the global economy and drive 3.5% growth in global GDP. Thus, global consumer behavior is rapidly shifting toward digitalization, with increasing acceptance of technologies such as AI, prompting enterprises to embark on digital transformation.

3.2.2 Internal Motivations

Internal development needs. Currently, the sports apparel industry faces fierce market competition. On the one hand, traditional competitors such as Adidas continue to capture market share; on the other hand, emerging digitally native brands such as Lululemon are rapidly rising through efficient supply chains and digital marketing, impacting the industry landscape. In this competitive environment, digital transformation has become a key strategy for Nike Inc. to break through. Through digital transformation, companies aim to achieve sustainable business development.

4. Performance Analysis of Nike Inc.'s Digital Transformation

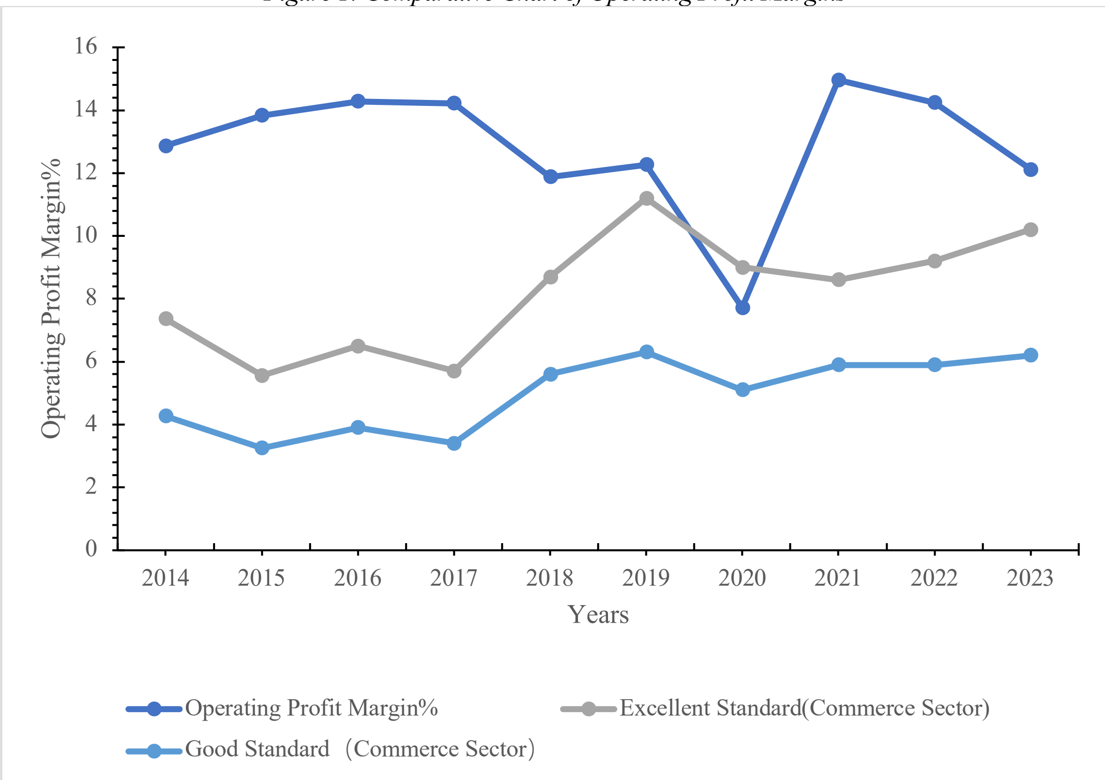
The core of digital transformation lies in empowering business growth, verified through key corporate performance indicators. As Nike Inc. officially launched its "consumer direct offense" strategy in 2017, accelerating digital transformation, this paper evaluates and analyzes Nike's performance from 2014 -- 2023 in both financial and nonfinancial dimensions.

