

Digital Transformation and Revenue Divergence in China's Coffee Market: A Comparative Analysis of Starbucks and Luckin Coffee

Chengze Wang

Beijing Haidian Kaiwen Academy, Beijing, China

15011511580@163.com

Abstract. China's coffee market has undergone rapid digital transformation, resulting in a completely different revenue development trajectory among leading brands. This study aims to explore how the digital transformation strategy leads to the widening revenue gap between Starbucks and Luckin Coffee in the Chinese market. Through the comparative case analysis of the audit financial report of the U.S. Securities and Exchange Commission (SEC) and peer-reviewed academic literature, this study evaluates the digital transformation strategies of the two from multiple dimensions such as mobile platform architecture, member ecosystem, artificial intelligence application deployment and supply chain digitization. Research results show that Luckin Coffee has successfully implemented the "light asset" expansion strategy with its "digital native" business model. By fiscal year 2024, the scale of its store network had expanded to about three times that of Starbucks in China, and its total annual revenue in RMB was about 64 percent higher than that of Starbucks China. The study identified four core elements that promote this revenue differentiation: strategic positioning and its fit with digital capabilities, the depth of integration of technology in various business functions, the ability of the organization to adapt to market dynamics, and the breadth and accuracy of the application of data in operational decision-making. Further analysis shows that Starbucks China still maintains a leading position in terms of single-store revenue and operating profit margin, which indicates that the competitive effect of digital transformation is far beyond the simple revenue scale comparison. This research helps to deepen the understanding of how digital transformation can reshape the competitive landscape of the service industry, and provides strategic guidance for traditional brands and digital native brands that seek development in the wave of technology-driven market transformation.

Keywords: Digital transformation, Coffee industry, Revenue divergence, Competitive strategy, Comparative case analysis

1. Introduction

1.1. China's coffee market and digital transformation trend

In the past decade, China's coffee market has experienced a significant expansion. The growth of per capita consumption, the acceleration of urbanization, and the popularization of digital ordering platforms have reshaped the competitive pattern in this field. Against this background, digital transformation—that is, the process of digital technology fundamentally changing the way of value creation, transmission and acquisition (—has become a key determinant for the catering industry to build a competitive advantage [1]. Mobile ordering, artificial intelligence-driven operating systems and data-driven supply chain management have evolved into core strategic tools; they empower newcomers to challenge existing giants in the market with technology-driven business model innovation [2].

The two enterprises have shown completely different digital participation strategies in the market. Starbucks entered the Chinese market in 1999. By the end of fiscal year 2024, it has about 7,596 direct stores in China. Historically, Starbucks' competitive advantage is mainly based on its high-end brand positioning and the "third space" with a sense of experience. On top of that, its digital capabilities are gradually superimposed and iterated based on the existing physical retail model [3]. Luckin Coffee was founded in 2017. As a "born digital" brand, it has embarked on a completely different development path: since its establishment, Luckin has deeply embedded digital technology in every link of business operations. As of December 31, 2024, the total number of Luckin Coffee stores in China has reached 22,340, including 14,591 direct stores and 7,749 joint stores [4].

1.2. Case selection and data sources

The revenue trends of the two companies show significant differentiation, making them an ideal object of comparative research. Luckin Coffee's net revenue in fiscal year 2024 reached RMB 34.5 billion, an increase of 38.4% year-on-year; while Starbucks China's revenue in fiscal year 2024 was about \$3 billion—equivalent to about RMB 21 billion—and the annual sales of the same store decreased by 8% [3,4]. By 2024, Luckin Coffee's annual revenue in RMB is about 64% higher than that of Starbucks China. This fact leads to the core question of this study: to what extent has digital transformation promoted the continuous widening of the revenue gap between this old global brand and this "digital native" challenger?

