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АНАЛИЗ РАЗВИТИЯ МАРКЕТИНГОВОЙ МОДЕЛИ ТОРГОВЛИ O2O (ОНЛАЙН-ОФЛАЙН) В УНИВЕРМАГАХ
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ABSTRACT

Li Ziqian. Analysis of the development of the marketing model of O2O trading (online-offline) in department stores: SUSU, Chelyabinsk, EU-224, 93p, 13 tables, 14 pictures, references – 47 names.

With the continuous development of the Internet, e-commerce has emerged and developed rapidly, and the traditional retail industry has been impacted. Therefore, it is particularly important for retail companies to find a suitable business model. This article selects Rainbow, a benchmarking company in the retail industry, as a sample company, analyzes the financial performance of Rainbow before and after the O2O model transformation, explores the effect of its transformation, and makes relevant suggestions for the problems found. First of all, this article combs the related literature of O2O model and corporate performance, explains the meaning and characteristics of O2O model, corporate performance related concepts, performance evaluation methods, and the theoretical basis of the impact of O2O model transformation on corporate performance, from a macro and micro perspective. Analyzed the reasons for the transformation of Rainbow. Then, it briefly explained the transformation process of Rainbow, using financial indicator analysis and principal component analysis to comprehensively analyze and evaluate the performance of Rainbow before and after the O2O model transformation.

CONTENT

INTRODUCTION

With the continuous development of the Internet, e-commerce has emerged and developed rapidly, and the traditional retail industry has been impacted. Therefore, it is particularly important for retail companies to find a suitable business model. This paper selects Rainbow Department Store (China), a benchmarking case company in the retail industry, as a sample company, analyzes the financial performance of Rainbow Department Store before and after the O2O model transformation, explores its transformation effects, and provides relevant suggestions for the problems found.

First of all, this article combs the relevant literature of O2O model and corporate performance, explains the meaning and characteristics of O2O model, corporate performance related concepts, performance evaluation methods, and the theoretical basis of the impact of O2O model transformation on corporate performance, from a macro and micro perspective. Analyzed the reasons for the transformation of Rainbow, including the macro analysis using the PEST analysis method, and the micro analysis from the four aspects of market expansion and resource integration. Next, it briefly explained the transformation process of Rainbow, using financial indicator analysis and principal component analysis to comprehensively analyze and evaluate the performance before and after the transformation of Rainbow Department Store to the O2O model. In the process of performance evaluation, the analysis of financial indicators mainly analyzes and evaluates the performance changes of Rainbow Department Store from the four dimensions of profitability, operation, debt repayment and growth ability. Process, score the transformation performance of Rainbow Department Store’s O2O model, and then get a comprehensive evaluation result.

Through research, it is found that after Rainbow Department Store has transformed its O2O model, its transformation effect has not appeared in the short term, and its impact on performance has a certain degree of lag.

This is a process that any transformation enterprise must go through. After 2017, the effect has gradually emerged. Therefore, this article judges that the transformation of

Rainbow Department Store's O2O model is successful. The transformation of Rainbow Department Store's O2O model has clarified a correct development direction for corporate development.

1 THE FIRST CHA PTER

1.1 Research background

In recent years, the Internet has developed extremely rapidly, and online shopping has also developed rapidly, which to a large extent has prompted people to continuously change their consumption and life patterns. Under such a big background, the business model of enterprise operation has also changed under the great challenge. At present, online and offline consumption channels are showing large fragmentation characteristics, and online sales prices are constantly increasing, but offline stores do not have advantages in marketing accuracy, so they have been challenged to a greater extent. Therefore, the online and offline sales models began to interact frequently, which is the O2O (Online To Offline, Same as follow) business model.

"Internet + circulation" provides new impetus for the innovation-driven development of the department store industry. The department store industry combines with the Internet to increase experience-based and scenario-based services, develop smart logistics, and integrate online and offline development. The online and offline integrated development of the department store industry is still facing some difficulties and challenges. Nowadays, it is necessary to further differentiate online and offline operations, connect and divert online and offline, train or introduce professional talents, and use cloud computing, big data, and artificial intelligence. Efforts in technology and the development of smart logistics in order to better integrate and restructure to develop in depth.

1.2 Basic concepts

1.2.1 O2O mode

O2O stands for Online to Offline, which is the product of e-commerce development to a certain stage. Its concept was first proposed by Alex Rampell of the United States in 2010. To put it simply, companies use online sales to drive offline consumption, that is, relying on Internet technology to establish an online O2O platform, release offline store-related product information through the platform, Users complete product selection, and then realize the consumption experience offline. Transfer online users to offline. The relationship between online and offline is no longer a competitive relationship, but a division of labor and coordination, complementing each other, forming a customer-centric, using the Internet to open up online and offline channels to achieve omnichannel integration.

There are four O2O operating modes: online first and then offline, offline first and then online, online first and then offline and then online, offline first and then online and then offline.

(1) Online first, then offline. Through the establishment of an online sales platform, the promotion and marketing of products can be achieved. After consumers complete online payment, they can experience offline services.

(2) Offline first, then online. By first establishing an offline sales platform and then an online shopping mall, consumers go to offline physical stores to consume, and at the same time direct business flows online, forming a closed loop, realizing the docking of online convenience and offline convenience.

(3) Online first, then offline and then online. Through the establishment of an online sales platform, the business flow from online to offline, enjoy offline service experience, and then realize online transactions.

(4) Offline first, then online and then offline. Through the establishment of an offline sales platform, the business flow is imported from offline to online, transactions are completed, and offline consumption experience is realized.

1.2.2 Features of O2O Mode

(1) Online and offline closed loop

Under the O2O model, online and offline are no longer a relationship that does not affect each other and operate independently, but transforms from a competitive relationship to a cooperative relationship. The O2O model integrates logistics, capital flow, information flow, and business flow, and logistics passes offline Completed, capital flow and information flow are completed online or offline through online and business flow options, forming an online and offline closed loop structure. Consumers enter the closed loop through offline stores or online O2O platforms. Because online and offline channels are connected in this mode, it is easier for consumers to associate online product information with offline stores. At the same time, retailers The big data analysis in the backend understands the consumption characteristics and habits of customers, pushes product information to them, realizes precise marketing and improves customer stickiness. By completing online selection and payment, users then go to offline consumption experience and enjoy related after-sales service, which stimulates offline consumption while also driving online consumption, mastering user data, and communicating with consumers to understand their needs, so as to achieve Precision marketing.

(2) Online and offline complement each other

Under the O2O model, the relationship between online and offline channels achieves synergy. Within the O2O closed-loop structure, online and offline can give full play to their respective advantages and form complementary advantages. Consumers screen for related goods and services online, consumption information is passed to offline stores through the O2O platform, and offline retailers use big data to analyze consumer information collected on the O2O platform to determine consumer behavior and consumption Preference, targeted push related product information to achieve precision marketing. In addition, under the O2O model, consumers complete online payments, and offline retailers can use online sales to predict offline sales to reduce inventory and reduce inventory costs. At the same time, offline stores can collect product information that customers are most concerned about. Moreover, consumers' consumption concepts are gradually changing, and they pay more attention to consumption experience. After placing an order online, they can pick up products or enjoy related services in offline stores. Offline stores are good Service quality, service level and consumer experience brought to consumers will stimulate consumption, increase user stickiness, and increase the rate of secondary consumption.

1.2.3 The impact of the O2O model on performance

The O2O model opens up online and offline channels, and its features such as experiential consumption, online payment, offline consumption, and channel integration have a certain impact on corporate performance.

First, the O2O model pays more attention to the consumer experience, emphasizing experiential consumption. Enterprises release relevant product and service information through online platforms, consumers choose online and complete online payments, and then experience offline. In this process, the secondary consumption rate of consumers can be increased, and joint sales can be realized. At the same time, retail companies can use the customer information recorded on the O2O platform to conduct intelligent data analysis, analyze their consumption habits, preferences, etc., so as to achieve precision marketing, increase consumer stickiness, and increase business income of the company.

Secondly, because the O2O model emphasizes experiential consumption and is closer to customers' lives, it is necessary to set up some offline stores. In the process of expanding the layout of offline stores, the rental cost and construction cost of the stores will also increase correspondingly, resulting in huge financial pressure. However, under this model, the location of offline stores is not very dependent on geographic location. Therefore, it saves rent and reduces corporate costs. In addition, under this model, online and offline collaboration is achieved, and with a relatively complete logistics distribution system, offline stores can carry out appropriate inventory based on online sales, thereby reducing inventory costs.

Third, the O2O model makes full use of the Internet's borderless and widely spread features, actively expands online platforms, pushes relevant product or service information, analyzes users' consumption behaviors through big data, and achieves precision marketing. Customers use WeChat, Alipay, and other online platforms. Quickly place orders through payment methods, shopping APPs or WeChat applets, realizing O2O anytime and anywhere, reducing marketing costs. At the same time, companies can publish some advertising information on the self-built O2O platform, collect advertising fees, and increase a portion of their cash flow.

Finally, the use of the O2O model by enterprises has a positive impact on corporate performance on the one hand, and on the other hand, related problems will also arise in the process of implementing the O2O model. First of all, in the initial stage of transformation, the online and offline synergy issues are crucial to the development of enterprises. If the online and offline imbalances, it will affect the normal operation of the enterprise and slow down the pace of enterprise development. Secondly, the construction of online channels requires logistics, capital flow and related technologies as support. A large amount of funds need to be invested in the early stage to build an O2O online platform and lay out offline stores. In this transformation process, companies may experience excessive capital investment, Risks such as increased borrowing and slow return of funds, which in turn affect the profitability, operating capacity, debt solvency and growth of the company.

In short, the impact of O2O model transformation on performance has both advantages and disadvantages. Companies should not blindly transform. They should choose an appropriate model based on their own actual conditions to promote sustainable development of the company.

1.2.4 Enterprise performance connotation

Regarding corporate performance, related scholars mentioned that listed companies can reflect corporate performance through the results of accounting information systems, which can be regarded as quality information reflected by listed companies, and can be reflected through different indicators to better reflect shareholders Benefits and operating effects are easier to understand and accept by users of financial information. In addition, financial performance can be used to evaluate whether the strategy being implemented and executed by the company contributes to operating performance. Generally, the evaluation of the contribution is mainly carried out from two dimensions: financial indicators and non-financial indicators. The financial indicators mainly include net asset income. Indicators that reflect the company’s profitability, operation, debt repayment and development capabilities in a certain period of time, such as total asset turnover rate, asset-liability ratio, and net profit growth rate. Non-financial indicators mainly include customer satisfaction, strategic goals, market share, etc.

For the evaluation of the transformation effect of the O2O model of the case company, this article analyzes the dimensions of measurable financial indicators, objectively analyzes and evaluates whether the transformation event has a positive impact on the company's performance, and judges the success of the company's transformation.

1.2.5 Corporate performance evaluation methods

(1) Financial indicator analysis method

The financial index analysis method refers to the use of simple mathematical formulas to calculate the financial data of an enterprise to obtain relevant financial indicators, and then quantitatively analyze and evaluate the financial status and operating results of the enterprise. The evaluation dimensions mainly cover the profitability, operating capacity, and Debt solvency and growth ability. In addition, the financial indicator analysis method is based on the financial data published by listed companies and has strong objectivity. It uses mathematical calculation formulas to convert a wide range of financial data into simple indicators. The indicators are easy to understand and clear in order to make financial information users more accessible. It is easy to understand and accept, and decision makers can analyze objective financial data to discover problems and business risks in the business process in a timely manner and propose corresponding solutions, so as to point out the direction for business development and improve business efficiency.

(2) Principal component analysis method

Principal component analysis is also called principal component analysis. The earliest user was Pearson, and then Hotelling further developed the method. Principal component analysis is a statistical method that converts multiple indicators into several comprehensive indicators through dimensionality reduction. These comprehensive indicators are called principal components. Its core idea is to use fewer variables to explain the largeness of the original variables. Part of the information, recombining the original highly correlated variables into a set of mutually exclusive comprehensive indicators. At the same time, each indicator reflects the relevant situation of the research object, and there is a certain overlap between different indicators. After dimensionality reduction, more original variables can be reflected by several principal components, and then each the main component scores and comprehensive scores are used to comprehensively evaluate the business situation of the company and simplify the problem.

1.2.6 Related theories

(1) Contingency theory

This theory was first put forward by American management scientist Fred Lusans in the 1970s. He pointed out in "Introduction to Management: A Theory of Contingency" that the historical background of this theory was put forward in the 1970s. The American society is turbulent and the economic development speed has dropped sharply. The internal and external business environment faced by enterprises has undergone great changes.

The management theories and management methods used by enterprises no longer adapt to the survival and development of enterprises. It is necessary to change the management philosophy and management methods of the enterprise, and make corresponding adjustments to its strategic objectives and business models in a timely manner according to the changes in the internal and external environment faced by the enterprise. The basic idea of the theory is that any enterprise is a subsystem in the entire social system. Under the influence of the social environment, it analyzes its own situation in the entire system, and makes corresponding strategic adjustments in time to be in line with the social environment. adapt. At the same time, the production and operation modes adopted by various enterprises are different from each other, and there are differences in the life cycle stage, business scale, and growth of each enterprise. It is impossible for one management mode to be suitable for all enterprises. The strategic objectives and business model of an enterprise will continue to adjust with changes in the internal and external business environment in which it is located. Therefore, managers need to make full preparations, timely adjust strategic goals, and transform management models to respond to environmental changes and promote the sustainable development of enterprises.

It is appropriate to use this theory when constructing a performance evaluation system. Due to differences in the operating conditions, operating characteristics, life cycle stages and industry environments faced by various enterprises, fixed evaluation methods and ways of thinking should not be used when evaluating corporate performance, and full consideration should be given to the internal When the external environment changes, build an appropriate performance evaluation system to objectively analyze the business effect of the enterprise. In addition, the internal and external environment of the enterprise is constantly changing, and the enterprise will make corresponding strategic adjustments at different stages. Therefore, the evaluation of enterprise performance needs to be combined with the actual situation.

(2) Value chain theory

The concept of value chain theory was first mentioned in the book Competitive Advantage. The concept was proposed by Harvard Business School Professor Michael Porter in 1985. Its core idea is "The production and operation process of each company All have to go through activities such as production, design, marketing, and delivery, and these production and business activities reflect the form in which the company uses the value chain. "The various business activities and business units are interconnected and supplemented to form a single. The complete value chain mainly includes three parts: the internal value chain of the enterprise, the value chain of competitors, and the value chain of the industry. In economic activities, value chains are ubiquitous. For example, there are value chains between companies with upstream and downstream relationships and between various operating links within the company, and each node can have an impact on the realization of corporate value. In addition, the competition between enterprises is not a single node competition, but a competition between the entire value chain. Each node complements each other and influences each other. Enterprises can discover their own advantages by analyzing each node in the value chain. Deficiencies, and the degree of impact on the entire value chain, and constantly optimize and adjust to improve their competitiveness.

The value chain theory can be introduced when analyzing the transformation effect of an enterprise's O2O model. In the O2O model, online channels, offline channels, and O2O platforms form a value chain, and each node is interconnected and closely connected. Use this theory Split the nodes in the value chain and analyze the construction of its online, offline, and O2O platforms separately, so as to provide a corresponding reference for traditional retail enterprises to transform their O2O model.

(3) Blue ocean strategy theory

The blue ocean strategy theory was first proposed by W. Qian. Jin and Mobonne in 2005. They pointed out in the "Blue Ocean Strategy" that the theory can serve the needs of modern corporate strategic management, guide companies to open up new market space, and Business management provides new ideas and practical methods.

The theory believes that the entire market can be divided into the blue ocean and the red ocean. The blue ocean refers to a brand-new and undeveloped market, emphasizing how companies operate in a new market. In the blue ocean, companies need to rebuild market boundaries, focus on the overall rather than partial, and the focus of attention has changed from the supply side of the market to the demand side. In industry competition, the ultimate goal is no longer to exceed competitors, but to value innovation. As the goal, while pursuing differentiation and low cost, by re-screening the buyer value elements in each market, from the buyer's perspective, reshape the value curve, so as to open up a huge market space. Because it is a new market space, the market demand in the initial stage is small, and it is necessary for companies to deepen their business models, optimize and adjust business strategies in time, and strengthen marketing and promotion to stimulate consumer demand. With the stimulation of consumer demand, it also brings companies. Huge profits and room for growth. The Red Sea refers to the existing market. In this traditional space, most companies are in a mature stage. In order to compete for market share, the competition among companies is very fierce, with the goal of surpassing competitors, and at the same time adopting price reduction strategies to make profits Zoom out. This theory provides a new idea for the development of enterprises, enabling enterprises to effectively avoid fierce competition in the traditional market space, encouraging enterprises to actively innovate, opening up new market spaces, and changing the strategic focus from competition to innovation. In the retail industry, as the pace of e-commerce development gradually accelerates, some retail companies are keenly aware of the O2O business opportunity, quickly seize the transformation opportunity, take the lead in innovatively transforming the O2O model, and continue to explore and move forward in this blue ocean. In order to promote the enterprise to achieve healthy development.

1.3 Research methods

(1) Literature research method

By collecting and combing the relevant literature of domestic and foreign scholars, analyzing and summarizing the relevant research results of the subject, integrating O2O model, performance evaluation and other related theories, existing research results on O2O model and performance evaluation, and summarizing O2O in a literature review method the research status of models and performance evaluation methods provide ideas for writing thesis.