4.1 Financial Indicators

4.1.1 Profitability

Operating Profit Margin: As shown in Figure 1, an analysis of the trend in the operating profit margin reveals that from a longitudinal perspective, from 2014--2017, Nike's operating profit margin slightly increased, likely because of the early stages of building the membership ecosystem for digital transformation. However, from 2017--2020, this indicator clearly exhibited a downward trend. It was not until 2021 that the operating profit margin sharply rebounded to 14.96%, perhaps owing to the effects of Nike's online-offline integration. From a horizontal comparison dimension, Nike's operating profit margin generally exceeded the excellent benchmark level for the global trade industry, only slightly falling below the excellent value in 2020 due to disruptions from the COVID-19 pandemic.

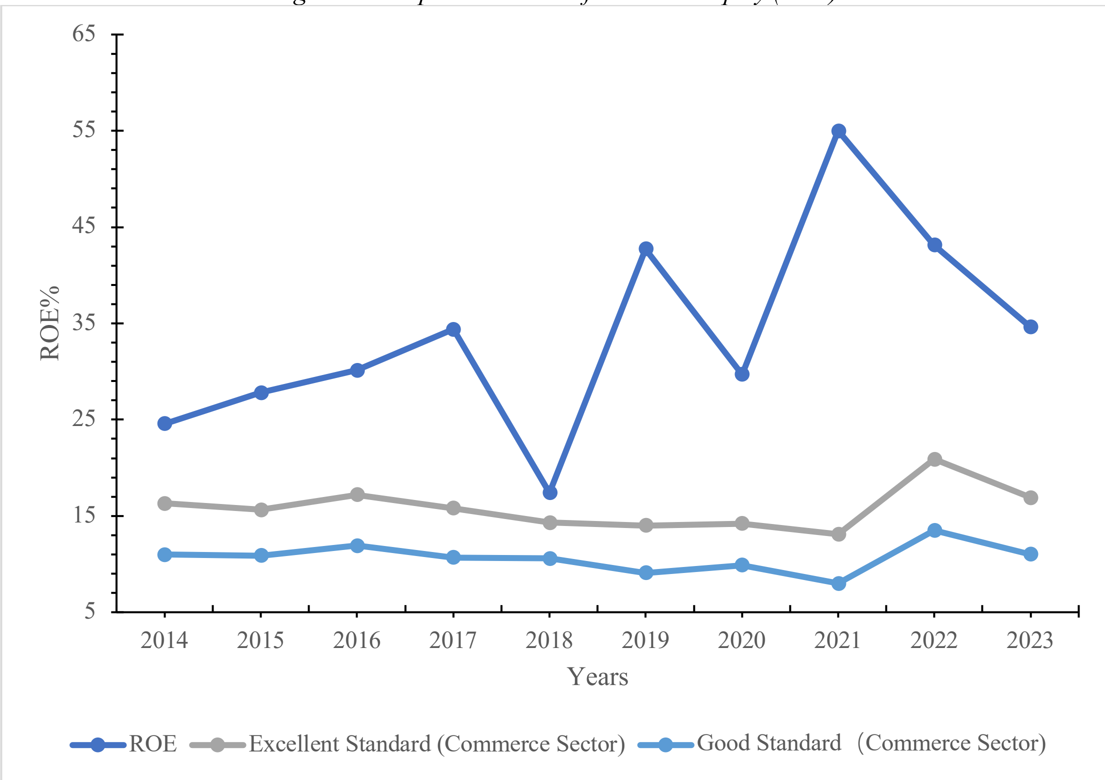
Figure 1: Comparative Chart of Operating Profit Margins



Data Source: Nike Inc. Financial Reports, 2015---2024 'Corporate Performance Evaluation Standard Values', same below for subsequent figures

Return on Equity (ROE): Figure 2 shows that Nike's ROE exhibits fluctuating characteristics. Longitudinally, it was as low as 17.4% in 2018 and as high as 55.01% in 2021. However, through horizontal comparison, despite fluctuations, Nike's ROE has consistently remained above the excellent benchmark for the trade industry.