The data of this study mainly comes from audited financial documents publicly disclosed by the U.S. Securities and Exchange Commission (SEC), specifically including Starbucks' Form 10-K annual report and quarterly financial report, and Luckin Coffee's Form 20-F annual report and financial performance announcement. In addition to the above first-hand data sources, this study is also supplemented by peer-reviewed academic literature on the theory and practice of digital transformation, which aims to ensure that all financial-related discussions are based on verifiable empirical evidence, rather than relying only on second-hand reports [5,6].

2. Literature review

2.1. Digital transformation theory and framework

Digital transformation is conceptualized as a multi-stage journey, covering three progressive stages: Digitization, Digitalization and Full Digital Transformation [7]. Among them, "digitalization" refers to the process of converting analog information into digital formats; "digital application" refers to

the use of digital technology to reshape existing business processes; and "comprehensive digital transformation" refers to the strategic changes implemented throughout the company under the empowerment of digital technology. This phased framework provides a useful analytical perspective, which is conducive to the comparative study of organizations at different stages of digital maturity; because the starting point of technology adoption and the order of implementation will directly determine the breadth and depth of the transformation results [1]. Warner and Wäger pointed out that building "dynamic capabilities"—specifically including perception capabilities, capture capabilities and transformation capabilities—is crucial to ensuring the long-term sustainable development of digital transformation [8]. Hanelt et al systematically reviewed the literature on digital transformation and identified organizational adaptability—covering structural flexibility and decision-making speed—as a key determinant of the success of transformation [9]. Nambisan et al further pointed out that digital technology has reshaped the essence of innovation and competition, enabling new entrants to challenge existing market leaders with business models based on digital architecture rather than traditional resource accumulation methods [2].

2.2. Digital transformation in service industries

In the service industry, digital transformation is usually reflected in three areas: customer-oriented digital contact points, operational process automation, and data-driven decision-making systems [10]. The catering industry shows unique characteristics in the research of digital transformation, which combines high-frequency consumer interaction with complex supply chain operations. Chen et al show that the digitalization of the supply chain can significantly improve the operational performance indicators [5]. Tian et al provide evidence that the adoption of a digital supply chain can not only reduce operating costs, but also improve sustainable development [6]. These research findings show that digital transformation affects enterprise performance through multiple interrelated paths, rather than relying solely on isolated technology applications.

Although theoretical research has made the above progress, there are still significant gaps in the existing literature. Most of the existing studies are limited to the general industry framework level or limited to case studies for a single enterprise. At present, there is still a significant lack of such comparative analysis: that is, linking specific digital transformation strategies with audited and verified financial performance results among competing enterprises in the same market. This research aims to fill this gap by building a multi-dimensional comparative analysis framework based on audited financial data and using the above-mentioned established theoretical framework for in-depth discussion.

3. Digital transformation strategies in China's coffee market

This section will present the digital transformation strategies of the two enterprises and their corresponding financial performance results based on the audited annual financial reports. The multi-stage framework proposed by Verhoef et al will be used as the analytical perspective of this study to position and evaluate the two enterprises in the continuous evolutionary spectrum of "digitization–digitalization–transformation" [7].

3.1. Starbucks China: progressive digital transformation

3.1.1. Stage division of digital transformation

Starbucks China's digital transformation is a model of "progressive" transformation, and its evolution can be divided into three completely different stages. The core of the first phase (2011–2016) focuses on "digitization": that is, integrating mobile payment solutions—especially WeChat payment and Alipay—to conform to the transition trend of the Chinese market to the "cashless transaction" model. During this period, the main function of digital channels is to provide payment convenience and carry out brand communication, not to optimize the operation process or deepen customer interaction and participation outside the sales terminal.

The second stage (2017–2021) marks the enterprise's entry into a new stage of "Digitalization" transformation, and is characterized by the implementation of a series of key measures. One of the major initiatives is to establish a strategic partnership with Alibaba Group and rely on the "Eleme" platform to carry out delivery services, so as to extend the service tentacles of the enterprise from the physical store to a wider external space. At the same time, Starbucks has developed a proprietary mobile ordering application and transformed its loyalty program into a comprehensive digital membership ecosystem, which can track customers' purchasing patterns and support precise marketing and promotion (Starbucks Corporation, 2024). At this stage, the company has also established a special digital innovation team within its Chinese business unit to deeply integrate the mobile order function into the daily operation process of the store.