(2) Case analysis method

This article selects a specific department store company as a case study, and analyzes the specific situation of its O2O model transformation in the form of case analysis.

(3) Comparative analysis method

In the performance evaluation, this article compares and analyzes the relevant financial data before and after the transformation of Rainbow's O2O model. At the same time, it compares with industry averages and competitors in the same industry, and compares and analyzes whether the transformation of O2O model is successful or not, as well as the impact on business operations. The impact of performance makes the case analysis more adequate and objective.

(4) Principal component analysis method

In order to comprehensively evaluate the transformation performance of Rainbow's O2O model, this paper introduces this method. The research idea is to reduce the dimensionality of the data, and extract the principal components according to certain principles to reflect a number of different indicators, and each principal component contains. The information is different. Through the use of SPSS20.0 software for data processing, the main components are extracted, and then the comprehensive score of the enterprise is obtained, and the transformation effect is evaluated by the comprehensive index, making the analysis result more objective and scientific.

1.4 Current research status at home and abroad

(1) Research on O2O model

The O2O model has been gradually developed in recent years, and has only formed a certain scale in the 21st century. Foreign scholars' research on the O2O model is mainly reflected in the following two aspects:

First of all, from a strategic perspective, Krishnan S. Anand, Ravi Aron established an analysis model

Based on the analysis of the current operation of the online group buying market, it was found that in the business using the O2O model, by comparing the revenue under different price mechanisms, e-commerce companies began to consider formulating corresponding promotion strategies.[1]

M Tsai and WN Wang believe that the O2O model is a relatively new business model, and defined an O2O business service model. According to the model, a case study was carried out, and then the effectiveness of consumer behavior was analyzed to find out what influence consumer behavior Key factors, and proposed to use attractive digital marketing strategies to innovate the model. [2]

M Tsai, PC Yang, and WN Wang pointed out that the O2O model used by enterprises can help them collect information and data of existing customers and potential customers through the Internet platform, and analyze these data to formulate appropriate marketing strategies. [3]

X Chen, X Wang, X Jiang believe that the development of the Internet has increased the ways for retailers to reach consumers. Online and offline are no longer the previous competitive relationship. The two merge channels and broaden the competitive thinking of enterprises. [4]

Secondly, from a consumer perspective,

Ariely D believes that providing customers with the most appropriate product information is one of the goals of retail companies. Through the use of the Internet and big data analysis, to understand customers' consumption behaviors and consumption habits, in order to better match customers' consumption preferences. Realize precision marketing. [5]

Julio. J and Martin M.J analyzed the socio-economic characteristics of online consumers-whether age, gender, and income will affect their online behaviors. The results of the study show that both men and women, young and old, have adapted to online consumption. [6]

YS Chi and MY Kang pointed out that the O2O model can enable consumers to choose their favorite products anytime and anywhere through the Internet, which can bring customers a good service experience. [7]

TJ Wu, RH Zhao pointed out that the starting point and final result of enterprises adopting the O2O model is to attract more consumers through the Internet, through the Internet, analyze the consumer psychology of users, better grasp young consumer groups, and achieve precision marketing. [8]

Finally, from the perspective of channels, WS Kwon and SJ Lennon studied the reciprocal relationship between online sales channels and offline sales channels, and pointed out that offline service quality can affect online and offline to a certain extent. Fusion. [9]

Blanca H, CW Phang, CH Tan, etc. researched and investigated retail companies using the O2O model to promote their products online to promote offline sales. The key to using this model is to attract consumers' attention to stimulate consumption. For example, digital advertising and digital coupons. The former focuses on product attribute information, while the latter focuses on consumer incentives. This research provides important insights for retail companies seeking to use the O2O model, and also provides reference for e-commerce and digital advertising. [10]

Black D mentioned multi-channel retailing, which refers to retail companies constructing sales channels, where there are two or more channels, and goods are transferred to customers through this channel. [11]

(2) Research on corporate performance

After years of research, experts continue to expand the dimensions and methods of performance evaluation.

Alexander Wall proposed the term credit ability index. The relationship between financial ratios is expressed by a linear function. Seven financial indicators are selected, and then the credit ability of the enterprise is calculated through the function to evaluate the credit of the enterprise. Level. [12]

Jackson Martindell constructed a relatively complete management capability evaluation index system, and its management effect is reflected by corporate performance. [13]

Joffrey emphasizes that the fair value of assets is the core, and after making certain adjustments to the EVA model, it is possible to fairly evaluate the business effect of the enterprise. [14]

Paul R Brown mentioned the use of DuPont analysis to split the relevant financial indicators, analyze the relationship between the indicators with the return on net assets rate, and comprehensively evaluate the performance of the company. [15]

Fullerton RR, Wempe WF established a structural equation model to analyze and verify that non-financial indicators have a certain impact on the financial performance of enterprises. [16]

David (2010) based on the study of corporate performance and analyzed its related theories, and proposed to select corresponding evaluation indicators according to different corporate performance evaluation items, and build a performance evaluation system. [17]

Erich. A considered non-financial indicators when evaluating corporate performance, and included customer satisfaction when constructing the evaluation system, which enabled the company to achieve an organic combination of business management and financial performance evaluation, and the evaluation results were more persuasive. [18]

Gomes CF, Yasin MM, Lisboa JV studied the performance evaluation system of the manufacturing industry, using multivariate statistical analysis methods, detailed exploration of the characteristics and practicability of various performance evaluation methods, so as to provide performance evaluation for business managers. Provide reference. [19]

N. Yadav mentioned that with the adjustment of corporate strategic goals, the performance evaluation system will also make corresponding changes. Therefore, a dynamic evaluation system-strategic game card framework is constructed, which includes both corporate and customer dimensions. [20]

Li Tao, Guo Xiaojing, and Zhou Ninging used principal component analysis to analyze the financial status of electric power companies, and finally obtained comprehensive scores and rankings. [21]

(3) Research on business model innovation

Experts and scholars have been paying attention to the innovation of business models for a long time. After entering the 21st century, experts and scholars gave up the original research perspective and began to study the issue from a new perspective. Tucker studied business model innovation from the perspective of customers, and proposed that business model innovation is mainly to bring customers a better consumer experience. [22] Mitchell also studies business model innovation from the perspective of customers. He mainly innovates business model from the seven aspects of "who innovate for, what to innovate, when to innovate, where to innovate, why, how to innovate, and how much it costs to innovate". Conducted in-depth research, and pointed out that as long as there are major changes in four of the seven aspects, this behavior can be called business model innovation. [23]

A large number of experts and scholars have conducted research on business model innovation. Their research perspectives are diverse, some are from the perspective of demand-driven research, some are from the perspective of technology-driven research, and some are from the perspective of competitive force. The most important aspect of technology-driven perspective is perspective. Currently, the network economy is booming, and the traditional business economic model is also undergoing changes. [23] Timmers (1998), Amit and Zott and others have conducted research on business model innovation and other related content very early. Later, scholars such as Kodama (2004), Yovanof, Faber, Hazapis and others have also studied business model innovation and have done a lot of research.[24]

The above research results show that the rapid development of the Internet has promoted the integration of many industries, which greatly

Locally promoted the process of retail enterprises increasing their innovation capabilities from their own business models. Chinese scholar Jiang Qiping found through research that under the background of the rapid development of the Internet, the innovation of business models is mainly reflected in the ways of profiting, sales and customer relationships. [25]

Management master Peter Drucker once pointed out that, nowadays, competition between enterprises is not only at the level of product competition, but also competition between business models. [26] Many companies have begun to realize that they need to continuously improve their business models. Improve its own market competitiveness. Scholars from the perspective of demand-driven research proposed that the innovation of corporate business models must be based on customer needs as a prerequisite, and other reasons are not the main reason. [27]

Scholars who take the system as a research perspective believe that companies innovate their own business models due to the influence of various marketing factors. [28] For example, Mahadevan conducted an in-depth analysis of a variety of factors affecting business model innovation, and finally proposed that the factors that have the most impact on the value of business models include industry competition and customer demand. These two factors directly promote business Continuous innovation of the model. [29] Venkatraman and Henderson proposed that the innovation of enterprise business models is mainly affected by two factors, technological progress and the evidence of business competition between enterprises. [30] There are also many experts and scholars whose research content evaluates the effect of business model innovation. Dubosson and Torhay mainly adopted the balanced scorecard method to evaluate the innovative effects of business models. [31] Afuah mainly evaluated the development potential of their business model from the perspective of profitability.

Chinese scholar Li Man also used the method of balanced scorecard to evaluate the innovation effect of business models, and the evaluation index system used was relatively complete. However, the balanced scorecard method is difficult to evaluate the dynamic effects of business model innovation. Wu Siqin proposed that the evaluation of the innovation effects of business models is mainly done from the perspectives of effect testing and logical evaluation. Among them, effect testing refers to the evaluation of the innovation effects of business models, and logical evaluation refers to the use of multiple A theoretical approach to analyze the innovative effects of business models. The above two methods should be effectively combined for use.

(4) Research on corporate performance

In terms of the construction of performance evaluation system, Zhao Xiufang believes that the basis of competition among enterprises to transform the profit index to the comprehensive index of enterprise value, when establishing an enterprise’s performance evaluation system, it is necessary to have financial indicators, while taking into account non-financial indicators [32].

Li Heping mentioned that performance evaluation can promote the improvement of corporate governance structure and is also the basis and basis of the incentive mechanism. At the same time, a perfect incentive mechanism has a counter-effect on corporate performance and is conducive to promoting corporate value maximization [33].

Jiang Hongxia pointed out that there is a close connection between corporate performance evaluation and corporate management, and the development of performance evaluation is inseparable from the company’s goals. For the development and progress of the company, strategic management must be integrated into the performance evaluation [34].

Zhang Yuqin believes that when building a performance evaluation system, it is necessary to pay attention to the balance between financial indicators and non-financial indicators. In addition, enterprises should realize the diversification and socialization of evaluation subjects, so that performance evaluation can effectively meet the requirements of stakeholders [35].

Liu Xuexin, Miao Ningning pointed out that enterprises are building a comprehensive performance evaluation system. When establishing a relationship, it is necessary to focus on three aspects: the original financial indicators of the company, and the company’s contribution to society and stakeholders. Evaluation [36].

In terms of performance evaluation methods, Shao Yiming and Qian Min are constructing an evaluation index system for corporate competitiveness. In the department, starting from the five dimensions of market ownership and profitability, the corresponding performance evaluation indicators are selected [37].

Wu Fengxia and Wu Fengwei take the improvement of corporate financial performance as the starting point, use principal component analysis to evaluate the financial performance of listed steel companies in my country, and propose relevant countermeasures to improve corporate financial performance [38].

Li Weizhong established a competitiveness evaluation model based on the analysis of the meaning of retail enterprise competitiveness, and use functional coefficient method and comprehensive evaluation method to evaluate the competitiveness of enterprises, and provide theories for improving the competitiveness of enterprises according to the basis, the evaluation indicators of retail enterprises are mainly selected from the two dimensions of enterprise resource advantage and capability advantage. Resource advantages mainly include materialization, goodwill, finance and human resources; capability advantages mainly include market operations sales, profitability, operation and service capabilities [39].

Tang Jiafu, Li Runsheng, Shi Yonggui, etc. used the principal component analysis method to evaluate the performance of the case company from the perspectives of finance, operation and growth ability, to find out the differences in each department, and the study found that the principal component analysis method measures corporate performance Conducive to improving the efficiency of business management [40].

Zhu Lin, on the basis of explaining the relevant theories of the principal component analysis method, studied the case of the merger of North and South vehicles, and evaluated the performance of the company before and after the merger through a detailed analysis of the proposed three principal components and comprehensive scores [41].

In terms of industry performance evaluation, Pan Yan and Cheng Xiaoke collected data samples of 30 listed companies, selected nine indicators such as asset-liability ratio and profit growth rate, and used principal component analysis to evaluate the performance of the sample companies. Through the analysis, it can be seen that the principal component analysis method can better reflect the objectivity and fairness of performance evaluation [42].

Fang Fang, Tang Wuxiang, and Cheng Guizhi take the evaluation of Beijing's innovative enterprise performance as the starting point, select 31 listed innovative companies, and use principal component analysis to calculate the sample companies from the four dimensions of asset management capability and operating efficiency. The comprehensive score of the enterprise comprehensively and objectively evaluates the financial performance of the enterprise, thus providing a new idea for the performance evaluation of the enterprise [43].

Wu Jianwei used factor analysis to analyze the competitiveness of retail companies from the perspective of statistical analysis, and selected 15 indicators from seven dimensions, including cash flow capability and risk response capability, to conduct empirical analysis on the competitiveness of retail companies. Finally, the ranking situation [44] is obtained.

Yun Xin, Xin Ling, Liu Ying, etc. used principal component analysis to analyze the merger cases of Youku and Tudou, and evaluated whether the merger was successful based on their principal component scores. The study found that the merger is beneficial to Youku's corporate performance improvement, but it has not fundamentally changed the long-term loss of video sites, and needs to change its existing profit model [45].

Sun Yongbo, Gao Xue, and Yang Jie selected 40 listed retail companies as samples, and selected evaluation indicators from seven dimensions including scale strength, growth ability, talent gathering ability, and friendly cooperation with suppliers, and evaluated the competitiveness of the sample enterprises. Comprehensive evaluation is provided to provide a basis for companies to find strategies to enhance their competitiveness [46].

Zhu Huaqian selected 16 listed automotive manufacturing companies and used principal component analysis to select financial evaluation indicators from the four dimensions of profitability and solvency, construct a performance evaluation system, and evaluate the performance of listed automotive manufacturing companies. Financial performance, so as to provide a reference for management's performance evaluation.[47]

1.5 Review of research status and research feasibility

After reading and combing the relevant domestic and foreign literature on O2O mode and performance evaluation, this paper found that experts and scholars have made very rich research results on O2O mode and performance evaluation. Experts have conducted research from the essence, characteristics and different perspectives of O2O mode. However, most of the current research scholars on the O2O model study business models, strategic choices, etc. from the perspective of corporate management, and there are few studies from the perspective of financial management, and the perspective of linking O2O transformation with corporate performance in the form of case analysis

The research results are even rarer. For the choice of corporate performance evaluation methods, experts mostly choose financial indicator analysis and principal component analysis. However, when using principal component analysis, they usually conduct performance analysis from the perspective of a certain industry or certain regions, and use cases to analyze specific There is less research on company performance.

Therefore, based on previous research results of experts and scholars on the O2O model and corporate performance, this article adopts the form of case study to analyze the financial indicators of a specific company horizontally, and at the same time, uses the principal component analysis method to analyze the company’s O2O model before and after the transformation. Score the financial results, compare the scores of the main components and the comprehensive scores vertically, and comprehensively analyze whether the use of the O2O model by retail companies can bring the company's profitability stability and sustainable growth, and then put forward relevant recommendations, with a view to transforming traditional retail companies to O2O Mode provides some help.

1.5.1 China Department Store Retail PEST analysis is as follows

Political Environment. On September 29, 2015, the General Office of the State Council issued the Opinions on Promoting Online and Offline Interaction to Accelerate the Development and Transformation and Upgrading of Trade and Circulation, calling for the vigorous development of online and offline interaction (O2O), an emerging economic form, in the traditional trade and logistics industry. Business model innovation, driven by the accelerated development of mobile Internet technology, is emerging, and online and offline interaction has become one of the most dynamic economic forms. It is of great significance to develop online and offline interaction to promote the transformation of brick-and-mortar stores, promote business model innovation, enhance new impetus for economic development, serve mass entrepreneurship and innovate.

Economic environment. In the context of China's market economy, the transformation of department store retailing to O2O is determined by market demand, and after-sales evaluation of users in O2O mode is the standard of market selection, and market selection ensures the correct direction of transformation and competitiveness after enterprise transformation. At this stage, the market demand of O2O-turned-enterprises is still growing, but the traditional department store retailing industry has reached market saturation, department store retail O2O model transformation has become an inevitable trend.

At the same time, the growth of residents' disposable income also ensures the purchasing power of residents, so that the enterprise's early transformation investment in the later stage through management to be compensated. But it also faces a potential crisis in economic transformation. The initial transformation of O2O industry is carried out under the strong support and subsidy of the state, with the support of national policies and funds to make the O2O market start to operate, but also face the crisis of self-financing after the loss of economic subsidies, if O2O transformation cannot open new markets quickly in time, then the transformation can only face losses or even bankruptcy. China's department store retail industry has fallen into low-cost competition, the transformation of the O2O model still has a trend of low-cost competition, through the issuance of coupons, discounts and other behavior to reduce the price to attract consumers is not a long-term solution, through economies of scale to reduce costs need time and capital, not all department store retail outlets, most of the retail industry in the transformation if they cannot accurately position their products to increase prices, it is likely that because of high cost growth rate led to transformation failure.

Social environment. With economic development to a certain stage, according to Maslow's demand level theory, after meeting the low physiological needs, there will be advanced psychological needs. The prosperity and development of the service industry cannot be separated from people's pursuit of consumption and enjoyment of psychology. O2O's focus is on services, consumers enjoy on-the-home services through online consumption, and the experience of consuming process services directly determines the probability that consumers will shop again through the online platform. But the complete transformation of O2O will be limited by traditional consumption concepts. There are no problems such as information asymmetry and moral hazard in the process of department store retail sales, and consumers have more intuitive access to information about purchased goods. However, the information obtained when making an online payment is written and the consumption is evaluated only after seeing the physical object. O2O mode is not the best shopping option for older people and older people who are not used to online shopping.