Figure 2: Comparative Chart of Return on Equity (ROE)

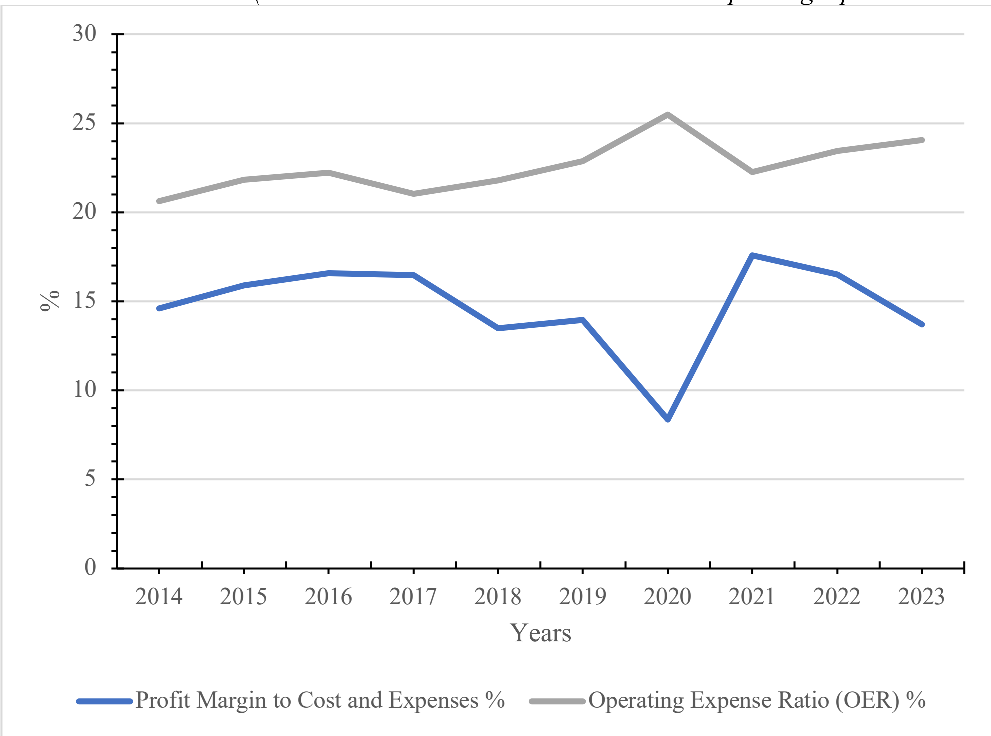


Combining the data from Figure 1 (operating profit margin) and Figure 2 (ROE), it is evident that both indicators for Nike, Inc. are generally at good levels. Nike's long-term financial performance, which is superior to industry excellent benchmarks, fully demonstrates that its digital transformation has enhanced the company's competitiveness and overall profitability.

4.1.2 Cost Control Capability

This paper uses the cost-to-income ratio and operating expense ratio as measures of cost control capability. Figure 3 shows that Nike's ocst-to-income ratio overall shows a downward trend, whereas during the same period, the operating expense ratio shows a slight upward trend. This finding indicates that the proportion of expenses related to sales, management, R&D, and other operations relative to income has increased for Nike, Inc. Although Nike actively promotes digitalization across the entire industry chain, its cost control capability during the observation period has some deficiencies. This may be because digital transformation involves large-scale and sustained capital investment with a long payback cycle. Nike intensively launched various digital transformation initiatives, such as the Nike App, Nike Mini Program, and Nike Plus membership system, and continued R&D investment, leading to an increased burden of operating expenses.