The third stage (that is, the current stage, starting in 2022) marks that Starbucks is trying to carry out a more in-depth digital transformation. Its core is to deploy the "Deep Brew" artificial intelligence platform, which aims to optimize inventory management, achieve personalized marketing and improve the efficiency of labor allocation. However, a key structural constraint limits the pace and breadth of this transformation: as a subsidiary of a global listed company, Starbucks China must be consistent with the group's global operating standards in terms of technology application and need to go through a multi-level approval process. In the rapidly changing competitive environment of the Chinese market, this governance structure inevitably leads to the lag of decision-making efficiency [9]. In view of this constraint, Starbucks launched a strategic restructuring of its Chinese business in 2025 and actively explored various partner models—reportedly, including cooperation intentions with a consortium led by Bain Capital—aimed at giving its Chinese business greater local autonomy and flexibility in market competition [11].

3.1.2. Key digital initiatives

The three major digital initiatives constitute the pillar of Starbucks' China technology strategy. Among them, the Starbucks Rewards loyalty program is the core of its customer-oriented digital ecosystem. As of the second quarter of fiscal year 2025, Starbucks China reported to have about 25.5 million "Star Club" members who are active for 90 days, and the transaction volume of members accounts for about 74% of the total sales in the Chinese market [11]. The membership system has both the functions of customer retention mechanism and data collection platform, which can generate behavioral insights, and then provide decision-making basis for personalized promotion, product recommendation and inventory planning of each store.

The Starbucks mobile application extends the digital interactive experience beyond the loyalty program, realizing functions such as mobile ordering and payment, store positioning and personalized content push. Although the application improves the convenience of ordering, its

functional focus is still on enhancing the existing store experience, rather than fundamentally restructuring the customer journey—this design choice is highly consistent with the company's commitment to create a "high-end experience model".

The "Deep Brew" artificial intelligence platform represents the most cutting-edge technological part of Starbucks's digital strategy. The system supports store-level demand forecasting, dynamic scheduling based on passenger flow prediction model, and large-scale personalized marketing content generation [8]. These AI-driven capabilities aim to optimize cost efficiency at the operational level without sacrificing the service quality that supports its high-end pricing strategy. However, because these tools operate more as a functional enhancement layer on the existing infrastructure than as a unified operation center, the impact they bring is often gradual improvement rather than subversive change [1].

The distribution business, which is mainly based on takeaway services, mainly relies on third-party platforms to operate, and has now expanded into an important revenue channel. However, dependence on third parties is also accompanied by the generation of commission expenses, which not only reduces the profitability of a single order, but also restricts the company's direct access to customer data related to distribution—which constitutes a structural limitation compared with those competitors who have their own distribution ecosystem.

3.1.3. Impact on revenue performance

In fiscal year 2024, Starbucks China's revenue was about \$3 billion, and the annual same-store sales fell by 8% [3]. Among them, the same-store sales in the fourth quarter decreased by 14%—specifically, the average customer unit price decreased by 6% and the transaction volume decreased by 8%. By the second quarter of fiscal year 2025, the decline in same-store sales narrowed to 4%; it is worth noting that the trading volume increased by 1%, although this increase was offset to some extent by a 4% drop in average customer unit price [11].

These financial performances reveal a complex picture of the impact of digital transformation on revenue. Facts have proved that membership plans and mobile order functions have strongly promoted customer retention: the trading volume stabilized from a negative growth of 8% in the fourth quarter of fiscal year 2024 and rebounded slightly to a positive growth of 1% in the second quarter of fiscal year 2025. This trend shows that digital interactive tools have begun to show effectiveness in maintaining the frequency of customer visits. However, the decline in the average unit price reflects the cost of revenue paid to defend market share through promotional pricing strategies in an increasingly competitive market environment.