Technical environment. The O2O model and the emergence of the Internet, especially mobile Internet technology is inseparable, in the retail transformation O2O model also needs advanced technology support, O2O's biggest advantage is to provide consumers with better information about homogenous goods, in the case of accurate information rational consumers can get the greatest benefits. First of all, the wide application of B2C platform promotes the development of O2O, some people think that O2O is a special form of B2C, some people think that O2O is the development of B2C application, in any case, the improvement and use of B2C is the driving force for the transformation of the retail O2O model. China's LBS (Location Services, Location-Based Services) commercial applications began in 2001 when China Mobile first developed location services, and the advent of Internet maps accelerated the development of China's LBS industry, which has since experienced an explosive growth period in China with the improvement of wireless technology and hardware facilities.

The application of LBS is an important channel for O2O businesses to open up markets to attract customer resources. However, the O2O model of the most important link online payment platform is not unified, especially in the retail industry, because there is a small amount of each fund transaction, the number of transactions, once any obstacles to payment methods will cause consumers to abandon the long-term use of O2O mode for online transactions. Network payment security has also become one of the long-term hidden dangers in the transformation. At the same time, China's retail transformation is seriously lack of innovation, imitation, is not conducive to the later in-depth transformation and sustained operation. After PEST analysis, we can see that the O2O model in promoting the transformation of China's department store retail industry at the same time there are risks, enterprises should develop their own circumstances of the transformation plan, for the O2O model innovation to find long-term development strategy.

1.5.2 The inherent environmental viability of retail O2O transformation - the game between merchants and customers

The process of transition from retail to O2O model is actually a two-way choice for merchants and customers to maximize profits, whether the merchant chooses to transform depending on whether the customer accepts the transitioned retail O2O market and the degree of acceptance, i.e. the desire to use O2O consumption; So the transformation of department store retailing is a two-way game between merchants and customers, as shown in Figure 1.1 shows:

		Client	
		Accept	Not accept
Business	Transformation	V S	V A
	No transformation	B S	B A

Figure 1.1– Game diagram

The probability of customer acceptance and non-acceptance of transformation is P and 1-P, you can write the business choice transformation of the benefits are: VP-V (1-P), merchants choose not to transform the benefits are: BP-B (1-P);

When the VP-V (1-P) > BP-B (1-P), the benefits of business transformation outweigh the benefits of pre-transformation. From the level of game payment, merchants will choose O2O transformation, if S > A, then customers will choose to accept the transformation is the merchant to obtain the transformation< of the market, the game reached Nash equilibrium (transformation, acceptance);

When SAQ-A (1-Q), the customer from the transformation of O2O retailing to obtain more than the pre-transformation gains, customers accept the business O2O transformation, if the V > B, then the business will choose transformation, this game to Nash equilibrium (transformation, acceptance);

From the above analysis can be seen, the game conflict of interest between business and customers is not obvious, more mutually beneficial and win-win relationship, the two-way choice between the two sides is particularly important, must achieve Nash equilibrium (transformation, acceptance) to enable the successful transformation of businesses. There is no direct conflict of interest between the two sides, two-way choice when customers are affected by merchant credit and price concessions, merchants can promise low prices and promotional offers and other ways to moderate concessions to profits, will consolidate the choice of customers, to achieve long-term equilibrium.

To visualize the dynamic game after commitment, you can play the game tree as shown in Figure 6. Merchants in the conversion of discounts and other activities to increase customer revenue payment a. In the game tree can be seen, the merchant as the first actor, can change the game by commitment to change the payment of both sides. Merchants in order to ensure that the profit after the transformation is greater than the pre-transformation profit, that is, V-a >B, let the payment of a's income to the customer to make the S-a> A-a, so that Nash equilibrium (transformation, acceptance) in each sub-game chain is established, then (transformation, acceptance) become a stable sub-game Nash equilibrium.

Through the static game and committed dynamic game matrix and game tree analysis in the process of transformation, it can be seen that the direct conflict of interest between merchants and customers in the transformation is small and can be balanced through the way that the merchant promises to promote the transformation and upgrading of department store retailing, which provides intrinsic relationship support for O2O to promote the transformation and upgrading of department stores, indicating that the contradiction between business and customer relationship can be resolved through reasonable profit distribution, providing the ideological basis for the long-term strategic development of retail O2O transformation.

1.6 Innovation

After sorting out domestic and foreign documents, it is found that experts and scholars mainly focus on the profit model and target strategy under the corporate O2O model. There are few studies on the performance evaluation of the corporate O2O model transformation process. At the same time, the principal component analysis method is used more. Analyze from the perspective of the industry, with fewer case studies. Therefore, after summarizing the relevant literature on the O2O model and performance evaluation, this article analyzes the benchmark case companies in the retail industry from the perspective of the O2O model transformation effect evaluation perspective, using the combination of financial indicator analysis and principal component analysis in the form of case analysis The research method can not only reflect the uniqueness of a single financial indicator, but also based on overall performance, compare with industry averages and competitors in the same industry to comprehensively evaluate corporate performance, hoping to provide a reference for traditional retail companies to transform O2O models .

2 THE IMPLEMENTATION OF O2O MODE TRANSFORMATION OF RAINBOW SHARES

2.1 Overview of Rainbow Company

2.1.1 Company profile of Rainbow

Rainbow Department Store Co., ltd. was established in 1984, is a Sino-foreign joint venture state-owned chain retail enterprise, its controlling shareholder of China aviation industry corporation of China aviation technology import and export company in Shenzhen, a registered capital of 88 million yuan, 1985 Shennan Store opened the first Store opened, Store opened in 2010 in Shenzhen stock exchange, stock code is 002419.Over the years, the company adhering to the people-oriented, scientific management concept, professional, efficient operation mode, has made outstanding achievements, has been listed in the Chinese chain 100 enterprises for many consecutive years. Store shares owns "Rainbow", "dreams-on" two big retail brands, and in our country the first department store + supermarket + X formats combination mode, continued through to the supermarket, convenience stores, department stores, shopping center formats such as upgrade, improving the user consumption experience, store stock as a department store chain enterprise, its highest in Shenzhen and Guangdong area sales, market the largest, is also the earliest in the domestic retail enterprises to introduce lean six sigma, the balanced scorecard.

Under the impact of the e-commerce, the company in the industry take the lead in the transformation of O2O model, breaking the previous single offline operation mode, the construction of online and offline channels, realize the coordinated development of online, forming entity shop Shop + + PC mobile terminal (store WeChat, store article, rainbow scarf) channels of O2O full retail platform, build online services and offline depth fusion new mode of retail experience. At present, the company has formed a multi-format and all-channel strategic development pattern of online and offline integration. The O2O platform serves as a bridge to connect online and offline channels and achieve channel integration. The offline channels composed of physical stores such as department stores and shopping centers are closely connected with the online channels composed of Rainbow Micro Products, Rainbow WeChat and Rainbow Scarf, so as to realize their complementary advantages.

2.1.2 Development history of Rainbow Shares

Table 2.1 – Development History of Rainbow

Time	Content
1984-1985.	In January 1984, Rainbow was established. The following January, Shenzhen Rainbow opened
1986-1993.	Rainbow has become the only retail enterprise in Shenzhen to be listed in the "national 100 largest retail stores"
1994-1998.	In July 1995, Rainbow was introduced into CI system. In September of the same year, the integrated information processing system was launched. In May 1998, the first online shopping platform for online payment was established in China, creating a new trend in domestic shopping
1999-2002.	In January 1999, it passed the ISO9002 quality certification. In July of the same year, Shenzhen Rainbow fully reopened, marking the transition of Rainbow from traditional department stores to modern department stores.
2003-2007.	In September 2003, Rainbow Training Center was established. In January 2005, Dongguan opened its doors, marking the company's expansion beyond Shenzhen. In September of the following year, they purchased their own property; In June 2007, Rainbow Department Store Co., Ltd. changed its name to Rainbow Department Store Co., Ltd.
2008-2010.	Rainbow went public in 2010.

End of table 2.1

2011-2013.	In July 2013, strategic cooperation with Tencent; In October of the same year, Rainbow Micro was launched and completed the omni-channel layout, creating a unique retail O2O model.
2014-2016.	In May 2014, Rainbow became the first domestic retail enterprises and shopping malls to pass the 22000food safety management system certification; In July 2015, Rainbow Mall launched its first cross-border e-commerce experience store in Baoan Rainbow Shopping Center in Shenzhen, and in September 2016, its first themed editing store "Rainbow Cool +" opened.
2017-2018.	In January 2017, the first Sp@ce supermarket was transformed and upgraded from Shennan Supermarket. In the first half of 2017, the company began to independently develop the supermarket format. In April 2018, it co-founded the Smart Retail Lab with Tencent. In November of the same year, the company cooperated with WeChat Payment to build the first Rainbow & WeChat Payment Smart Retail Store.

2.2 Motivation of O2O mode transformation of Rainbow Shares

2.2.1 External motivation

This paper uses PEST analysis to analyze the external causes of the O2O mode transformation of Rainbow Shares, including the following four aspects:

(1) Political factors

The development of an enterprise cannot be separated from the support of government policies, and the relevant policies issued by the government have created a good political environment for the implementation of the O2O model of Rainbow Shares. In June 2012, the Opinions issued by the Ministry of Commerce mentioned the need to improve the legal system of the retail industry, actively promote the introduction of regulations such as the Commercial Network Regulations, continue to promote the implementation of relevant policies, accelerate the formulation of regulations of relevant departments, and increase the support for the retail industry in terms of finance, taxation and finance. The proposal of this opinion brings new vitality to the retail enterprises, and the introduction and implementation of relevant policies provide guarantee for the transformation of the business model of the retail enterprises. In recent years, the government realized that the development of electronic commerce have a positive impact on the development of national economy, more and more attention to the development of electricity, the government work report mentioned in 2015, "to put on the carrier of the Internet, online interactive emerging consumer make prosperous", the policy effectively promote the development of the O2O mode in our country, advance the O2O model transformation for retail enterprises to build a good policy environment.

In September of the same year, the Opinions emphasized that retail enterprises should be encouraged to realize the integration of online and offline channels. Offline stores should interact with customers 24/7 through the Internet and emphasize the function of consumption experience, so as to improve the allocation rate of resources, thus boosting the transformation of traditional offline stores and promoting the innovation of operation model and the development of social economy. In the 2016 Government Work Report, it was once again proposed to "encourage online and offline interaction, promote the innovation and transformation of physical business", and put more emphasis on personalized and fashionable consumption. Subsequently, the State Council issued relevant documents to promote the transformation of physical retail enterprises, providing strong support for the O2O model transformation of Rainbow Shares.

(2) Economic factors

In 2010, the government implemented a series of policies to boost domestic demand, which contributed to China's economic recovery after the financial crisis and the stable development of the retail industry. However, in 2012, under the influence of the European debt crisis and other severe macro environment, the growth rate of national economy slowed down significantly, and the growth rate of consumer market fell back, showing a weak state. The growth rate of national GDP fell by 1.5 percentage points compared with the previous year. At the same time, the development of e-commerce makes the traditional retail enterprises have been impacted, the adjustment of business model is imminent.

By table 3-2, you can see that China's growing disposable income of urban and rural residents, the Engel's coefficient declining, which, in 2012 China's urban residents disposable income growth of 9.7% on the previous year, rural disposable income year-on-year increase of 981 yuan, a 12.39% increase, the increase of residents' disposable income to some extent also stimulated the residents' consumption, residents purchase by increasing consumption, in order to improve the living standards, improve the quality of life. In addition, the population of the middle class in China is 109 million, and the large size of the group plays a driving role in the growth of consumption in China, and at the same time promotes the diversification of residents' consumption structure. Also can be seen from table 2.2 decreasing Engel's coefficient of urban residents, consumption expenditure structure change, food expenditure in the personal consumption expenditure proportion to drop, representative in total, to buy food spending, town residents' consumption will be meet the basic demand of daily consumer goods, into a consumer some brand clothing, cosmetics, etc., at the same time pay more attention to consumer experience.

In recent years, the rapid development of e-commerce, the number of online transactions continues to increase, a great impact on the traditional retail enterprises, enterprises closed stores, mergers and acquisitions, transformation and other situations frequently appear.

In addition, with the continuous improvement of people's living standards, the consumption concept has also undergone a great change. The emergence of logistics, WeChat, Alipay and other payment methods has changed people's consumption mode

Table 2.2 – Statistics on Disposable Income of Urban and Rural Residents and Engel Coefficient

	Urban residents		Rural residents	
	Disposable income (yuan)	Engel's coefficient (%)	Disposable income (yuan)	Engel's coefficient (%)
In 2012	24572	35.4	7915	38.3
In 2013	26955	35	8896	37.3
In 2014	28844	35.6	10489	37.9
In 2015	31195	34.8	11422	37.1
In 2016	33616	29.3	12363	32.2
In 2017	36396	28.6	13432	31.2
In 2018	39251	27.7	14617	30.1

. As can be seen from Figure 2.1, the scale of online retail transactions has been expanding in recent years. From 2012 to 2018, the volume of transactions has increased from 131 million to 901 million, an increase of about 9 times in six years. 2013 is a key year for the expansion of online retail, with the most obvious increase of 23.27%. On this context, the rapid rise of online retail forces Rainbow to embark on the road of O2O model transformation.

With the rapid development of Internet, the Internet has penetrated into all aspects of people's life, can see from figure 2.2, by 2018, the number of Chinese Internet users reached 829 million, increased by nearly 47% compared with 2012, and 2012-2018, the number of Internet users in China is on a straight line rise, the Internet penetration rate by 42.1% to 59.6%, an increase in the number of Internet users, will bring online

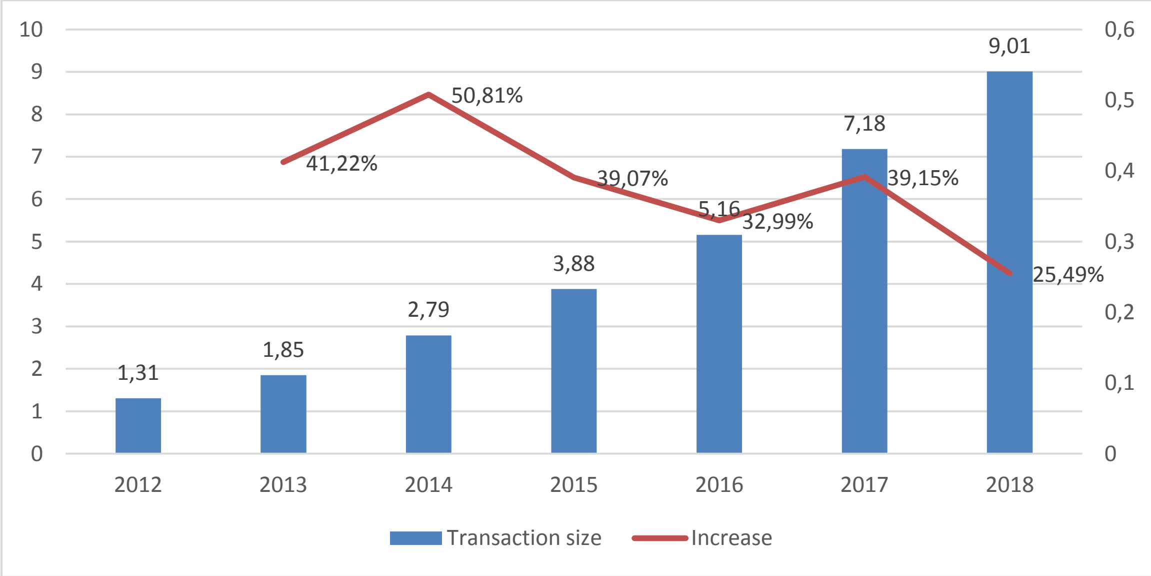


Figure 2.1 – Online Retail Transaction Scale

(3) Social and cultural factors

sales promotion on the one hand, on the other hand, O2O mode, online mutual confluence, boost enterprise online users to offline store drainage, Consumers can place orders online, complete consumption experience and enjoy related services offline, which further promotes the development of offline physical stores and enhances user stickiness, thus effectively propelling the transformation process of O2O model.