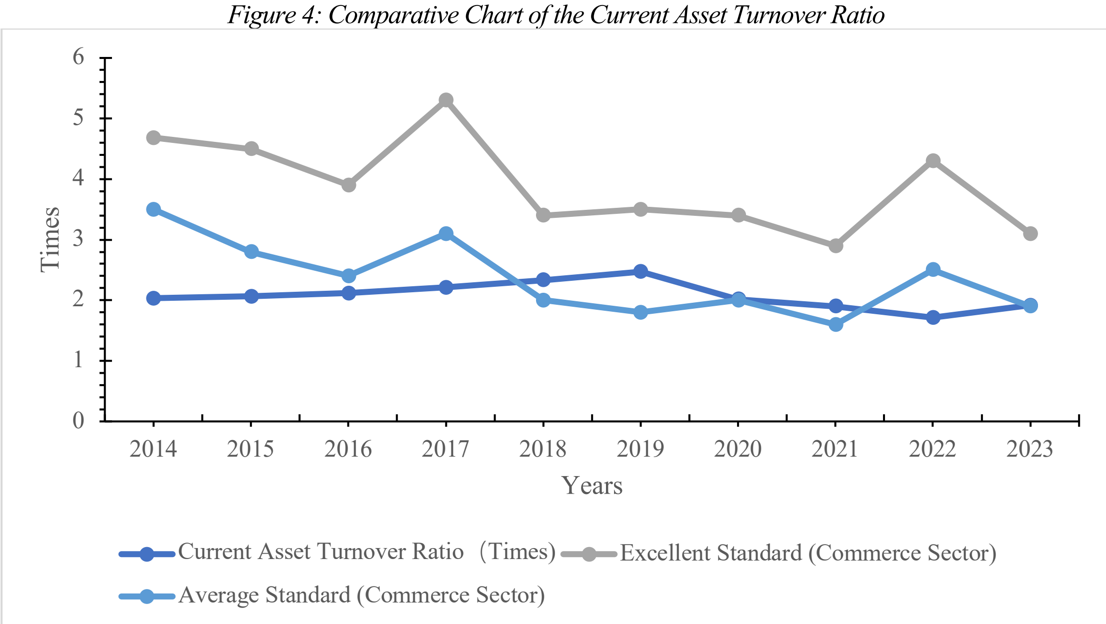
Figure 3: Cost control chart (which illustrates the cost-to-income ratio and operating expense ratio trends)



4.1.3 Operational Capability

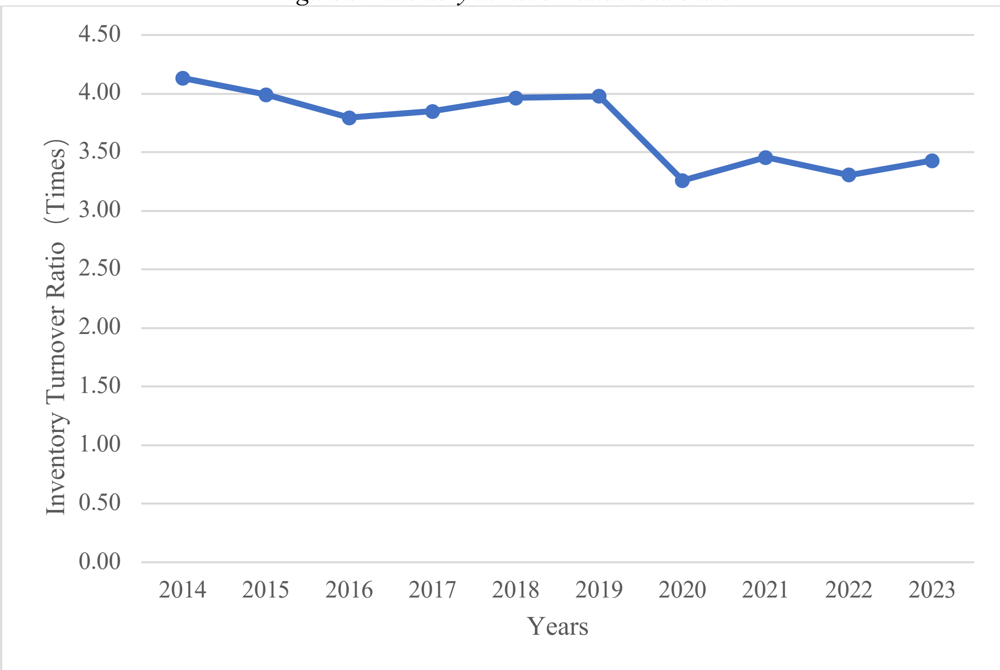
Current Asset Turnover Ratio: As shown in Figure 4, from a longitudinal trend perspective, over the 10-year observation period, Nike’s Current Asset Turnover Ratio shows relative stability, basically hovering around an annual average of 2 times. However, compared with the excellent level of the global trade industry, Nike’s performance on this indicator is significantly low, lingering in the industry’s mid-to-low range for a long period of time. Particularly between 2014 and 2017 and in 2022, its turnover rate was significantly lower than the industry’s average level. This indicator reflects the challenges Nike faces in working capital management efficiency, with core issues likely being inventory management and accounts receivable collection efficiency.