In terms of cost, its impact is mixed. Although the use of artificial intelligence (AI) technology to optimize inventory and manpower allocation through the "Deep Brew" platform helps to reduce operating costs, the commissions paid to third-party distribution platforms and the increasing promotional expenditure constitute a new cost burden in the digital age and offset to a certain extent the benefits brought by the above-mentioned cost savings. Despite these pressures, Starbucks China's operating profit margin is still above Luckin Coffee. This shows that its "high-end positioning" business model—that is, operating with the assistance of digital technology but not entirely relying on technology itself—can continue to create excellent unit profitability [10].

3.2. Luckin coffee: digital-native business model

3.2.1. Digital architecture and establishment

In stark contrast to Starbucks' gradual strategy, Luckin Coffee is directly in the stage of digital transformation at the beginning of entering the market, instead of going through various stages of development step by step [7]. Founded in 2017, this company has built its complete business model around digital technology before opening its first store. Luckin's mobile application and WeChat applet constitute its core trading platform, and almost all orders are processed through digital channels. This application-based architecture enables it to fully capture the data of customers in each interaction, thus generating a continuous stream of behavior and transaction data, and providing continuous data input for the company's analysis system.

This "digital priority" strategy has fundamentally reshaped the cost structure of China's coffee retail industry. By adopting the store form with "self-pickup" as the main one and a very small dining area, Luckin has significantly reduced the property area and the corresponding labor costs required for a single store compared with the traditional full-service cafe model. This "light asset" model not only achieves the rapid expansion of the store network, but also has extremely high capital utilization efficiency: the total number of stores has increased from 16,248 at the end of 2023 to 22,340 at the end of 2024—including 14,591 self-operated stores and 7,749 joint stores—and further increased to 31,048 on December 31, 2025 (including 20,234 self-operated stores and 10,814 joint stores) [4,12]. The joint venture model (accounting for about 34.7% of the total number of stores by the end of 2024) accelerates the expansion of the store network by dispersing the capital investment demand to independent joint ventures; at the same time, the company still maintains centralized digital control over the order system, supply chain logistics and quality standards.

When evaluating the maturity of Luckin Coffee's digital governance, the relevant background factors cannot be ignored. In 2020, the company disclosed that it had made up a trading volume of about 2.2 billion yuan, which not only led to sanctions from regulators, but also triggered a comprehensive restructuring of the company's management [4]. The subsequent governance reform—including the reorganization of the board of directors and the strengthening of the internal control system—enabled the company to resume the release of audited financial reports. Nevertheless, this incident still profoundly warns us that a sound and strong governance framework is indispensable to ensure the authenticity and integrity of digital data.

3.2.2. From user platform to supply chain digitalization

Luckin's digital ecosystem is far more than a customer-oriented ordering platform, but covers a complete operational value chain. At the user interface level, its mobile application not only acts as an ordering channel, but also as a comprehensive data collection system. Each transaction will generate data on product preferences, order frequency, period rules, price sensitivity and specific location demand. By the end of fiscal year 2025, the cumulative number of registered trading users has exceeded 450 million; the average number of monthly trading customers for the whole year reached 94.2 million, of which the peak reached about 112.3 million in the third quarter, and then fell to 98.4 million in the fourth quarter [12].

The data generated through user interaction is directly input into the supply chain management system. Based on the demand forecasting function of artificial intelligence (AI), it realizes the dynamic inventory allocation of thousands of stores, thus reducing the waste of raw materials and optimizing the freshness management of perishable ingredients. The company has invested in the

construction of automated baking and processing facilities to track various quality parameters in real time through digital monitoring systems, thus ensuring the consistency of product quality on an unprecedented scale [5]. The site selection of the new store relies on the algorithmic analysis of demographics, passenger flow and competitive density data; this data-driven decision-making model replaces the traditional field survey site selection method, which effectively reduces the risk of site selection while accelerating the pace of expansion.