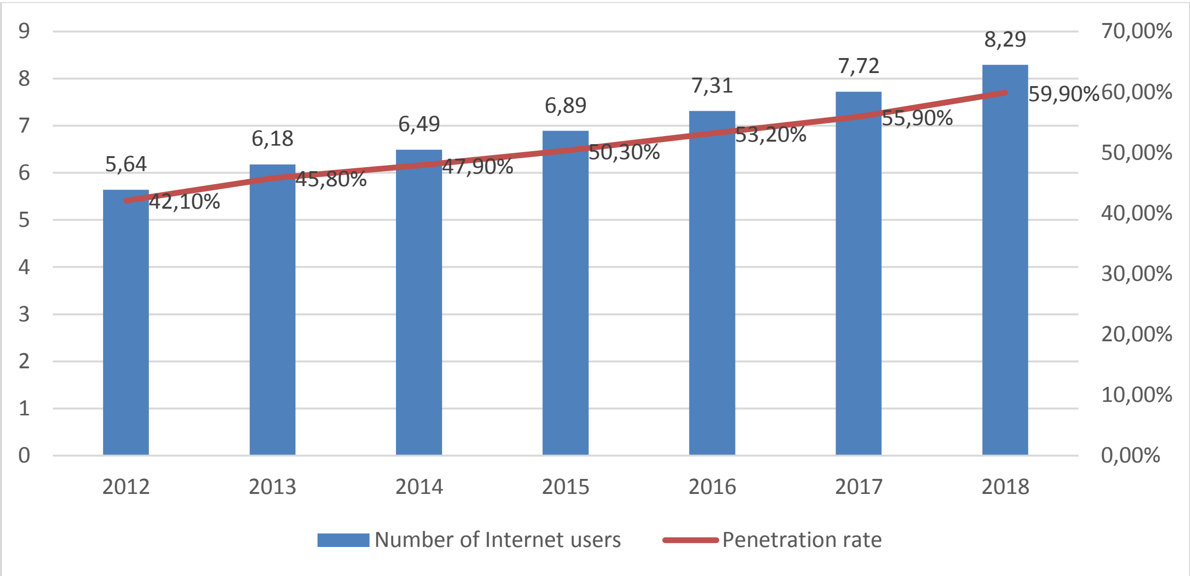


Figure 2.2 – Number of Internet users and penetration rate

At the same time, it can be seen from Figure 2.2 that the scale of online shopping users also keeps expanding, increasing from 247 million in 2012 to 610 million in 2018.Due to the consumer's consumption concept and consumption habits change, its consumption is no longer a single consumption through offline channels, and pay more attention to the consumer experience and novelty, single offline retail mode cannot meet the shopping needs of consumers, therefore, the shift to a certain extent, offline store the impact of a single, put up the shutters, collapse, M&A phenomenon appear frequently, forcing companies to transformation.

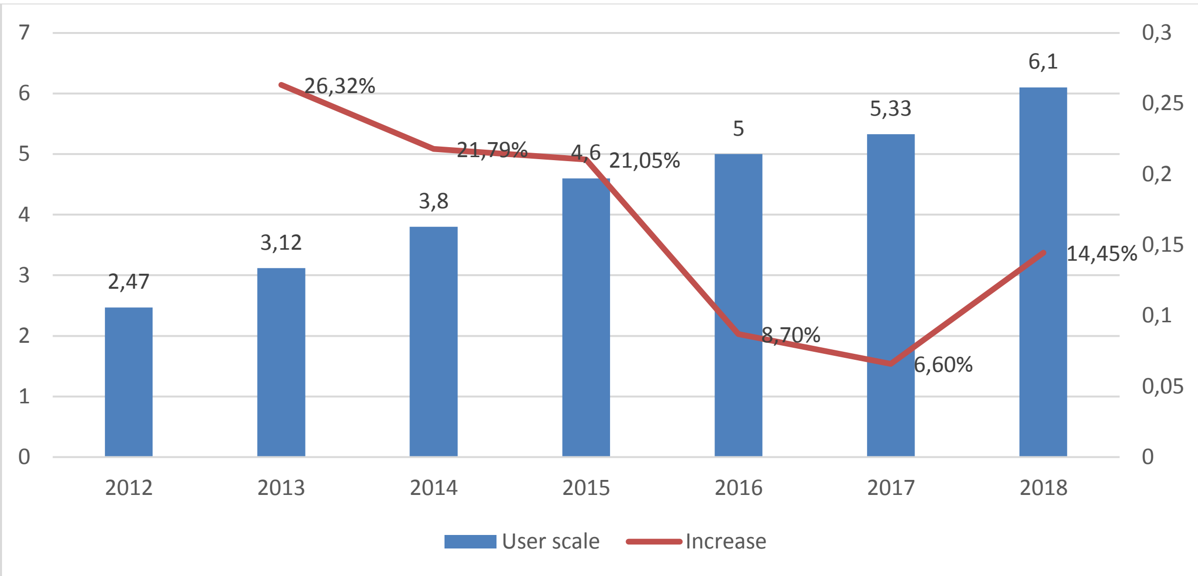


Figure 2.3 – Online shopping user scale

(4) Technical factors

As a product of the network era, the rapid development of e-commerce cannot be separated from the development of information technology. Innovative technologies such as big data and cloud computing provide powerful technical support for the transformation of enterprises' O2O model and promote the development of the retail industry. After the online and offline channels are connected, a closed-loop structure is formed in which customers complete the entire consumption activities. Customers select products online, place orders, and get the products by store pick-up or express delivery. The whole process seems simple, but in fact, it needs strong technical support. With the popularity of mobile terminals such as smart phones and the growing maturity of mobile payment technologies such as WeChat and Alipay, the launch of shopping mini-programs and APPs has led to the rapid growth of online shopping and more diversified forms of payment, which has promoted the construction of online channels for traditional retail enterprises.

At the same time, Internet technologies such as big data and cloud computing have exerted a certain influence on the development of retail enterprises. By analyzing the consumer information recorded in the background, retailers can judge customers' consumption preferences and realize precision marketing. At present, enterprise ERP resource planning system, CRM customer relationship management system and SCM supply chain management system technology development is increasingly perfect, help retail enterprises to achieve digital management. In addition, the development of logistics is also crucial to the development of the retail industry. The application of EDI technology, barcode technology, data warehouse technology, WMS system and other intelligent technologies has boosted the development of the logistics industry, greatly improved the efficiency of logistics and distribution, enhanced the stickiness of customers, and promoted the development and progress of the retail industry.

2.2.2 Internal Motivation

(1) Resource advantages

Store stock set up time is earlier, and as a state-owned retail enterprise, after nearly three decades of development, and closely with suppliers to establish a stable, long-term strategic partnership, and form a stable supply chain between upstream and downstream enterprises, and continue to advance strategic cooperation, the introduction of CK dress, BONI, and many other international brands. In addition, the company began to set foot in the field of e-commerce in 1998, and established the online Rainbow PC terminal. After years of upgrading and improvement of the online shopping platform, it has accumulated a stable group of network customers for the company, which provides resource advantages for the transformation of O2O model and guarantees the implementation of O2O model.

(2) High degree of marketization

As a well-established retail enterprise, Rainbow has established a number of offline physical stores after years of development. In 2012, Rainbow owns 53 Rainbow brand direct department stores in 21 cities in 9 provinces including Guangdong and Jiangsu. The expansion of stores provides market guarantee for the transformation of the company's O2O model. In addition, as the first Sino-foreign joint venture retail enterprise in China, Rainbow shares has obvious advantages in the degree of marketization and openness compared with most retail enterprises, creating a good innovation environment for the transformation of enterprise O2O model.

(3) Decline in profits

Enterprises of any nature take profit as one of the goals of their business development, and the company's business effect will directly affect the adjustment of its business model and target strategy. In a market economy environment, when companies operating environment changes, managers should keep up with the trend of The Times development, make a strategic adjustment in time, improve the management pattern, if ignored, so the enterprise will be faced with falling profits, put up the shutters, mergers and acquisitions and other issues, through the store stock in 2011-2018 annual report to get the company's total assets, business income, net profit three financial indicators, as shown in table 2.3.

Table 2.3 – Main Financial Indicators of Tian Hong Group from 2011 to 2018

	In 2010,	In 2011,	In 2012,	In 2013,	In 2014,	In 2015,	In 2016,	In 2017,	In 2018,
Total assets	76.23	88.05	94.66	104.94	114.99	138.84	147.58	154.07	162.55

End of Table 2.3

	In 2010,	In 2011,	In 2012,	In 2013,	In 2014,	In 2015,	In 2016,	In 2017,	In 2018,
Operating income	101.74	130.36	143.77	160.32	169.98	173.96	172.73	185.36	191.38
Net profit	5.26	5.74	5.88	6.15	5.38	12.08	5.24	7.18	9.04

It can be seen from Table 2.3 that before the O2O mode transformation of Rainbow Shares, the growth rate of total assets, operating income and net profit declined significantly from 2011 to 2012, in which the growth rate of total assets decreased from 15.51% to 7.51%, operating income from 28.13% to 10.29%, and net profit from 9.13% to 2.44%. Rainbow shares revenue growth slowed down, net profit dropped significantly and other operating problems prompted its O2O model transformation.

2.3 Rainbow shares O2O mode transformation measures

2.3.1 Online channel construction

(1) Create a three-dimensional e-commerce model

Downturn in the retail industry development general store stock in the face of enterprise internal and external environment changes, the transformation of the first step, in the process of O2O model transformation, in addition to the offline stores and online store PC, to further expand mobile terminal layout, and puts forward "in 2013 the whole channel, experiential consumption, vertical value chain integration of the three major strategies. In September of the same year, Rainbow cooperated with Tencent to develop the first customized WeChat service number in domestic retail industry, which kicked off the prelude to the transformation of O2O model. The service account focuses on the following three main contents: real-time services, selected services and community interactive marketing. After consumers opens at store WeChat, released by clicking on the relevant graphic information, and online shopping can pick the goods, online shopping menu consists of cable on home mall, department store, supermarket, home, studio and gift CARDS, including online and Taobao, Jingdong mall and other similar platform, customers can directly search or find the products according to the classification, to complete the order; By locating the nearby stores, the department store and supermarket can select the products of the stores online and complete the online payment. The stores can pick up or deliver the products by express, and the stores can provide the corresponding after-sale service.

Under the menu of shopping malls, there are mobile phone quick payment, parking payment, coupons and popular activities. Consumers can scan the barcode of goods through mobile phones to complete the payment link, saving time. At the same time, they can also pay online parking, get coupons and participate in related commodity activities. Through big data analysis, further analysis of customer consumption preferences, do a good job of customer label management, targeted push product information.

Rainbow Micro Store is a micro retail service platform created by Rainbow Co., Ltd., and was officially launched in December 2014.Within the platform, users = consumers + distributors + sellers. The platform mainly cooperates with offline retailers to launch relevant commodity information for customers, and provides services such as membership management and LBS. At the same time, consumers can through this platform, realize the customized service, namely can choose by screening and classification information of interest, such as brand, specific market and product, style and discount information, etc., can also realize the communication with offline entity store clerk interaction, then increase the consumer satisfaction, consumer viscosity increased. In addition, the platform cooperates with shopkeepers in the form of rebates, that is, after the shopkeepers register, they can choose their favorite goods to share with one click, and if an order is completed, they will get rebates. Through the promotion and publicity of the platform, the dissemination efficiency of the goods is greatly improved. In April 2017, store shares issued store product version 2.0, compared with the previous version, basically has the following two aspects: on the one hand, on the basis of original item mode, cooperate with quality suppliers, specifically for store micro product customization for goods, on the other hand, the form of cooperation with the shop owner change, by the rebate into net difference, to the owner with a rope. So far, Rainbow has been continuously transforming to O2O mode, initially forming a three-dimensional e-commerce model of online Rainbow + Rainbow WeChat + Rainbow micro products.

(2) Launching its own APP

In July 2015, store the stock development with online shopping platform, members of the confederate, local life service, marketing center four core functions of rainbow scarf APP, is combined with the existing industry forefront of high technology and high quality services for the integration of innovative retail APP, localization is for consumers to create a life consumption online platform, as of December 2018, rainbow scarf APP has reached more than 6 million registered members. The APP online play a leading role in the offline layout, realizes the connect the customers and the background effectively, connecting the background, mainly has the member center, large data center and traffic center, the whole channel sales center, etc., to connect the customer, main shopping platform, marketing center, union members and local life four big main functions. At the same time, the rainbow scarf is mainly shopping, preferential and other functional modules. After opening the APP, the user will automatically locate the nearby Rainbow Shopping Mall. If the user buys the goods in the store, the user can scan the barcode of the goods to realize the self-service mobile phone purchase, which saves the time of queuing. If you choose to buy online, it can be delivered within two hours through Rainbow Home. At the same time, the rainbow scarf can be used to pay parking fees with one click, receive online shopping coupons, and buy movie tickets, laundry and shoes, connect to WiFi and other services.

2.3.2 Offline channel construction

(1) Create themed shopping scenes

With the continuous improvement of living standard, people's consumption ideas gradually change, from the purpose of consumption special scenario, theme, store shares in accordance with the theme of market segmentation, pricing, etc., such as store COOL aimed at college students as the main body of the young consumer groups, to build a set of COOL fun, experience, shopping, tide play in one of the COOL play a concentration camp. In addition, we created SPACE to target the middle-aged consumer group and provide product combination solutions according to the needs of consumers with the themes of love of freshness, learning about life, appreciating vision and enjoying delicious food. In department stores, the former way of combining goods categories has been changed, and the theme shopping areas such as Western-style cultural living area, travel area and parent-child area have been set up according to the market segments. In addition, in terms of retail formats, it introduces the formats rarely seen in other shopping malls, such as painting, flower arrangement, cooking, wood art and other arts and crafts workshop experience brands, which enhance customers' consumption experience and pleasure.

(2) Innovate the convenience store model

At present, domestic convenience stores can be generally divided into two categories: one is the tight franchise stores such as Le Dou Jia and Quanshi; The other is the loose franchise stores, such as the Meiyijia, FuRongXingSheng, etc. Store shares the convenience store mode bold innovation, launched in July 2014 micro oh convenience store, the concept of "retail, restaurant and personalized services + O2O", draw lessons from Japanese convenience stores operating standards and service details, advantage of the characteristics of convenience store is close to the community, O2O platform, integrated with retail, catering, clothes dry cleaning, ordering, extract, express delivery, return, print, copy, and on an ATM withdrawal, pay utilities and other services, customers can use in-store shopping tablets. At the same time, the source procurement of goods is carried out to ensure the quality of goods, and the introduction of fruits, vegetables and Chinese fast food, which are more in line with the consumption habits of Chinese people, and other "big fresh" categories. In addition, there is free WiFi in the dining area of the convenience store. Customers can connect to Rainbow WeChat, Rainbow Micro Products, Rainbow Scarf and other platforms to browse Rainbow online.

(3) Living in the shopping center

To create a joy-centric shopping center, emphasize "happy time" and "family life", continue to strengthen children's themed blocks, and develop and promote the characteristics of different places according to different places. Creating happy hour project, carrying out happy marketing, and constantly optimizing the content of shopping center around the life of customers, enhancing passenger flow and driving sales have brought good performance of comparable stores of Rainbow Shopping Center with 5.55% increase in operating income and 64.41% increase in total profit. Besides store expanding store network, during the reporting period the company a total of four provinces, Hunan, Fujian, Jiangxi, Guangdong) new 16 stores, including four shopping center open and operated, management, output 1; The department store opened a direct sale. Department stores and shopping centers have respectively taken over two franchise store projects in Dingnan and Jiujiang of Ganzhou, and are undergoing transformation and adjustment. Six independent supermarkets have opened and two have joined. The regional distribution and quantity of Rainbow department stores, supermarkets, shopping centers and convenience stores are shown in Table 2.4.

Table 2.4 – The Distribution of Rainbow Shares in 2018

Region	Formats							
	Department		The supermarket		Shopping center		The convenience store	
	The number of	Area (m^2)	The number of	Area (m^2)	The number of	Area (m^2)	The number of	Area (m^2)
In the southeast	5	124214.5	6	23620.89	2	119160.1	28	3464.9
The southern	36	856767.2	46	208446	3	199666.8	1 31	11199.67
The Chinese northern	19	495653.8	23	116025.8	5	343336.4	0	0
East China	4	139253.8	3	12823.65	3	224544.8	0	0
Beijing	3	71443.09	2	13356.43	0	0	0	0
Chengdu	1	34864.97	1	4980	0	0	0	0
A combined	68	1722197	81	379252.8	13	886708.1	159	14664.57

2.3.3 Omni-channel integration

Explore the adjustment of the O2O operation model, and the online store share has formed an omni-channel integration. The offline channel layout mainly includes supermarkets, physical stores, shopping centers and micro convenience stores，The online channel layout includes online micro-shops + WeChat stores + "Rainbow Scarf" (Rainbow Scarf is a mobile shopping and local consumer service mobile application specially launched by Rainbow Shares for mobile phone users)，Online and offline collaboration has been achieved, providing customers with clothing, daily necessities, fresh food, cooked food and other commodities, as well as catering, entertainment and other services from multiple channels. Customers can choose products or services through both online and offline channels, which enhances users' consumption experience and stickiness.

At the same time, the digital operation management tool APP has been developed to realize the management and analysis of customers, employees and suppliers in the operation process, which greatly improves the operation efficiency. In addition, Rainbow continues to speed up its intelligent exploration and jointly set up an intelligent retail lab with Tencent, mainly cooperating in big data and AI. By the end of 2018, the total number of members of Rainbow reached 18 million; Rainbow digital members have reached 16.44 million, including 8.4 million Rainbow App members, 6.45 million WeChat fans and 1.59 million WeChat mini program members.

3 PERFORMANCE EVALUATION OF THE O2O MODEL TRANSFORMATION OF DEPARTMENT STORES

3.1 Performance evaluation based on financial index analysis method

Financial statements can objectively reflect the actual operating situation of an enterprise and provide an important basis for business decisions. By analyzing the financial data in the statements, managers can understand the development of the company, timely find out the problems existing in the operation process and make improvements, so as to boost the healthy development of the company.

In this paper, the store shares the performance evaluation of O2O mode transformation, respectively from the profit ability, operation ability, debt paying ability and growth ability to four dimensions of performance evaluation, and in the same industry category, size of competitors Hefei department store as a comparison, analysis the financial effect of O2O model transformation. Macroeconomic environment at the same time, in order to eliminate as much as possible, such as the effect of factors on the store stock O2O model transformation performance, this paper chooses the industry average, in hundreds of retail enterprises in the secondary screening, including International Medical in March 2018 - Kaiyuan commercial retail asset is sold, the company into the new health care industry, no longer belong to the retail industry, thus to eliminate, at the same time, the classification and eliminate the secondary industry enterprise of data missing, finally selected 42 and main business store shares similar retail enterprise, to calculate the average as the industry data.