Figure 4: Comparative Chart of the Current Asset Turnover Ratio



Inventory Turnover Ratio: From 2014--2023, the inventory Turnover Ratio overall shows a downward trend, as shown in Figure 5. This can explain the low current asset turnover ratio shown in Figure 4, where the most critical issue is prominent inventory turnover pressure. Even though Nike actively implements full-industry-chain digitalization and enhances design and marketing capabilities, its inventory backlog situation remains significant. This suggests that there may be room for optimization in terms of supply chain efficiency and inventory level control capabilities.

Figure 5: Inventory turnover ratio trend chart

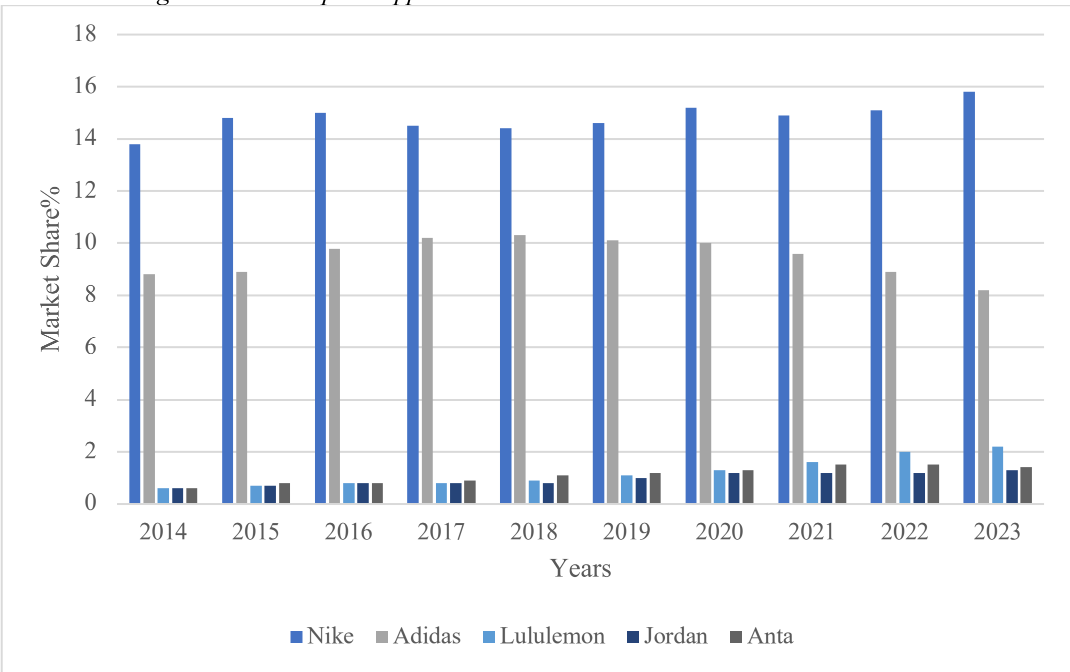


4.2 Nonfinancial Indicators

Market Share: As shown in Figure 6, the market share of Nike Inc.'s core brands showed a steady growth trend between 2014 and 2023. Among them, the Nike brand's market share ranks first, at as high as 15.8%, and the Jordan brand's share also increased slightly. This trend reflects Nike's ability to maintain its leadership position amidst fierce market competition.

On the one hand, Nike built a precise demand forecasting platform, utilizing technologies such as big data analytics and AI to capture and analyze consumer demands and preferences. On the other hand, the company creates immersive cocreation and community experiences, such as Nike by You, which allows consumers to participate in product personalization, transforming them from passive recipients into active cocreators and thereby enhancing the product's perceived exclusive value. Simultaneously, through its online app, it fostered the concept of the Nike community, strengthening brand trust and user stickiness. This deepened customer relationship effectively translates into stronger market competitiveness and stable market share, positively driving long-term corporate performance.