The digitalization of the procurement link has further improved the cost-effectiveness. The centralized digital procurement system realizes the overall procurement of coffee beans, milk, packaging materials and other raw materials; with the huge procurement scale, the company has a significant advantage in bargaining with suppliers. By integrating procurement, inventory and sales data, the company has built an agile supply chain, which can flexibly adjust purchase orders according to the near-real-time consumption dynamics in the entire store network [2].

3.2.3. Digitally driven revenue growth

Luckin's financial performance fully demonstrates the far-reaching impact of its "digital native" model on revenue. The annual net revenue in fiscal year 2024 reached RMB 34.5 billion, an increase of 38.4% year-on-year; this growth momentum accelerated further in fiscal year 2025, and net revenue climbed to RMB 49.3 billion, achieving a year-on-year increase of 43.0% [4,12]. With the continuous expansion of the partner network, Luckin's revenue structure has also changed: in fiscal year 2025, the revenue from product sales—mainly contributed by self-operated stores—reached a total of RMB 37.7 billion; at the same time, the revenue from partner stores reached RMB 11.6 billion, accounting for 23.5% of total net revenue, up from 22.5% in fiscal year 2024 [12].

In the process of product innovation, we can find a specific example that clearly shows how digital capabilities drive revenue growth. Based on consumer data analysis, Luckin has built a set of high-frequency iterative product development cycles, and its new products are launched far faster than traditional competitors. Through the taste preferences identified by the algorithm and the differences in taste in various places, Luckin can implement an accurate product launch strategy, so as to maximize the user adoption rate in the early stage of the launch of new products. Those successful "limited-time special supply" products can often trigger a huge interaction boom on social media, and the resulting "spontaneous marketing" effect further amplifies its effect on revenue—and the realization of all this is due to the integration of a unified digital data platform behind it.

However, if we conduct a more detailed financial analysis, we will find that there are still some details worth paying attention to under the strong revenue growth on the surface. The proportion of raw material costs to revenue has been optimized, from 40.8% in fiscal 2024 to 38.1% in fiscal 2025, which fully reflects the cost-effectiveness brought by large-scale procurement [12]. In contrast, distribution costs showed a surge: from RMB 2.8 billion (accounting for 8.2% of revenue) to RMB 6.9 billion (accounting for 14.0% of revenue)—an increase of up to 144% largely offsets the efficiency improvement achieved by other cost categories. According to the generally recognized accounting standard (GAAP), Luckin's operating profit margin in these two fiscal years remained basically flat, maintaining between 10.3% and 10.4%; while the net profit margin narrowed from 8.6% to 7.3% [12]. These trends show that although the digital model can effectively drive revenue growth, maintaining profitability is facing increasing pressure with the rising intensity of distribution costs and the expansion of the network to low-density markets.

4. Results and discussion

The comparative analysis in Section 3 reveals four interrelated factors. It is through these factors that digital transformation has shaped the pattern of revenue differences between Starbucks and Luckin Coffee. Although the total revenue gap between the two—about 13.5 billion yuan in fiscal year 2024—is huge, the deep motive behind it is much more complicated than what the mere "digital advantage" narrative implies. The next discussion will examine these factors one by one, and comprehensively apply the financial evidence presented above and the theoretical framework established in the literature review.

Table 1 summarizes the key operational and financial metrics of Starbucks China and Luckin Coffee, providing a consolidated basis for the comparative discussion that follows.

Table 1. Key operational and financial metrics comparison

Metric	Starbucks China (FY2024)	Luckin Coffee (FY2024)
Total Stores in China	~7,596	22,340
Store Model	Direct-operated only	14,591 direct + 7,749 partnership
Annual Revenue (RMB)	~21 billion	34.5 billion
Year-on-Year Revenue Growth	-8% (same-store sales)	+38.4%
Estimated Revenue per Store (RMB)	~2.77 million	~1.54 million
Digital Ordering Penetration	~74% (member transactions)	~100% (app-based)
Active Users / Members	25.5 million (90-day active)	450 million+ (cumulative registered)
Transformation Approach	Progressive (since 2011)	Digital-native (since 2017)

Sources: Starbucks Corporation (2024; 2025); Luckin Coffee Inc. (2025). Revenue per store is estimated by dividing total annual revenue by year-end store count.