3.1.1 Profitability analysis

Profitability reflects the profitability of an enterprise in business activities and the ability of capital appreciation. At the same time, it can measure the income level of an enterprise in a certain period. When analyzing the profitability of Rainbow Stock, this paper mainly selects two representative indicators, namely, the net profit rate on sales and return on equity, between Rainbow Stock and Hefei department stores and retail industry from 2011 to 2018 for comparative analysis.

(1) Analysis of net profit rate on sales

Sales net interest rate refers to the percentage of net profit divided by sales income, which can reflect the ability of the enterprise to obtain sales income in a certain period, and reflects the profit situation brought by each unit of business income of the enterprise.

The comparison of the ROE of Rainbow Shares with the average industry value and Hefei Department Store is shown in Figure 3.1:

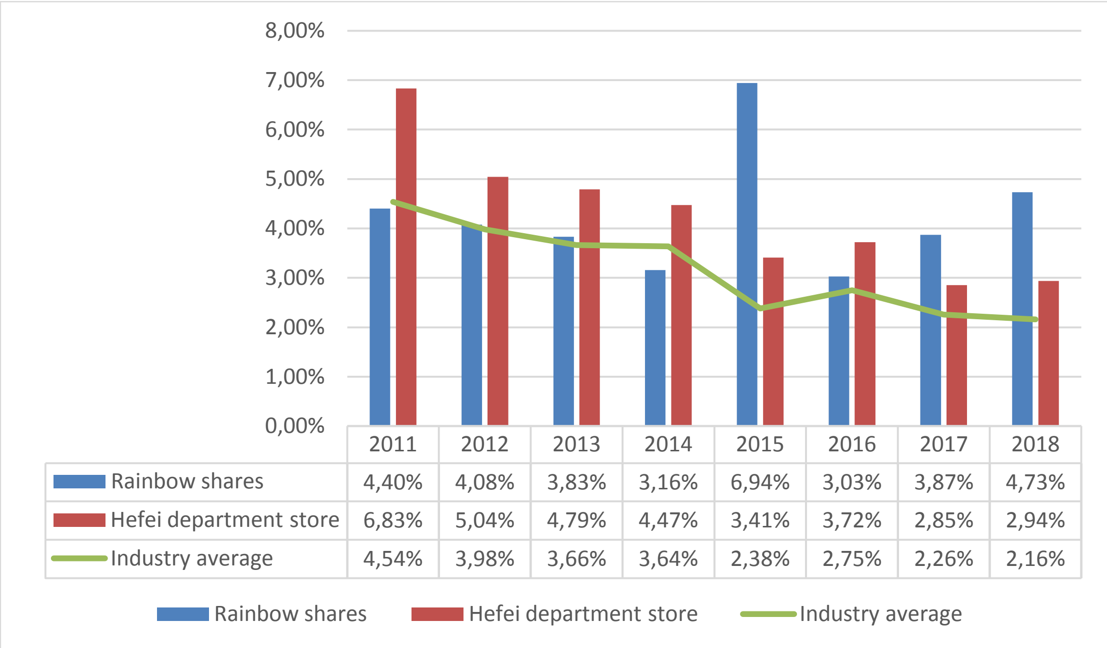


Figure 3.1 – Comparison of net profit margin on sales

It can be clearly seen from Figure 3.1 that before the transformation of O2O mode in 2013, the net profit rate of sales of Rainstock was constantly declining, lower than the average value of Hefei department stores and the industry. Meanwhile, the average value of the industry was also in a downward trend, mainly due to the sluggish development of the retail industry, and traditional retail enterprises were greatly affected by e-commerce. But in 2013 the company after the transformation of O2O sales net interest rate fell to 4.08% from 3.83%, the highest sales net interest rates in 2015, mainly due to that in order to revitalize the assets, a wholly owned subsidiary company to transfer the Shencheng company 100% stake, increased about $850 million in after-tax net profit for the company, the potential of the growth is not long, however, store after transformation by 2016, its sales net interest rate continued to decline, and has been below Hefei department and the industry average.

Rainbow shares sales net profit rate continued to decline, there are two main reasons: first, the rapid development of e-commerce enterprises, seized part of the market share, industry competition intensified; Second, store shares hit O2O mode transformation, because the company takes the lead to O2O mode, is still in groping forward, hard to avoid encounter obstacles in the process of the transformation, that in the short term, the store shares O2O mode does not bring obvious effect for enterprise's profitability, on the contrary, in a short period of time to reduce the level of profitability, its effect has a lag. But when any enterprise in transition will experience a running-in process, after a four-year period, store shares O2O model transformation effect appeared gradually after 2016, sales net interest rates more than the industry average, in the state of industry development has been falling, store shares "upstream", 2017 downturn, break through the transition has been gradually adapt to this pattern, and began to profit. In addition, the net profit rate of sales of Hefei department stores in the same industry is consistent with the change trend of the retail industry, showing a trend of first decline, then rise, and then decline. Except for 2015, the net profit rate of sales of Rainbow shares was lower than that of Hefei department stores before 2016, and exceeded that of Hefei department stores in 2017, and widened the gap in 2018.

(2) ROE analysis

Return on equity (ROE) refers to the ratio of net profit after tax to net assets of an enterprise, which reflects the efficiency of a company in using its own capital and can better reflect the profitability of a company.

The comparison of the ROE of Rainbow Shares with the average industry value and Hefei Department Store is shown in Figure 3.2:

Figure 3.2 – ROE comparison

By figure 3.2 you can see, the store opened in 2011-2018 stock net assets yield the change trend of performance after the first drop in rise, can also be found at the same time, the company by the below the industry average rise to higher than the industry average, except the last two years, its return on equity moves from Hefei department store is roughly same, before 2017, store a decrease in the level of profit in addition to the affected by industry downturn, more is influenced by its own transformation. This is mainly because Rainbow shares invested a lot in the early stage of O2O business development during the transformation process, including the construction of online channels such as Rainbow Shirt App, Rainbow WeChat and Rainbow Micro Products, as well as the layout of offline channels and the construction of logistics system.

Among them, the significant increase of ROE in 2015 was mainly caused by the transfer of its own business. Company after four years of the period, in the 2017 transition effects, is grown, rose 16.28% in 2018, and with the industry, the widening gap between the average return on equity of the Hefei department store at the same period a downward trend, its value overtaken by store shares in 2016, after 2017 and the gap is gradually widening, mainly because of the company in 2017 continued to optimize O2O mode, through forms upgrade improve merchandise consumer experience, build digital formats, catering a new supermarket. In 2018, the company carried out in-depth digitalization and accelerated intelligent exploration, jointly established an intelligent retail laboratory with Tencent, and created super shopping guide services to improve consumer shopping efficiency. Although the return on equity of Rainbow shares presents a downturn after the transformation, it does not indicate the failure of the transformation. After three years of run-in period, the buck-trend growth of Rainbow shares reflects the improvement of the company's profitability.

3.1.2 Operation capacity analysis

Operating capacity reflects the ability of an enterprise to use various assets to earn profits, which can better reflect the company's management level and asset utilization situation. The higher the asset utilization rate, the faster the asset turnover speed. In this paper, the total asset turnover and inventory turnover of Rainbow Stock and Hefei department stores and retail industry from 2011 to 2018 were selected for analysis and evaluation.

(1) Total asset turnover analysis

Total asset turnover refers to the ratio of net sales revenue to average total assets, which reflects the matching situation between asset size and sales level. The higher the index value of the enterprise, the better the asset investment efficiency and sales ability. The comparison of the total asset turnover ratio of Rainbow Shares with the average value of the industry and Hefei Department Store is shown in Figure 3.3:

As can be seen from Figure 3.3, the total asset turnover of Rainbow Shares, Hefei Department Store and the industry all showed a downward trend on the whole, and there was little difference in the total asset turnover among the three companies.

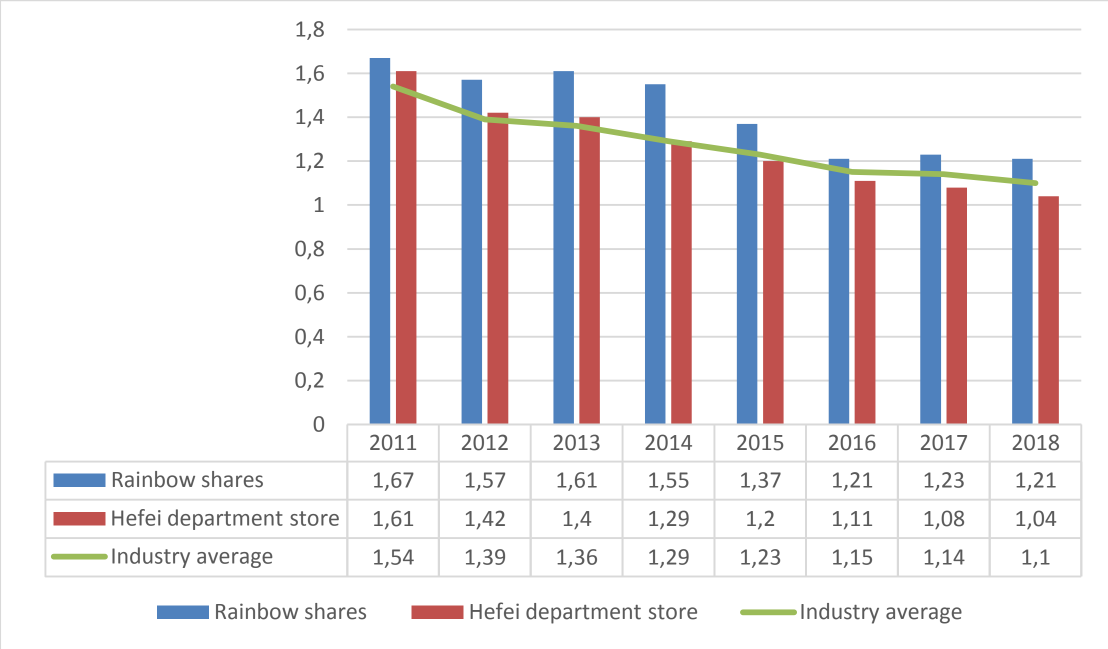


Figure 3.3 – Comparison of total asset turnover

The total asset turnover of Rainbow Stock fluctuated slightly from 1.67 times in 2011 to 1.21 times in 2018, which was basically consistent with the trend of industry level changes. Among them, it is worth noting that in 2013 and 2017, when the industry average and the turnover of total assets of Hefei Department Store declined, the company's operating capacity presented

Upswing. In addition, in 2018, the total asset turnover of Rainbow shares again showed a downward trend. After analysis found that, before the store opened in 2013 shares for O2O model transformation, the total asset turnover down besides macro environment influence, also influenced by the transformation of the enterprise itself, in order to achieve the online channel integration, safeguard the fall to the ground and implementation of the O2O mode company financing, lead to enterprise total assets increase, but not put into the cash, make sales revenue growth is small. The company took the lead in testing the O2O mode in 2013. Rainbow WeChat and Rainbow Micro Product were successively launched, which increased the operating income of the company and thus the turnover of total assets

It picked up a little bit. After 2013 the index continues to decline, mainly due to the company in the early stage of the transformation, action more radical, both online and offline input is larger, by setting up comprehensive department stores, supermarkets, convenience stores, and build a logistics system layout is offline market, build and optimize online PC, micro, micro and APP four ports, etc., this a series of measures are making store stock total assets was bigger in the short term, and increases short-term assets cannot be converted into cash immediately, converted to operating income. Rainbow shares after four years of efforts, with the gradual improvement of its management level, its transformation effect gradually revealed, the total asset turnover began to rise in 2017, but the management

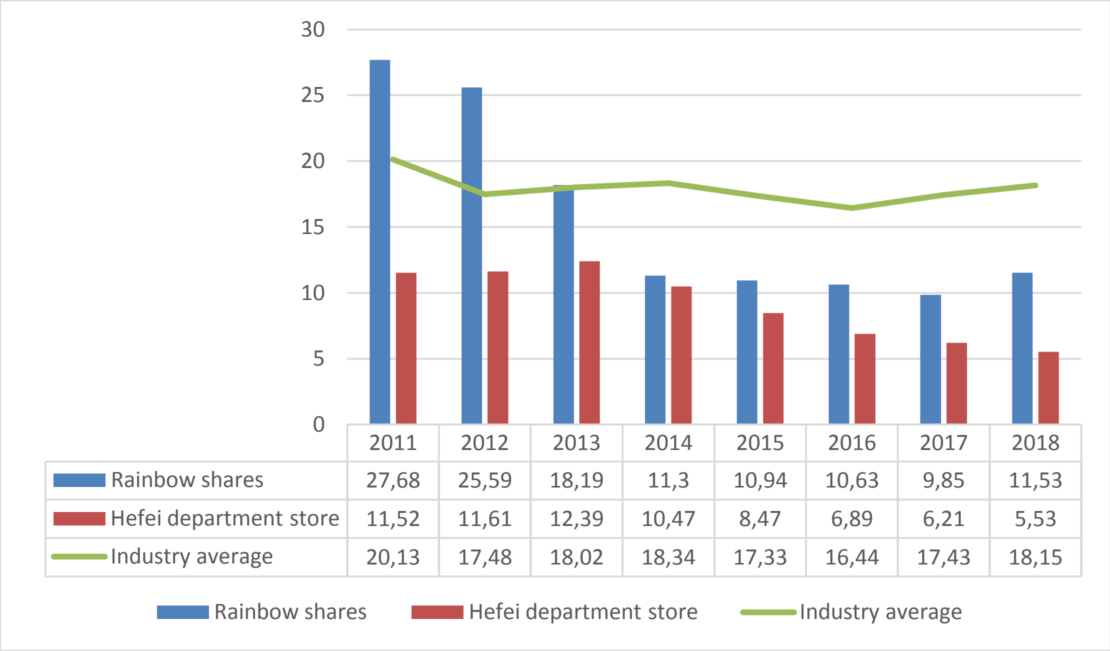
The company should pay attention to the decline of total asset turnover in 2018, which may be due to a problem at a node of the value chain in the process of omni-channel integration. Therefore, the company should properly control all links of production and operation and improve risk awareness in the process of development.

(2) Inventory turnover analysis

Inventory turnover refers to the ratio of an enterprise's cost of sales to its average inventory. It can comprehensively consider the inventory management and sales ability of an enterprise. The higher the index, the faster the inventory turnover and the stronger the liquidity ability of an enterprise.

The comparison of stock turnover of Rainbow with industry average and Hefei Department Store is shown in Figure 3.4:

In figure 3.4, you can see that store stock and the developing trend of Hefei department store, the industry average is roughly same, among them, the store stock inventory turnover by 27.68 times in 2011 to 18.19 in 2013, by the higher than the industry average fell below the industry average, Hefei department store inventory turnover although below store at the same time, the index has been promoted. After 2014, the decline of shares of Rainbow slowed down and basically maintained at about 10%.



	2011	2012	2013	2014	2015	2016	2017	2018
Rainbow shares	27,68	25,59	18,19	11,3	10,94	10,63	9,85	11,53
Hefei department store	11,52	11,61	12,39	10,47	8,47	6,89	6,21	5,53
Industry average	20,13	17,48	18,02	18,34	17,33	16,44	17,43	18,15

Figure 3.4 – Inventory turnover ratio comparison

The gap with Hefei Department Store gradually widened, but it was always lower than the average level of the industry. In 2018, the company's inventory turnover rate increased significantly, reaching 17.06. During the same period, the industry level improved, while Hefei Department Store was still in a downward trend, indicating that the macro-environment had little impact. Through analysis we can see that store shares after the implementation of O2O model transformation, stabilizing inventory turnover as a whole, mainly due to the company after implementation of the O2O mode, continuously strengthen the construction of online and offline channels, realize the whole channel integration, online collaboration can help retailers based on the analysis of online merchandise sales, and timely adjust offline inventory, the inventory management methods to further improve. In addition, the company adheres to customer-centric, focuses on consumption experience, and creates experiential consumption scenarios.

Continuously optimize the O2O platform to stimulate consumption, speed up inventory turnover, and improve inventory liquidity and company operating efficiency. Among them, the inventory turnover of Rainbow Stock decreased significantly in 2013 and 2014, mainly because at the early stage of transformation, the company took a more aggressive way to expand stores and began to expand from the business circle to the community demand.

The expansion of scale was accompanied by a large increase in inventory. In 2015, the company further optimized the supply chain and constructed the logistics system, which made the decline of inventory turnover slow down gradually. Compared with Hefei Department Store, the inventory turnover rate of Rainbow Stock is relatively stable, which reflects the operation and management level of the company, but it is still lower than the average level of the industry. Therefore, Rainbow Stock should continue to optimize the supply chain management and improve the inventory management level in the subsequent development process, so as to create more profits for the development of the enterprise.

3.1.3 Solvency analysis

Debt paying ability can reflect the ability of an enterprise to repay long-term and short-term debts with assets. Affected by various business activities of an enterprise, good debt paying ability is a prerequisite for the healthy development of an enterprise. If the debt paying level is too low, the debt paying risk of an enterprise will increase and the enterprise will face bankruptcy.

In this paper, the current ratio and asset-liability ratio of Rainbow Stock and Hefei department stores and retail industry from 2011 to 2018 are selected for analysis and evaluation.