Figure 6: Global Sports Apparel and Footwear Brand Market Share 2014--2023



Data Source: Euromonitor Data, Minsheng Securities Research Institute

5. Conclusion

5.1 Research Conclusions and Implications

As the digital era advances, various industries face increasingly fierce market competition and constantly changing consumer demands. For survival and sustainable development, enterprises need to undergo digital transformation. On the basis of dual financial and nonfinancial perspectives, this paper evaluated the impact of digital transformation on the performance of Nike Inc., revealing a significant "double-edged sword" effect during Nike's digital transformation process.

On the positive side, digital transformation significantly enhances profitability and customer relationship management capabilities, particularly excelling in precision marketing, personalized customization, and omni-channel integration. This reflects the effectiveness of digital strategies in market response and value creation. However, the transformation process also exposed several structural issues: On the one hand, substantial digital investments led to a continuous rise in the operating expense ratio, worsening cost control capability in the short term. On the other hand, potentially due to inefficiencies in Nike's supply chain and production management, disconnects between front-end and back-end information, product strategy missteps (overly singular product types or products reaching the end of their lifecycle), and failure to respond quickly to the market, among other issues, the inventory turnover ratio and current asset turnover ratio have long been below excellent industry levels. This indicates room for improvement in supply chain coordination, inventory management, and capital operation efficiency.

The research phenomenon indicates that digital transformation is not simply about technology addition or replacement but involves a systematic restructuring of organizational structure, business processes, and data management. Although Nike leads in front-end consumer experience digitization, there is a significant gap in data integration and process coordination between the back-end supply chain and front-end sales, resulting in suboptimal operational efficiency. Furthermore, the derivative costs and management complexity brought by digital transformation create pressure on the corporate financial structure in the short term.

On the basis of the above conclusions, this paper hopes to provide the following insights for other enterprises undergoing digital transformation, drawn from Nike Inc.'s experience:

First, prudently plan the transformation path. Digital transformation is not achieved overnight and is often accompanied by significant risks. The Nike case shows that overly aggressive strategies, such as large-scale closure of offline channels, can lead to channel shortages. Simultaneously, if innovative business models do not accurately match market demand or are not effectively promoted, they may face challenges of low user acceptance. Therefore, enterprises need to formulate gradual transformation strategies, ensuring that the pace is controllable and that risks are manageable.

Second, we focus on resource synergy and cost-effectiveness. Digital transformation involves enormous investments in human, material, and financial resources. If an enterprise lacks an effective cost control system and refined budget management, high investments may render the transformation unsustainable. Thus, enterprises need refined cost management, establish strict budget plans, and foster cost-control consciousness, embedding cost-effectiveness thinking into all levels and aspects of digital transformation.

Third, an integrated digital ecosystem should be built. The key to the success of digital transformation lies in its systematic and synergistic nature. A global architectural design for digital transformation is essential to ensure synergy during the process. Furthermore, it is crucial to break down data silos, achieve interoperability of core business data, and thereby improve operational efficiency. Utilize digital technology to end-to-end reshape business processes, ensuring seamless connections and efficient coordination between the front-end customer experience and back-end operational support, such as inventory management and logistics distribution.

5.2 Limitations and Future Research Directions

This paper has the following limitations: The performance evaluation dimensions are limited. This study focused on four core dimensions: profitability, cost control capability, operational capability, and customer satisfaction. Although these dimensions are representative, risk prevention and control capability, sustainable development capability, etc., were not further considered. The performance measurement indicators need further expansion. Regarding the selection of specific indicators, this study primarily selected five typical financial indicators (e.g., Operating Profit Margin, ROE) and one no-financial indicator (Customer Satisfaction). However, corporate performance presentation is quite complex. This study did not cover more key indicators such as the quick ratio, gross profit margin, or R&D conversion rate. Future research could go further to broaden the width and depth of performance evaluation.

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Conflicts of Interest

The authors declare no conflict of interest.

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