4.1. Differences in strategic positioning

The fundamental differences in strategic positioning determine the breadth of digital transformation of each company and its impact on revenue. Starbucks is positioned in the high-end "third space", which means that digital technology mainly acts as an auxiliary channel in its system, aiming to improve the consumption experience of physical stores. Any adjustment of store form, order process or pricing strategy aimed at maximizing digital efficiency may face the risk of weakening its brand characteristics—and it is this brand characteristics that supports its high-end pricing strategy. This inherent constraint fundamentally limits the potential of digital tools in promoting "winning by quantity" growth or achieving significant cost reductions by simplifying the store form.

Luckin Coffee's strategic positioning focuses on "digital accessibility" and "value optimization", which establishes a completely different fit between digital investment and business goals: each technology deployment directly strengthens its core value propositions of "convenience" and "affordability" [7]. This strategic consistency enables Luckin to implement a radical expansion strategy with the "light asset" store form without causing conflicts in brand positioning. The impact of this strategy on revenue is direct and quantifiable: the number of Luckin stores is about 2.9 times that of Starbucks in China; it is this advantage in the scale of the network that constitutes the main driving force behind the gap in total revenue between the two.

The analysis of the "annual revenue of a single store" further confirms this dynamic. It is estimated that the annual revenue of a single store in Starbucks China is about 2.77 million yuan,

while the annual revenue of a single store of Luckin Coffee is about 1.54 million yuan (the data is calculated by dividing the total revenue by the number of stores at the end of the year; it should be noted that the data of Luckin Coffee is a mixture of retail revenue of self-operated stores and the wholesale and franchise income of the store, so there are certain limitations in the direct comparison of cross-ownership models). The revenue generated by each Starbucks store is more than 80% higher than that of Luckin Coffee, which shows that the impact of digital transformation on the revenue gap is not mainly due to the superiority of single-store production efficiency, but by helping Luckin achieve rapid and highly capital-efficient expansion. Therefore, the core strategic question is not whether digital technology can improve unit revenue, but whether it can give rise to a completely different scale expansion model, thus creating higher overall revenue [10].

4.2. Technology application depth

The architectural depth of technology integration further highlights the differentiated impact of digital transformation at the competitive level. Starbucks applies digital technology as a discrete feature enhancement means—such as member loyalty programs, distribution cooperation projects or AI optimization tools—these technologies are simply superimposed on the existing infrastructure [1]. Although each component can create value in its specific area, their operation in cross-system data integration is very limited. For example, although the member loyalty program can generate customer behavior data, these data cannot fully flow into the process of supply chain planning or store design decision-making in real time.

In contrast, the technical architecture of Luckin is a unified platform, and user data, operational indicators and supply chain signals flow smoothly between systems that are connected to each other. The actual effect of this structure is intuitively reflected in the company's amazing expansion speed: in fiscal year 2025 alone, Luckin will open about 8,700 new stores [12]; without a deeply integrated digital system, the site selection, supply chain scaling, quality monitoring and personnel allocation cannot be managed synchronously. This expansion speed will not be achieved at the operational level at all. This system-level integration can bring "combined interest" benefits to various business functions—that is, the data generated by efficiency improvement in a certain field can in turn promote performance improvement in adjacent areas [2].

The depth of technology integration also determines the cost structure advantages that enterprises can obtain. Luckin's integrated platform enables it to implement centralized management of thousands of small stores, thus reducing the operation and management costs of single stores; while Starbucks' large stores adopt a high-end service model, so it requires higher single-store staffing and management costs. Although digital tools can optimize these cost expenditures at the marginal level, they cannot fundamentally restructure the operating model that focuses on providing physical experience.