(1) Liquidity ratio analysis

The current ratio refers to the percentage of an enterprise's current assets divided by its current liabilities. The higher the ratio is, the stronger the enterprise's short-term solvency is. The comparison of the turnover rate of Rainbow shares with the average industry value and Hefei Department Store is shown in Figure 3.5:

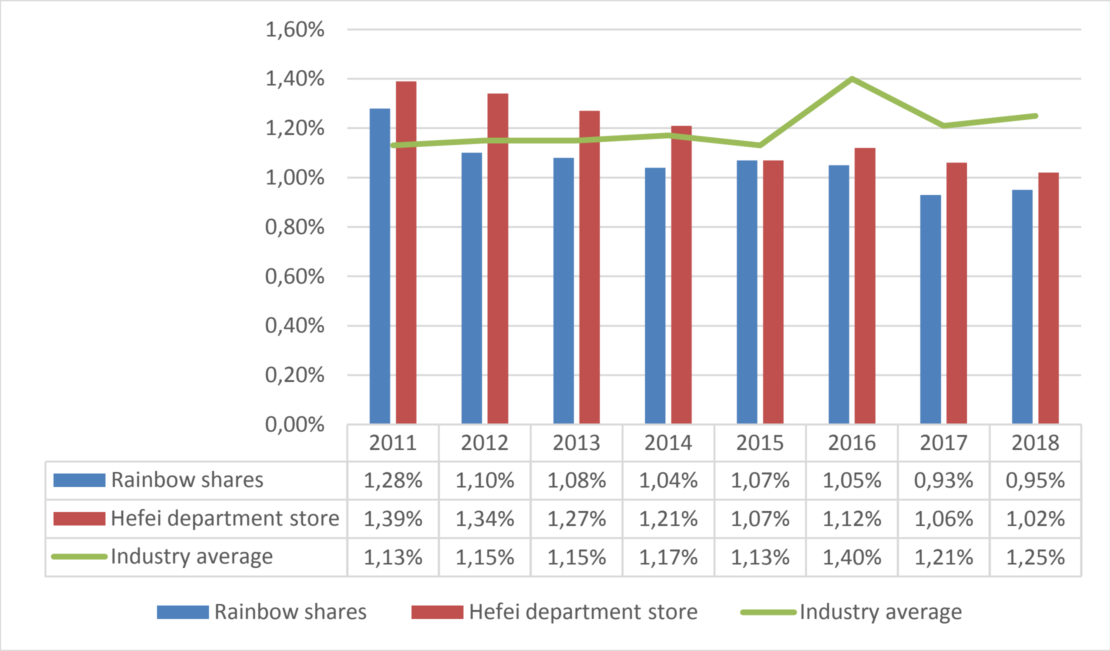


Figure 3.5 – Liquidity ratio comparison

As can be seen from Figure 3.5, the liquidity ratio of Rainbow shares has been fluctuating around 1% from 2011 to 2018, which is lower than the average value of the industry and that of Hefei Department Store. Based on the characteristics of the retail department store industry, namely, fast collection and slow payment, so the liquidity ratio is generally low. Through analysis, it is found that Rainbow shares actively practiced O2O business in 2013, deeply ploughed the dominant regional market, continued to add physical stores, laid out online channels, and launched Rainbow WeChat and Rainbow Micro Products.

In 2014, the omni-channel layout was further improved, convenience stores were added, and commodity theme editing was tried in supermarkets to meet customers' personalized consumption needs. O2O construction in the early stage of transformation needs more working capital as a guarantee, and short-term loans will increase accordingly. After that, Rainbow shares strengthened the construction of logistics system and logistics base, making other payables increase and improving the ratio of current liabilities. In addition, with the increase of the number of offline stores, store rents increase accordingly, making the increase of current liabilities exceed the increase of current assets, resulting in a decline in the current ratio. In 2017, the liquidity ratio of shares of Rainbow was less than 1, mainly because the company rebuilt department stores, developed new species of department stores, started to independently develop supermarket formats, and invested a lot of funds.

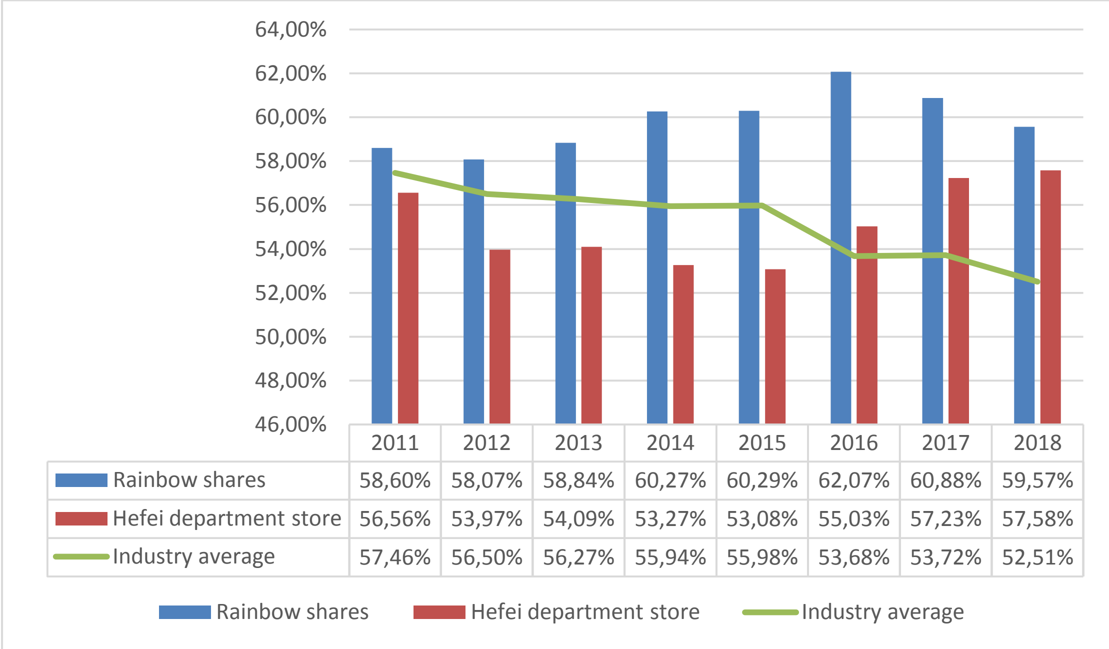
The current ratio of Hefei Department Store has been higher than that of Rainbow Stock in the past eight years, and the fluctuation range is small, and its short-term solvency performance is good. The current ratio of Rainbow shares has been kept at about 1, which does not indicate that its short-term solvency is weak. On the contrary, it reflects the strong fund management ability of Rainbow shares. In 2018, the liquidity ratio of Rainbow shares began to increase and was the same as the average trend of the industry, while Hefei Department Store showed a downward trend in the same period, which reflected the strong fund management ability of Rainbow shares and the continuous exploration and adjustment of Rainbow shares in the later period of O2O mode transformation. It is slowly going through the running in period.

(2) Asset-liability ratio

Asset-liability ratio refers to the ratio of the total liabilities of an enterprise to the total assets, which reflects the ability of an enterprise to repay long-term debts and the debt situation of an enterprise. The smaller the ratio, the stronger the long-term solvency, but it cannot effectively play the role of financial leverage. In general, the retail sector's debt to assets ratio remains around 55 per cent.

The comparison of the asset-liability ratio of Rainbow Shares with the average industry value and Hefei Department Store is shown in Figure 3.6:

As can be seen from Figure 3.6, the asset-liability ratio of Rainbow Stock was basically maintained at about 58% from 2011 to 2013, not much different from the average of the industry, and its fluctuation trend was consistent with the average level of Hefei Department Store and the industry. It rose sharply in 2014, widening the gap with the industry level. At this time, Hefei Department Store and the average level of the industry were still declining



	2011	2012	2013	2014	2015	2016	2017	2018
Rainbow shares	58,60%	58,07%	58,84%	60,27%	60,29%	62,07%	60,88%	59,57%
Hefei department store	56,56%	53,97%	54,09%	53,27%	53,08%	55,03%	57,23%	57,58%
Industry average	57,46%	56,50%	56,27%	55,94%	55,98%	53,68%	53,72%	52,51%

Figure 3.6 – Asset-liability ratio comparison

. After that, Rainbow shares fluctuated less, remaining at about 60% and falling to 59.57% in 2018.Based on the nature and characteristics of the retail industry, its ratio is generally maintained at about 55%. Compared with Rainbow, the asset-liability ratio of Hefei Department Store is relatively stable.

Through the analysis, it is found that the ability of using external funds is gradually improved, but it also increases the financial risk correspondingly. In 2014, the O2O model was further improved, the store network was laid out, and the new store of Rainbow Weibo was opened, which resulted in the corresponding increase of credit sales. Later, while continuously optimizing the supply chain, the construction of the logistics system was strengthened, resulting in the increase of accounts payable. The retail industry is characterized by a large amount of funds outstanding in the upstream and downstream. The upstream is mainly the credit sale to suppliers, while the downstream is mainly the enterprise advance payment formed by single-purpose shopping cards, etc. By making good use of commercial credit funds, the implied interest cost of enterprises can be reduced. Rainbow shares has a high asset-liability ratio, which can play the role of financial leverage, but it should also pay attention to relevant financial risks. After all, Rainbow shares took the lead in testing the waters of

O2O, and without predecessors' experience, it is moving forward in groping, and its operating risks are high. Therefore, the company should strengthen control on the use of financial leverage. In addition, since liabilities include current liabilities and long-term liabilities, the debt structure of Rainbow shares is further analyzed, as shown in Table 3.1:

Table 3.1 – Analysis of the debt structure of Rainbow shares

	2011	2012	2013	2014	2015	2016	2017	2018
Current liability ratio	99.98	99.83	99.98	99.14	97.33	99.15	99.15	98.69
Long-term debt ratio	0.02	0.17	0.02	0.86	2.67	0.85	0.85	1.31

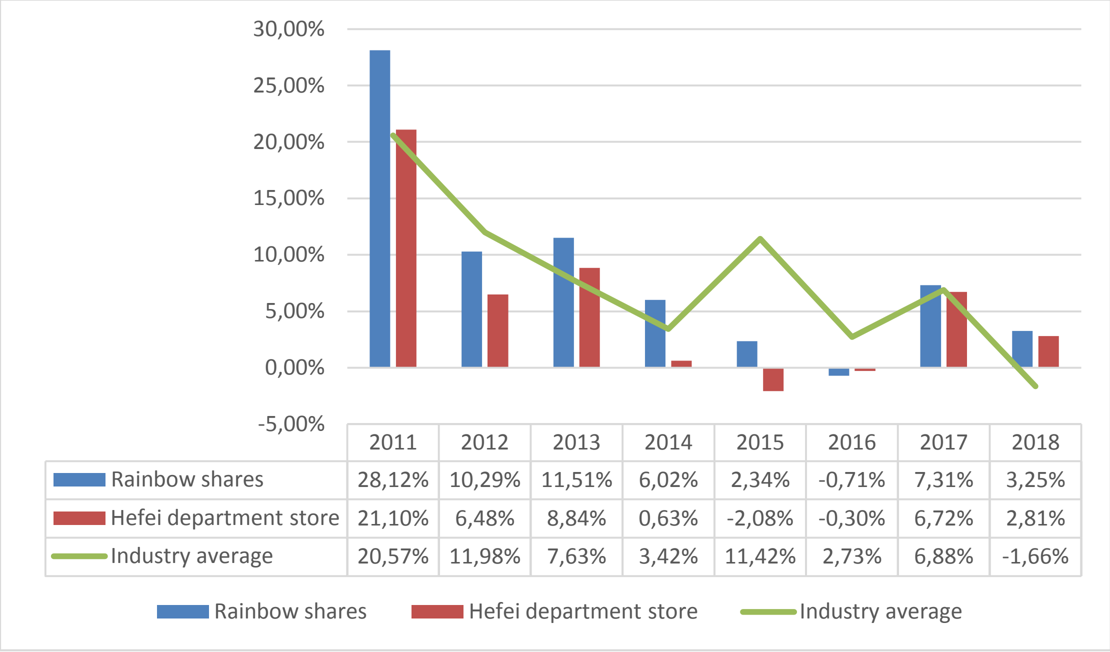
By table 3.1, you can see that in 2011-2018 store stock financing structure, the long-term asset-liability ratio is low, mainly because the company most indebted for current liabilities, financial report can be released from the store shares that its accounts payable, notes payable, accounts for the proportion of current liabilities reached more than 30%, reflecting the store shares to rely on commercial credit financing dependence is larger, the balance of the supplier's credit in the process of operation. Although commercial credit appears to have no financing cost and is easy to obtain, this cost is usually included in the purchase price. When upstream enterprises use cash discount, their financing cost is more prominent.

3.1.4 Analysis of growth ability

Growth ability refers to the future development trend and speed of the enterprise, which can reflect the development prospect of the enterprise, and the long-term development of the enterprise needs to have a strong growth ability. This paper mainly selects two representative indicators of revenue growth rate and net profit growth rate between Rainbow Stock and Hefei department stores and retail industry from 2011 to 2018 for analysis and evaluation.

(1) Operating revenue growth rate analysis

The growth rate of operating income refers to the ratio of the difference between the enterprise's main business income and the previous value and the previous main business income, which is an important index to evaluate the development status of an enterprise. The comparison of the asset-liability ratio of Rainbow Shares with the average industry value and Hefei Department Store is shown in Figure 3.7:



	2011	2012	2013	2014	2015	2016	2017	2018
Rainbow shares	28,12%	10,29%	11,51%	6,02%	2,34%	-0,71%	7,31%	3,25%
Hefei department store	21,10%	6,48%	8,84%	0,63%	-2,08%	-0,30%	6,72%	2,81%
Industry average	20,57%	11,98%	7,63%	3,42%	11,42%	2,73%	6,88%	-1,66%

Figure 3.7 – Comparison of revenue growth rates

As can be seen from Figure 3.7, the growth rate of the operating income of Rainbow shares is generally the same as the average growth trend of Hefei department stores and the industry. In 2012, the growth rate of the three showed a sharp decline, reflecting that the retail industry has encountered a "cold winter period". Among them, Rainbow shares saw the most obvious decline in the growth rate of operating income in 2012, from 28.12% to 10.29%. After a small increase in 2013, it continued to decline, but the decline slowed down. In 2016, it bottomed out and the growth rate of operating income turned negative. According to the analysis, due to the European debt crisis and the increasingly fierce geopolitical crisis in 2012, under the severe political and economic environment, the domestic retail industry suffered from medium damage. Affected by the economic growth situation, the consumer market showed a downturn.

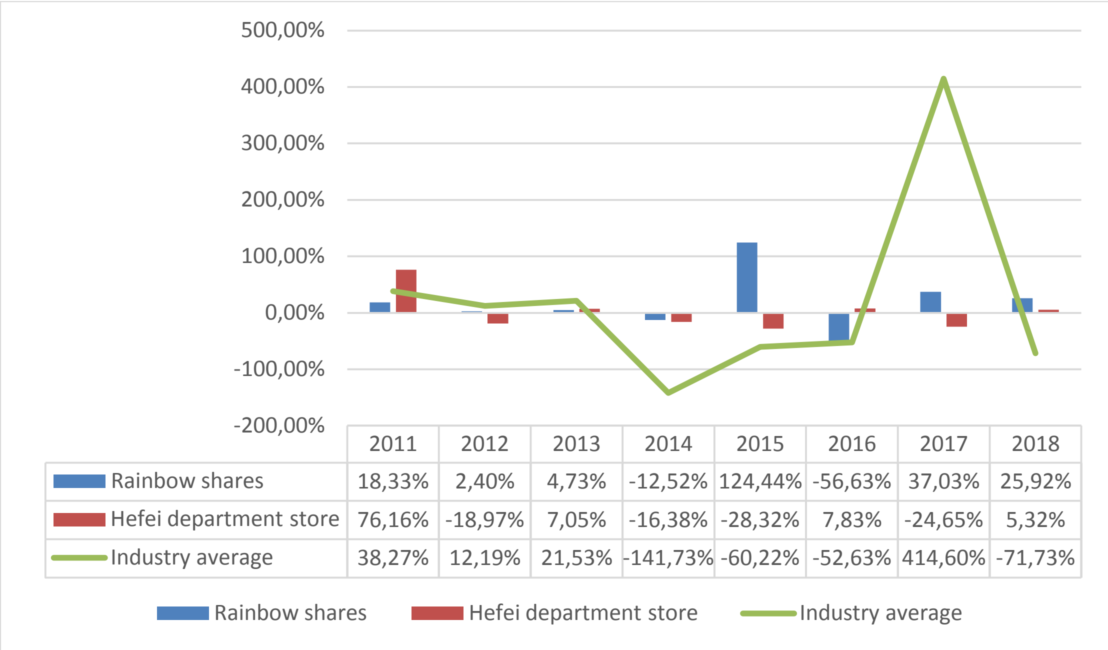
At the same time, the rapid growth of e-commerce has caused a huge impact on traditional retail enterprises. Therefore, it has become an irresistible trend for traditional retail enterprises to implement strategic transformation. In 2013, Rainbows began to transform into O2O mode, continuously promoted the shopping center of physical stores, built characteristic theme streets, and laid out online e-commerce business, etc., which resulted in the increase of corporate revenue. Later, the company increased the O2O process and expanded new businesses by launching Rainbow WeChat, Rainbow Micro Products and Rainbow Scarf App, etc.

Then the investment could not be realized in a short period of time. It would take some time for the optimization and improvement of the new business to be accepted by customers. To 2017, store stock bottomed out, transformation results, main income grew by 11.3% year on year, the same industry average and Hefei department also showed different degrees of growth, but growth below store, is mainly due to the company's agriculture O2O channel operation, adhere to the customer as the center, emphasize the experience value, rainbow scarf digitizing, the comprehensive implementation of online linkage, thereby expanding the sales, drive revenue growth. Store opened in 2018, operating income growth rate falling, but in the same period the nation with a shrinking revenue of the industry, Hefei department also decline significantly, in the situation, to store stock is still greater than the industry average revenue growth, mainly thanks to store shares "momentum" attitude, advance the O2O mode, channel perfect and optimized constantly, to speed up the intelligent exploration, and set up a joint Tencent wisdom retail laboratory, boost the healthy development of enterprises.

(2) Analysis of net profit growth rate

Net profit growth rate points to the difference between net profit of the enterprise and the value of the previous period to account for the proportion of net profit, the greater this index is, the better growth is on behalf of the growth.

The comparison of the net profit growth rate of Rainbow Shares with the average industry value and Hefei Department Store is shown in Figure 3.8:



	2011	2012	2013	2014	2015	2016	2017	2018
Rainbow shares	18,33%	2,40%	4,73%	-12,52%	124,44%	-56,63%	37,03%	25,92%
Hefei department store	76,16%	-18,97%	7,05%	-16,38%	-28,32%	7,83%	-24,65%	5,32%
Industry average	38,27%	12,19%	21,53%	-141,73%	-60,22%	-52,63%	414,60%	-71,73%

Figure 3.8 – Comparison of net profit growth rates

It can be seen from Figure 3.8 that the business performance of Rainbow shares showed a downward trend before the O2O mode transformation in 2013, and the average value of Hefei department stores and the industry also declined to varying degrees in the same period. The consumer market was weak due to the severe political and economic environment and the impact of e-commerce. In 2013, the growth rate of net profit picked up, on the one hand due to the influence of the macro environment, on the other hand, mainly because Rainbow shares began to transform into the O2O model in 2013, the revenue increased, and realized the profit growth. Store opened in 2014-2016 shares income not Li Zeng phenomenon appeared, the company to speed up the O2O during the process, optimization of online channels, and transfer of a wholly owned subsidiary in 2015 deep sincere property company 100% stake in the attempt to revitalize the enterprise assets in the form of asset securitization, the deal for the company to increase net profit of about 850 million yuan, make the net profit growth rate of 124.44%, however, financial report can be released through the store shares, in the case of without considering the non-recurring gains, the company's net profit is 448 million yuan only. In 2016 by the previous period of non-regular operating activities, the net profit growth rate of this period decreased significantly. 2017 store shares after the O2O transformation of stride, no longer blind expansion, carry out new business gradually accepted by the customer, after four years of transition throes, transition effects, through building the three-dimensional electric business model, to offline store layout and develop new business, increase business performance, net profit growth rate much higher than transformation O2O before profits.

At the same time, Rainbow shares continued to increase its operating profit in 2018, accelerated the intelligent exploration, continued development and innovation, and carried out extensive cooperation in AI, big data and other fields. Taking a look at the average index of the industry, it can be seen that due to the serious polarization, the average of the industry fluctuates greatly. On the whole, the growth ability of Rainbow shares is far greater than the average level of the industry.

3.2 Performance evaluation based on principal component analysis

This article introduces principal component analysis (pca) to store stock O2O mode transformation performance further system analysis, and then to the transformation of the company's performance, a comprehensive evaluation results, mainly due to the transformation from multiple dimensions analysis the company's performance in the process, involves more financial indicators, and there may be a part of information overlaps between the indicators, transformation performance of the company does not follow a system, comprehensive analysis of the results. And principal component analysis (pca) mainly adopts the dimension reduction approach, multiple complex index can be converted to a few comprehensive indexes, with composite scores for the company overall evaluation on the transition effect, and subjective assignment grade is different, the use of this method process based on the objective of financial data, avoid the influence of artificial factors, make the evaluation results more objective.

3.2.1 Index system construction

The application of principal component analysis should first build a comprehensive performance evaluation system. Based on Rainbow Stock, this paper builds an evaluation system from four dimensions of profitability, operation, debt paying and growth ability, and selects several representative indicators from each dimension respectively to make a comprehensive performance evaluation of the company's O2O model transformation. The construction of index system is shown in Table 3.2:

Table 3.2 – Performance evaluation index system

The index type	The index name	A formula to calculate	The serial number
Profitability	Return on Total Assets (%)	EBITDA/Average Total Assets	X_1
	Return on equity (%)	Net Income/Average Net Assets	X_2
Operation ability	Total assets turnover ratio (times)	Operating revenue/average total assets	X_3
The index type	The index name	A formula to calculate	The serial number
Imperation ability	Inventory turnover rate (times)	Cost of goods sold/average inventory balance	X_4
Debt paying ability	Liquidity ratio (%)	Current assets/current liabilities	X_5

End of table 3.2

	Asset-liability ratio (%)	Total liabilities/total assets	X_6
Growth ability	Growth Rate of Net Profit (%)	Net profit growth/net profit of last year	X_7
	Growth rate of total assets (%)	Growth of total assets/total assets of last year	X_8

3.2.2 Data selection and processing

Based on section on constructing evaluation index system, this paper compiled store shares of the relevant financial information from 2007 to 2018, selected the covers 12 years before and after the transformation of raw data, makes the analysis results with longitudinal comparison and extensibility, which integrated embodiment store shares O2O mode transition effects on financial performance, and the influence of the change trend, the concrete numerical value as shown in table 3.3.

Table 3.3 – Raw data of performance evaluation indicators

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
X_1	19.37	14.15	13.78	11.47	9.53	7.93	7.79	6.05	12.62	4.64	5.68	7.2
X_2	66.61	50.37	41.7	21.4	16.7	15.53	14.93	12.18	24.08	9.5	12.47	14.5
X_3	2.76	2.47	2.31	1.84	1.67	1.57	1.61	1.55	1.37	1.21	1.23	1.21
X_4	32.88	28.74	30.84	31.69	27.68	25.59	18.19	11.3	10.94	10.63	9.85	11.53
X_5	0.76	0.86	0.79	1.32	1.28	1.1	1.08	1.04	1.07	1.05	0.93	0.95
X_6	77.5	78.26	77.04	53.7	58.6	58.07	58.84	60.27	60.29	62.07	60.88	59.57
X_7	48.75	2.44	13.5	36.25	18.33	2.4	4.73	12.52	124.44	56.63	37.03	25.92
X_8	68.32	20.9	29.23	81.77	23.15	7.5	10.86	9.58	0.56	6.29	4.4	5.5

3.2.3 Data verification

In this paper, SPSS20.0 was used to conduct KMO and Bartlett spherical test on the data, in which KMO test was used to compare the simple correlation coefficient and partial correlation coefficient between variables, and the value range was 0-1. The measurement standard of KMO value was: if the value was greater than or equal to 0.9, it would be very suitable. 0.6-0.8 means suitable; 0.5-0.6 indicates average; Less than or equal to 0.5 indicates inappropriateness. Bartlett spherical test is mainly used to test whether the data is normally distributed. When the Sig value is less than 0.05, it indicates that the data is spherical, which is suitable for principal component analysis. The relevant test results are shown in Table 3.4:

Table 3.4 – KMO and Bartlett tests

Sampling the Kaiser-Meyer-Oikin measure of adequacy		0.711
	The approximate chi-square	107.176
	df	28
	Sig.	000.

As can be seen from Table 3.4, the KMO value of the variables is 0.711, which reflects the significant correlation between the variables. The Sig value of Bartlett's spherical test statistic is 0, indicating the spherical distribution among the variables. Therefore, the sample data selected in this paper can be tested and further analysis can be conducted. Then, the common degree of indicator variables is tested, that is, the variance of the initial variable extracted by the common factor. The specific results are shown in Table 3.5.

As can be seen from Table 3.5, most of the values of commonality of the extracted variables are greater than 0.9, indicating that most of the original financial information can be extracted from a number of financial indicators when the principal component analysis method is used to evaluate the performance of an enterprise. Therefore, the selected data of financial indicators are suitable for principal component analysis.

Table 3.5 – Common Factor Variance

	The initial	extract
X_1	1.000	0.983
X_2	1.000	0.987
X_3	1.000	0.974
X_4	1.000	0.91
X_5	1.000	0.936
X_6	1.000	0.977
X_7	1.000	0.99
X_8	1.000	0.851

3.2.4 Extraction and analysis of principal components

By using SPSS20.0 software to process the data variables, the eigenvalue, variance contribution rate and cumulative variance contribution rate were obtained. In this paper, principal component extraction was carried out according to the principle that the eigenvalue was greater than 1. The extraction results are shown in Table 3.6.

The SPSS20.0 is used to select the eight indexes of principal components is proposed, in accordance with the principle of eigenvalues greater than 1, finally extracted three principal components and its characteristic value was 4.898, 1.591 and 1.12, respectively, the cumulative contribution rate was 95.125%, shows that extraction of three principal component can reflect the 95.125% of the original indicators, can fully reflect the store shares O2O model transformation of financial performance.

Table 3.6 – Total variance explained

Composition	Initial eigenvalue			Extract the sum of squares and load it		
	A combined	% of the variance	The cumulative %	A combined	% of the variance	The cumulative %
1	4.898	61.228	61.228	4.898	61.228	61.228
2	1.591	19.891	81.119	1.591	19.891	81.119
3	1.12	14.006	95.125	1.12	14.006	95.125
4	0.254	3.179	98.304			
5	0.081	1.013	99.317			
6	0.028	0.347	99.664			
7	0.021	0.262	99.926			
8	0.006	0.074	100.000			

According to the initial characteristics in Table 3.7 above, the variance contribution graph was obtained and ranked in descending order. The details are shown in Figure 3.9.

It can be seen from Fig. 3.9 that the slope of the first three indicators is relatively high, and after the third point, that is, when the fourth point is reached, it is basically at a level.

Therefore, it is appropriate to select three principal components. Then, SPSS20.0 was used to calculate the load coefficient of sample data and judge the relationship between principal component and variables. The closer the value of this system is to 1, the better. The specific values are shown in Table 3.7.

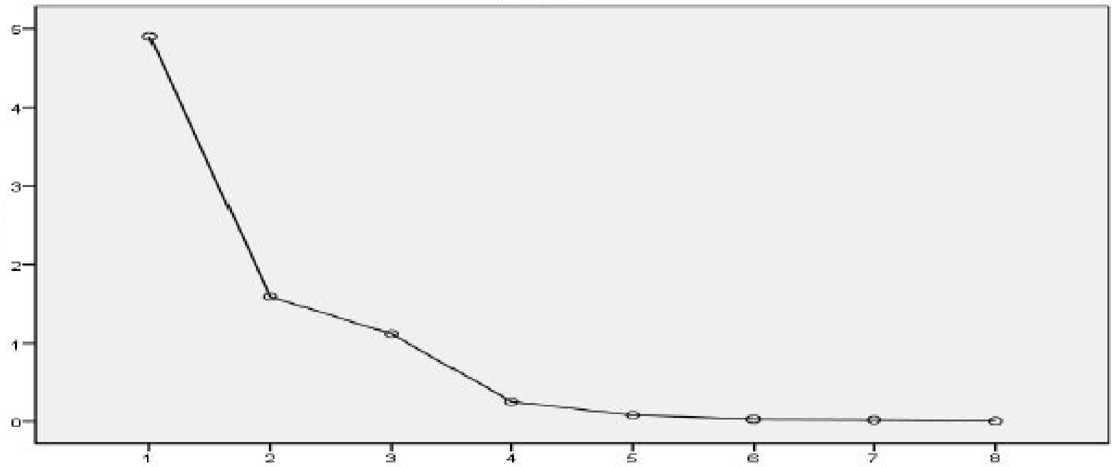


Figure 3.9 – Principal Component Analysis Gravel Diagram

Table 3.7 – Principal component coefficient matrix

	The principal components		
	1	2	3
X_1	0.945	0.142	0.264
X_2	0.983	0.121	0.08
X_3	0.972	0.037	0.167
X_4	0.787	0.456	0.298
X_5	0.562	0.784	0.078
X_6	0.837	0.517	0.94
X_7	0.218	0.242	0.942
X_8	0.647	0.638	0.159

It can be seen from Table 3.7 that the load coefficients of the three principal components on the eight indicator variables, among which the index X2 and X3 have the largest load coefficients in the principal component 1, reflecting the profitability and operating capacity of Rainbow Shares.X5 has a larger load coefficient in principal component 2, which reflects the solvency of Rainbow shares. X7 has the highest load coefficient among principal component 3, which reflects the growth ability of Rainbow shares.

Table 3.8 – Principal component score coefficient matrix

	The principal components		
	1	2	3
X_1	0.193	0.089	0.236
X_2	0.201	0.076	0.071
X_3	0.198	0.023	0.149
X_4	0.16	0.286	0.266
X_5	0.115	0.492	0.069
X_6	0.171	0.325	0.084
X_7	0.044	0.152	0.841
X_8	0.132	0.401	0.142

According to the component scoring coefficient matrix in Table 3.8, the coefficients of each principal component are finally expressed as follows:

$F1 = 0.193*X_1 + 0.201*X_2 + 0.198*X_3 + 0.16*X_4 - 0.115 * X_5 + 0.171*X_6 + 0.044*X_7 + 0.132*X_8$

$F2 = 0.089*X_1 - 0.076*X_2 + 0.023*X_3 + 0.286*X_4 + 0.492*X_5 - 0.325*X_6 + 0.152*X_7 + 0.401*X_8$

$F3 = 0.236*X_1 + 0.071*X_2 - 0.149*X_3 - 0.266*X_4 - 0.069*X_5 - 0.084*X_6 + 0.841*X_7 - 0.142*X_8$

Then, the comprehensive evaluation score was calculated. The variance contribution rate was taken as the coefficient, multiplied by the principal component scores, and the comprehensive score was obtained by summation. The specific expression is as follows.

$T = + 0.199 * 0.612 * F1\ F2 + 0.14 * F3$

T represents the comprehensive evaluation score of the O2O mode transformation of Rainbow Shares. By putting standardized data (see Appendix 1 for details) into the above expression, scores of the three principal components and comprehensive evaluation scores can be obtained. The specific score values are shown in Table 3.9:

Table 3.9 – Principal component score and comprehensive evaluation score

	F1	F2	F3	T
2007	2.18	0.03	0.32	1.37
2008	1.25	0.84	0.53	0.52
2009	1.18	0.74	0.39	0.52
2010	0.16	2.58	0.30	0.57
2011	0.30	1.17	0.33	0.01
2012	0.44	0.29	0.49	0.28
2013	0.51	0.04	0.27	0.34
2014	0.73	0.44	0.50	0.60
2015	0.30	0.06	2.69	0.20
2016	1.00	0.74	1.34	0.94
2017	0.78	0.75	0.65	0.53
2018	0.71	0.59	0.48	0.49

3.2.5 Analysis of evaluation results

According to the scores of each principal component and the comprehensive scores in Table 3.9, the score trend chart of the performance evaluation system of Rainbow Shares is drawn:

The first principal component mainly covers two financial indicators, return on equity and turnover of total assets, which respectively reflect corporate profitability and operating capacity. Through analysis, it can be clearly seen that before the O2O mode transformation of Rainbow Shares in 2013, F1 score showed a sharp decline, indicating the profitability and operating conditions of Rainbow Shares

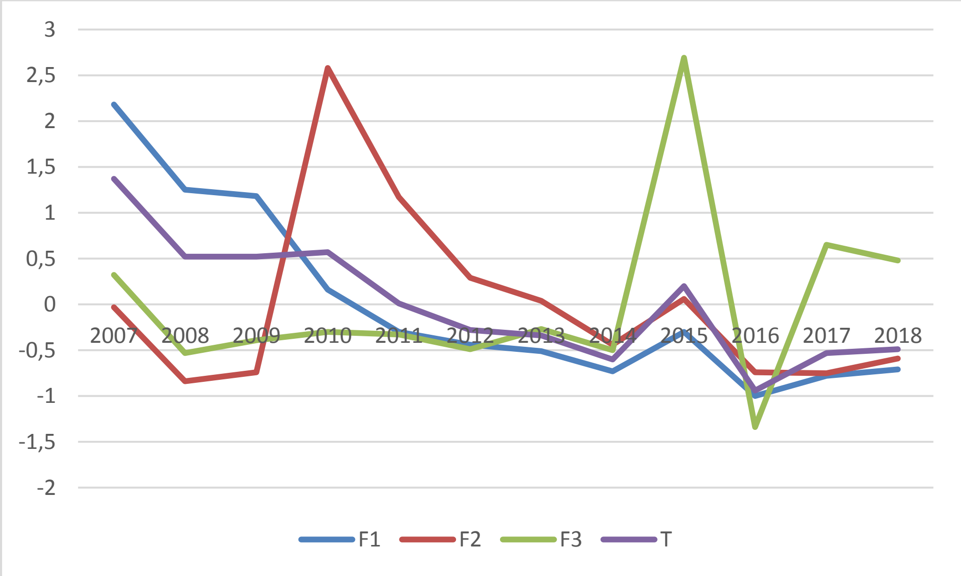


Figure 3.10 – Chart of principal component scores and comprehensive scores of the evaluation system

The performance is poor, transformation becomes the general trend. Although in 2013, with the implementation of O2O mode and the online operation of Rainbow WeChat and Rainbow Micro Product, the decline trend of principal component 1 score slowed down. However, influenced by the European debt crisis, political crisis and other severe political and economic environment as well as the impact of e-commerce, the profit and operating capacity of Rainbow shares still showed a downward trend.