4.3. Organizational adaptation capability

The organizational structure and governance mechanism have a significant impact on the implementation speed and effectiveness of digital transformation [9]. Starbucks China's positioning in the global enterprise hierarchy constitutes an inherent constraint on its adaptation speed. Technical decision-making must be consistent with global standards, regional investment priorities and enterprise risk management frameworks. Although these governance structures can ensure service quality and maintain brand consistency, they also weaken the organization's ability to respond quickly to competitive dynamics in the local market. The strategic restructuring in 2025—

that is, exploring a partnership model that gives the operating business in China greater local governance authority—is the organization's direct response to this "adaptive deficit" [11].

The organizational structure of Luckin Coffee has been aimed at achieving digital agility since its inception. Decision-making power is concentrated in the hands of a technology-oriented management team with rapid iteration ability. Its partnership model further enhances the flexibility of the organization: while maintaining centralized digital supervision, this model allows decentralized execution at the store level—this hybrid structure takes into account the responsiveness of the local market and the consistency of the whole system [8]. Its talent composition also strengthens this strategic orientation: engineering technology and data science capabilities are positioned as the core competitiveness of the organization, not auxiliary functions, thus accelerating the technology research and development cycle and realizing the seamless integration of digital tools and daily operations.

This contrast reveals a common law in the literature of digital transformation: those organizations that have been built around digital technology since the beginning can achieve a high degree of structural fit; and for those existing organizations, this structural fit is often difficult to replicate through gradual organizational change [7]. The challenges facing organizational adaptability are by no means limited to the technical level. It also covers many elements such as governance framework, decision-making hierarchy, incentive mechanism and institutional culture. Only the synchronous evolution of the above elements can strongly support the comprehensive digital transformation.

4.4. Data application capability

The scope and fineness of data utilization are the key differentiation factors in how digital transformation can be transformed into actual benefits. Starbucks' data capabilities are concentrated in the member ecosystem, and its purchase history, preference data and interaction indicators provide a basis for accurate marketing and product recommendations. 25.5 million active Star Club members have generated a large amount of behavioral data; however, dependence on third-party distribution platforms has limited data collection during non-store transactions, resulting in gaps in customer journey data sets [11].

Luckin Coffee's data architecture covers the entire transaction life cycle—from initial application download to ordering, payment, distribution or self-pickup, and post-consumption feedback—without the intervention of third-party platforms. As of fiscal year 2025, Luckin Coffee has more than 450 million registered users, with an average monthly transaction user of 94.2 million. The scale and continuity of its data set enable it to be applied to multiple business functions at the same time [12]. Product development uses consumption pattern analysis to identify emerging taste preferences and the best pricing points. Supply chain management uses aggregate demand signals from thousands of locations to optimize procurement time and quantity. The location of the new store uses geospatial and demographic statistics to predict the potential income of a specific location before investing funds [10].

This competitive impact is far more than a single application. With the growth of data volume and data types, the prediction accuracy of the analysis model based on these data training will also improve, thus forming a virtuous cycle: more data can bring better decision-making, better decision-making can produce better results, better results can attract more users, and more users will generate more data [6]. This data flywheel effect represents a structural advantage, which continues to increase over time, making it increasingly difficult for competitors with weak data capabilities to make up for the gap in data capabilities.

5. Conclusion

5.1. The impact of digital transformation path selection

This study explores how the digital transformation strategy leads to the revenue gap between Starbucks and Luckin Coffee in the Chinese coffee market. The comparative analysis has drawn some conclusions, which are of great significance for understanding the digital transformation path of the service industry.

The most fundamental discovery lies in the relationship between the time starting point of digital transformation and its strategic results. Luckin Coffee's digital native architecture—which has been designed and completed before the opening of the first store—has built an integrated technology ecosystem in which each component promotes each other through shared data flow [1]. This architectural approach makes the light asset expansion model possible. Its store network is about three times the size of Starbucks' Chinese store network, which has become the main driving force of Luckin Coffee's overall revenue advantage. Although Starbucks' gradual transformation maintains brand integrity and single-store profitability, it also creates inherent limitations in integration depth and organizational agility, which cannot be overcome by gradually adding technology alone [7].