After store shares continued to promote O2O mode, comprehensive online channel layout, build a logistics system, expand stores and online rainbow scarf APP, however, due to rising rents, consumers will take time to acceptance of new business, make the transition effect did not appear in the short term, F1 score is still a declining state. Among them, the score rose in 2015, mainly because with the intensifying competition in the retail industry, in order to further improve the O2O layout and improve the operating efficiency, Rainstock adopted asset securitization to raise funds in 2015, sold Shencheng Property Company, and made a non-recurring profit and loss of 1.14 billion, which increased the profit. After 2016, the F1 score of Rainbow shares showed an upward trend. Rainbow shares slowly went through the painful period of transformation and restarted its efforts. The deep integration of online and offline channels, the lifestyle-based and scene oriented department stores, the national integration of supply chains, the acceleration of intelligent exploration, and the enhancement of customer viscosity.

The effect of transformation is apparent. It can be seen that the O2O mode transformation of Rainbow shares has a promoting effect on profitability and operating capacity to a certain extent.

The second principal component mainly covers the liquidity ratio index, reflects the enterprise's solvency, the F2 score decreased obviously before transformation, mainly affected by the retail industry downturn, e-commerce impact etc, and at the same time to prepare for O2O model transformation, due to the transformation of the early construction of O2O requires more liquidity as guarantee, corporate borrowing will increase.F2 scores decline slowed after transformation, the basic is in a state of relatively stable, but the score difference is bigger, before the transformation and shares is mainly due to the store three or four years, after the transformation in O2O mode exploration, online and offline upfront investment is large, such as online APP, build their own logistics, extension, stores and so on all need a lot of money, therefore, its liabilities increase accordingly. After 2017, rainbow shares no longer carried out blind expansion, began to adjust resources, and improved customer experience through business format upgrade, intelligent technology, shopping scene life-oriented and other ways, which gradually improved the solvency score of the enterprise. At the same time, the company mainly relies on credit financing, there are certain financial risks, its financing structure needs to be improved.

The third principal component mainly covers the net profit growth rate index, reflects the growth ability of the enterprise, the F3 score in store shares O2O model transformation was improved, up from 2012-0.49 the transformation of 0.27, up 44.9%, scoring with a substantial increase in 2015, a jump, score is 2.69, mainly due to the company in order to revitalize the assets, to sell their own properties. In 2016, the F3 score dropped sharply and reached its lowest point, which was mainly due to the influence of the transfer of Shencheng Property Company in the last phase, in addition to the influence of the weak retail market. With the deepening of the O2O model, Rainbow shares are slowly going through the transition period, constantly improving the O2O layout, strengthening the construction of the logistics system, and continuously optimizing the supply chain.

The expanded new businesses are gradually recognized and accepted by consumers. In 2017, the transformation effect gradually emerged. Rainbow shares broke through the confused period of transformation, rising from -1.34 in 2016 to 0.48, up 135.82%. Although the score dropped in 2018, influenced by the downturn in the retail industry, the annual growth rate of consumer goods retail declined to 9.0% in the same period, down 1.2 percentage points compared with the same period last year. Rainbow shares still maintained a high score, so the F3 trend chart shows that Rainbow shares had a good improvement in financial performance.

The T score of the comprehensive evaluation is a comprehensive reflection of the scores of F1, F2 and F3. In the expression for calculating the comprehensive score, the coefficient value of F1 is 0.612, which accounts for the largest proportion among the three principal component coefficients. Therefore, the trend of the final comprehensive evaluation score of Rainbow Stock is basically the same as that of F1 score. Through analysis diagram 4-10 T score trends found that before 2013, store stock comprehensive performance evaluation score shows a sharp decline, among them, the comprehensive performance score turned negative in 2012, but it is worth noting that the volatility, the store before the transition scores decreased significantly, mainly due to the Macro economic growth is slowing, under the background of the Internet, the market environment changes, electrical business development is rapid, weak consumer market, strongly impact the traditional offline retail enterprises, the transformation is imminent.

Store opened in 2013 to begin O2O model transformation, because in the industry take the lead to O2O mode, no mature experience for reference, in groping forward, in the subsequent years is still in a period, ongoing O2O model of optimizing adjustment, capital investment and new business development, such as consumer recognition and accept the need a certain amount of time, make the investment in the short term cannot be converted into cash immediately, and it would do much to store shares the financial performance of a certain negative effect, therefore, the transformation effect is not appeared in the short term, But its score decreased after transformation in 2013 began to slow, until in 2017, as the ground and implementation of the O2O mode to reverse the score continued to decline in a decade, the score is slowly rising, transformation performance increase significantly, in 2018, the comprehensive evaluation score of store shares still keep rising trend, although the score is still negative, but does not explain the transformation of failure, according to the contingency theory thought, because the enterprise external environment is in constant change, therefore, not in the past before the transition of the performance evaluation ideas to evaluate the financial performance after the transformation, Should be based on the implementation of the transformation, the specific analysis of recent years score trend has increased. In 2018, when the total amount of social consumer goods fell, Rainbow shares still developed well and maintained a growth trend, indicating that the O2O model transformation of Rainbow shares was successful.

3.3 Performance evaluation review

To sum up, through the use of financial index analysis and principal component analysis (pca), and to store stock O2O mode transformation performance analysis found that: due to store shares in 2013, the first to test the waters O2O mode, in groping forward continuously, the transition effects did not appear in the short term, influence has a certain lag, after three years of optimizing adjustment, store shares in 2017 transition effects.

Financial index analysis, the store shares the 2011-2018 profit ability, operation ability, debt paying ability and growth ability and the industry average, in the same industry competitors, this paper compares and analyzes the results according to store shares after the implementation of O2O model transformation, after a period of three years, its profitability and growth ability compared with better before transformation, inventory turnover ratio and current ratio is lower than the industry average and competitors in the same industry.

At the same time, the principal component analysis was used to evaluate and analyze the comprehensive financial performance of Rainbow Stock from 2007 to 2018, and the performance of O2O mode transformation was evaluated by the principal component score. The results showed that its score declined significantly before the transformation in 2013, which was mainly affected by the severe political and economic environment and the rapid development of e-commerce. After the transformation in 2013, except that the score rose due to the transfer of its own business in 2015, the score still declined, but the decline was significantly smaller than before the transformation, mainly because the company's initial investment could not be realized in a short time, and it takes some time for customers to recognize and accept the new business. Scores rose sharply after 2017, reversing a steady trend of declining scores and continuing to rise in 2018. It can be seen that the O2O mode transformation of Rainbow shares has generally achieved a good financial performance of the company. Under the background of the bottleneck in the development of the retail industry, Rainbow shares went upstream against the current.

Regardless of the internal and external environment of the enterprise, the O2O mode transformation of Rainbow shares is a relatively successful transformation case. With the rise of e-commerce, Rainbow has carried out the transformation of O2O mode with bold and bold measures. Based on the basic idea of blue ocean strategy, Rainbow shares have effectively avoided the fierce competition in the traditional market space and the strategic focus

Transformation from competition to innovation, innovative O2O mode, open up new market space, in constant trial and error in the forward. Due to the time of O2O model this concept emerged late, no mature theoretical system and practice experience, and continuously explore, store shares during the inevitable will encounter some obstacles, combined with the transformation in the early online channel layout, increase investment, these obstacles that the effect of the short-term financial performance is not significant, appear even negative influence, but we cannot deny that store shares under the background of rapid development of electrical business chose a correct development direction, in the long run, the company in the O2O mode exploration phase transition of labor can be offset by the late development.

3.4 Suggestions on the O2O mode transformation of department stores

3.4.1 Strengthen inventory management

Through the above analysis of the transformation motivation, measures taken and the impact on performance of Rainbows O2O mode, it is found that Rainbows keeps moving forward after the transformation. Through constant trial and error and exploration, after three years of painful transformation, the transformation effect has been highlighted. At the same time, the company inevitably encountered some obstacles in the process of transformation. According to the performance evaluation results of the O2O mode transformation of Rainbows, after the O2O mode transformation of Rainbows in 2013, although the inventory turnover rate began to stabilize and basically maintained at about 10%, it was always lower than the average level of the industry. Shares at the same time, the store's inventory turnover dropped from transition before the year 2012 to 25.59 times to 9.85 times in 2017, the main reason in addition to the serious macro environment and the influence of e-commerce impact, mainly due to the company to take a more radical way layout O2O online channels, is too wide, enterprise's core competitive rate is not obvious, the asset management capabilities are inefficient, couldn't keep up with the pace of transformation.

Therefore, department stores of the same type should fully integrate enterprise resources, slow down the pace of transformation, strengthen supply chain integration, and improve weekly inventory speed on the premise of ensuring normal operation of daily business activities. In addition, the inventory management system should be improved, the inventory planning and control of the company should be strengthened, the online and offline sales situation should be analyzed and predicted by using big data and cloud computing, the inventory should be adjusted timely, and the ability of assets to be transformed into income and profit should be improved. At the same time, a perfect logistics distribution system can better reflect humanism as well as the principles of efficiency, can be information in a timely manner to the customer feedback, prompted the homework center to better cooperate in order to improve the efficiency, therefore, to strengthen the improvement of logistics system, increase the construction of the logistics center and the national warehouse network, can rely on to ensure the quality to complete the shipping offline store of improving consumers' satisfaction and shopping experience, leading to more customers consumption, improving customer consumption viscosity.

3.4.2 Improve the financing structure

Through the above analysis it can be seen that needs to improve the financing structure to store stock, shares in the store opened in 2013 after O2O model transformation, the asset-liability ratio, and higher than the industry average, which is most companies must face the problem of transformation, which is mainly due to in the process of transformation, capital investment, the company by borrowing to complete online channel layout, explore the offline store, build a logistics system, and running APP, develop international mining and own brand, makes the company in the short term, causes the growth of the company's assets increase amplitude is less than its liabilities. Although high asset-liability ratio reflects the companies to use well the role of financial leverage, managers in the process of using financial leverage, however, to pay close attention to the potential of the existing financial risk, namely at the beginning of the transformation, more radical transformation way possible capital chain rupture, etc., enterprises may appear insolvent, even facing bankruptcy.

At the same time, can be seen from the above store stock proportion of the total amount of liabilities of long-term asset-liability ratio is very low, mainly because the company most indebted for current liabilities, financial report can be released from the store shares that its accounts payable, notes payable, accounts for the proportion of current liabilities reached more than 30%, reflecting the store shares to rely on commercial credit financing dependence is larger, the balance of the supplier's credit in the process of operation.

Therefore, in the process of transformation, we should first reasonably carry out financing, increase financing channels, diversify financing, reduce the risk brought by excessive reliance on a single channel, and improve financing efficiency; Secondly, the solvency of enterprises is greatly affected by the capital structure, so it is necessary to optimize and adjust the capital structure, rationally use financial leverage, and keep the financial risks caused by financial leverage within a reasonable range. In addition, the financing channels should be diversified and the financing structure should be further improved.

After the transformation of the O2O model, if the asset-liability ratio of the enterprise is relatively low in long-term liabilities, mainly in short-term liabilities, and strongly dependent on suppliers, there will be potential financing costs and it is easy to cause debt repayment risks. Companies should increase their share of long-term debt to reduce their reliance on suppliers. Finally, in the process of transformation, enterprises should slow down the pace of transformation, consolidate and improve their existing business results, and enhance their core competitiveness.

At the same time, we should pay attention to the change of capital structure, strengthen the management of capital structure, effectively avoid financial risks, and boost the healthy and sustainable development of enterprises.

3.4.3 Reasonable distribution and control of stores

Enterprises need to offline the layout to make the reasonable planning and adjustment, first of all, to expand the number of stores at the same time, on a large scale should be liable for all the operations to make the reasonable analysis, maintain and upgrade earnings stores, stores shut down losses in time, at the same time, the department stores, supermarkets, shopping centers, convenience stores, such as implementing differentiation of different forms, and then promote the increase of the revenue. Secondly, analyze the layout of its offline stores, rationally expand the stores, and expand to the whole country with the market in specific places as the center. In addition, the location of stores should be selected in cities with large population and good economic development, so as to create revenue for the enterprise.

3.4.4 Introduction of versatile talents

Through the above analysis can find that store shares O2O model transformation in the third year, after the transformation effect, in terms of profitability and profit level to start with the industry, and the difference in the same industry competitors, in the traditional retail industry under the background of a hit from the Internet, store shares with times development trends, continuously improve their ability to compete, all competition, however, eventually is talented person's competition, innovative ability of the company, the use of the emerging business models and so on is inseparable from the talent team construction. Therefore, department store enterprises should strengthen the introduction of compound talents, that is, the compound talents should not only understand the operation of e-commerce and the construction of O2O platform, but also understand the development of the retail industry. This will help enterprises to build an O2O core talent team through innovation of operation mode on the basis of understanding and analyzing the development of the industry.

And rainbow shares can use equity incentives and other ways to attract outstanding talents. Under the electronic commerce rapid development trend, the company should also strengthen employees familiar with and use of electricity, hire outside experts to company for relevant professional training, improve staff sales ability and service level, and enhance the customer's consumption experience, improve the customer's consumption viscosity and increase corporate profits. At the same time, strengthen the training of professional e-commerce skills for employees, use the online learning platform to conduct systematic training for employees, formulate phased performance assessment, and encourage employees to master and apply the skills. Under the constantly changing internal and external environment of the company, the company's managers should also keep learning and summarizing.

For example, they should visit competitors or non-competitors to learn from relevant operation experience and apply the experience to the development process of the enterprise O2O model. And by regularly attending trainings or listening to relevant lectures to keep up with the development and operation of the retail industry. At the same time, I analyzed the financial report of the company, participated in the financial report analysis meeting, summarized and evaluated the company's phased operating situation, and then made appropriate strategic adjustment.

CONCLUSION

With the rapid development of the Internet and e-commerce, traditional retail enterprises have been seriously hit and faced with difficulties such as a sharp decline in revenue, merger and acquisition, store closure, etc. In order to achieve sustainable survival in the adversity, physical retail enterprises should conform to the development trend of The Times and transform into the general trend. This paper takes Rainstock, a benchmark enterprise in the retail industry, as the research object. Based on the elaboration of O2O model and related theories of enterprise performance, this paper makes a comprehensive and objective analysis and evaluation of the financial effects of the transformation of the company's O2O model by means of financial index analysis and principal component analysis. The research conclusion is as follows:

From the point of view of the enterprise long-term development, store shares O2O model transformation for the sustainable development of the company identified a correct development direction, start of O2O model transformation since 2013, the company actively layout is online and offline channels, expand the consumer market, built to store WeChat, micro, rainbow scarf etc on the basis of the three-dimensional electric business mode; In the offline form of department stores, supermarkets, convenience stores and other formats layout. At the same time, the company in the field of maternal and infant, finance, logistics, etc for business development, formed a relatively comprehensive system of management system, make the company's operating scale expands unceasingly, the market share and to be improved, the enterprise value through the store shares the financial indicators and comprehensive scores after a detailed analysis found that companies in the process of O2O model transformation with determination. Although the financial performance was still poor in the early stage of transformation, Rainbow shares still made great strides in the transformation of the O2O model to seize the consumer market share. After three years of exploration, the transformation effect has been prominent and the enterprise scale has been expanded. It can be found from the financial report released by Rainbow Shares that the total assets of the company in 2017 were 15.407 billion yuan, while the total assets of the year before the transformation were 9.466 billion yuan, an increase of 1.6 times. At the same time, the continuous expansion of enterprise scale and the optimization and improvement of O2O model have brought good profit performance to the enterprise. As can be seen from the net profit published in the financial report, after three years of running in and exploration, the financial effect of Rainbow shares began to show in 2017, with a significant increase in net profit. At the same time, the company further deepens the O2O mode and accelerates the exploration in the field of intelligence, thus promoting the further expansion of the enterprise scale, improving the market share and promoting the healthy development of the enterprise.

The financial index method and principal component analysis method are used to study and analyze the O2O mode transformation events of Rainbow shares. Both of them prove that the O2O mode transformation of Rainbow shares is successful, and the transformation effect has a certain lag. Through the analysis of the performance before and after the O2O mode transformation of Rainbows, it is found that when the company began to transform the O2O mode in 2013, both the financial indicators of the four dimensions and the principal component scores were negatively affected to a certain extent, and the transformation effect did not show in the short term. In order to seize the market share, Rainbow shares adopted a radical transformation mode, accelerated the layout of O2O network, expanded stores, and built a logistics system, which resulted in a large investment in the early stage, and could not immediately increase the company's income in the short term. The year 2017 began to enter the period of prominent transformation effect. The financial indicators such as return on equity and comprehensive evaluation reversed the long-term decline and began to show an upward trend.

Under the impact of e-commerce, Rainbow shares seized the opportunity, constantly explored and innovated and tested the O2O model, and kept moving forward in the process of exploration. Although the effect was not significant in the short term, it even caused some obstacles to the development of the enterprise. This running-in stage is what any enterprise will encounter in the process of transformation. The influence of lag does not represent the failure of transformation. On the contrary, the counter-trend growth after the running-in period just reflects the correctness of the O2O transformation model of Rainbow Shares.

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