This finding shows that the order of digital transformation is as important as the final scale. Enterprises that use digital technology as a basic business architecture rather than an auxiliary tool can obtain structural cost advantages and scale efficiency that are difficult for progressive transformation enterprises to achieve. However, the analysis also shows that speed and scale do not guarantee sustainable profits: Luckin Coffee's rising distribution cost and the net profit margin decline from 8.6% to 7.3% from fiscal year 2024 to fiscal year 2025 indicate that rapid digital expansion will bring financial sustainability risks, and these risks cannot be solved by technology itself alone [12].

The income difference itself needs to be interpreted carefully. Starbucks' single-store revenue in China is still much higher than that of Luckin Coffee, and its operating profit margin has always been higher than that of Luckin Coffee. The overall income gap reflects the completely different business models of the two companies, not that one digital method is absolutely superior to others.

There are some limitations of this study that need to be explained. The analysis relies on the audited public financial data of the U.S. Securities and Exchange Commission (SEC); internal operating indicators, proprietary technology performance data and customer-level transaction analysis data are still not available. In addition, the end date of Starbucks and Luckin's fiscal year is different—Starbucks is September and Luckin is December—which will cause a slight time deviation in the period comparison. The income comparison in RMB is very sensitive to the exchange rate assumption. External factors—including macroeconomic conditions, regulatory developments and changing consumer preferences—will affect financial performance.

5.2. Competition strategies for traditional and emerging brands

The comparison between Starbucks and Luckin Coffee provides a broader strategic inspiration for the digital competition between old brands and "digital native" challengers. For traditional brands operating in a market disrupted by digital technology, the above analysis reveals three key strategic considerations.

The organizational structure and governance mechanism must evolve accordingly to match the competitive speed of digital native competitors. Starbucks' restructuring decision in 2025—that is, the partner model of exploring "localized governance" for its Chinese business—confirms this

discovery: under the global governance framework, in the face of the rapidly changing local market, the rigid global governance framework may become a competitive disadvantage [9]. If traditional brands are slow to make organizational adjustments, they will still face the risk of not being able to respond effectively even if the required technology is ready.

As a competitive asset, data architecture must be strategically prioritized. Starbucks' dependence on third-party distribution platforms has created a structural gap in its customer data coverage, thus limiting the analytical ability of its entire digital ecosystem. Traditional brands must carefully evaluate whether outsourcing customer-oriented digital functions to third parties—although it seems convenient at the operational level—will bury long-term competitive disadvantages in terms of data accumulation and application capabilities [10]. Although the initial investment is relatively high, investing in its own digital channels is expected to bring a data advantage with a compound effect in the long run.

The relationship between digital investment and brand positioning must be clearly and refined. High-end brand positioning often limits the radicalism of brands in digital price competition and store form simplification—and these means are usually the key driving forces for "scale-oriented growth". Therefore, traditional brands must explore a digital transformation path to ensure that the transformation process can strengthen rather than dilute their core value propositions [8].

For digital native brands, the case of Luckin Coffee not only shows the great power of large-scale expansion under technology empowerment, but also reveals its inherent limitations. The digital native model can indeed achieve amazing expansion speed and network scale; however, the proportion of distribution costs in revenue has soared from 8.2% to 14.0%, and the synchronous contraction of net profit margin prove this: the improvement of digital efficiency cannot automatically translate into an equal increase in profitability [12]. Shifting the strategic focus from simply pursuing "growth indicators" to focusing on "profit optimization" is a key turning point that digital native brands must leap over cautiously.

The above two types of competitors can draw a common conclusion: the way digital transformation reshapes the competitive landscape is not by eliminating some existing business models, but by creating a new environment—in this environment, completely different business structures can coexist, and each structure can target specific optimized configuration of value proposition, sub-customer group and profit model. Future research can use econometric modeling to quantify the impact of various dimensions of digital transformation on revenue; and explore whether organizational restructuring can help existing brands accelerate their digital transformation process while maintaining their core competitive advantages.

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