

The Study on the New Retail's Emergence and Development in China

Yinyin Zhang

School of Management, Shanghai University, Shanghai, 201800 China

Abstract: *The appearance of Internet Finance not only provides great convenience for people's production and living, but also prompts retailing industry in China into a whole new look. Following, the emergence of the "New Retail" has drawn considerable attention from all over the country. This article regards the relationship between Internet Finance and the "New Retail" as a breakthrough point and bases on the "Wheel of New Retailing" theory to analyze the driving force of production and development history of the "New Retail" deeply. Investigation attributes the "New Retail" emergence and growth to the cyclical theory, which belongs to the "Wheel of New Retailing" theory. It means that the "New Retail" will innovate continuously in China and offer reference significance for retailing practitioners.*

Keywords: *Internet Finance, New Retail, Wheel of New Retail, Cycle Theory*

1. Introduction

In the 21st century with rapid technological changes and rapid economic development, people's production and lifestyles have also undergone tremendous changes, among which the change in the way of living and consumption is one of the most prominent changes. People's daily transaction media ranged from the Qin Dynasty's half and two coins to the Song Dynasty's paper currency named "Jiaozi", to the RMB¹ that can be used throughout the country today, to the electronic renminbi—the era of electronic money. This change not only contributed to the rise of electronic payment, but also promoted the rise of e-commerce retail with the help of electronic payment and occupied a leading position in the sales industry in the 21st century. Whether it is the diversified needs of the material world or the personalized pursuit of the spiritual world, it can reach the realm of "mobile phone in hand, worry-free throughout the process", all of which benefit from the emergence of Internet Finance. In the era of Internet Finance, various forms of electronic payment are emerging in endlessly. On the one hand, there is no need to hold cash when you go shopping, from branded supermarkets to small wholesale vegetable markets, and mobile phones have become an important part of the process of facilitating transactions. On the other hand, consumers can still choose the major e-commerce platforms to buy what they need under the premise of staying at home. The method of transaction can be either online payment or cash on delivery service. In short, the transaction method under the Internet financial model provides convenience for the development of all walks of life in our country.

Meanwhile, with the progress of the times, in order to pursue a higher quality of life, more and more people enter the e-commerce industry in order to seek dividends that are not available offline. In the early days of e-commerce retail, consumers could only select and purchase products from a limited number of merchants, while a small number of merchants relied on their "monopoly" status to obtain profits. However, with the continuous influx of Internet merchants, on the one hand, the competition in online retail has been intensified, and on the other hand, the profit and income of the e-commerce market has been evenly divided. With the increasingly fierce competition in the pure e-commerce industry market, the growth rate of retail sales has gradually flattened out, as shown in Figure 1:

¹ RMB: Renminbi.

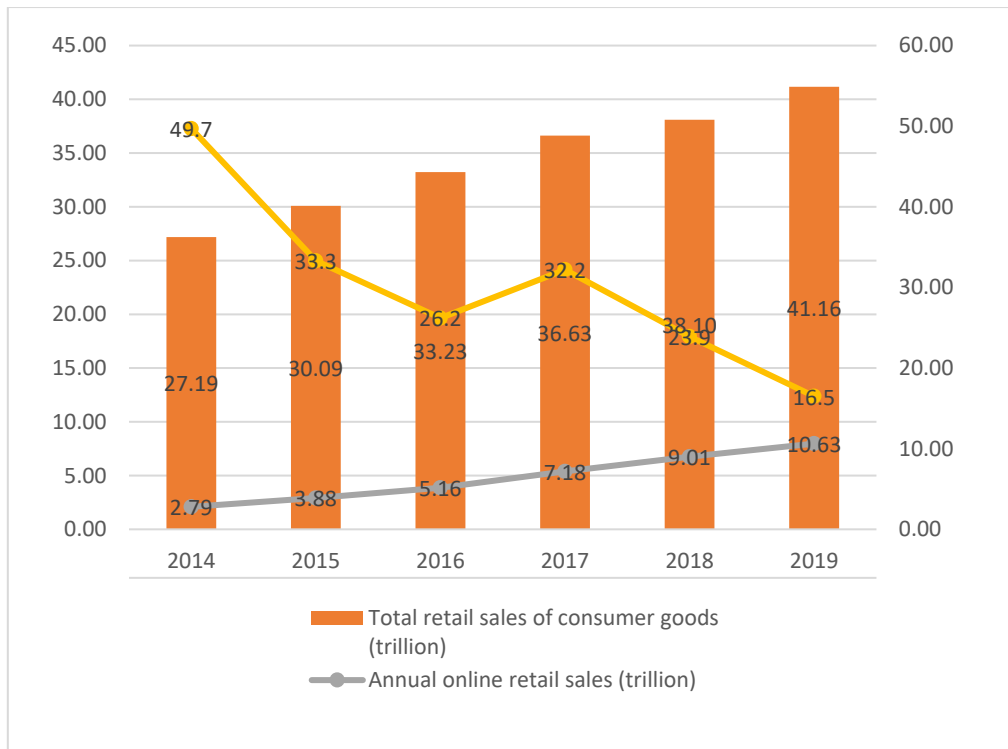


Figure 1: 2014-2018 National Retail Sales of Consumer Goods and Online Retail Sales Statistics²

It is not difficult to see from Figure 1 that in the past six years of the development of the online retail industry, both the total retail sales of consumer goods and online sales have shown a prosperous trend, but we need focus on not only the phenomenon but also the essence behind the phenomenon. On the whole, the overall growth rate of online retail sales throughout the year has shown a downward trend, from 49.7% in 2014 to 16.5% in 2019. This also shows that the development of country's e-commerce retail industry has reached the "bottleneck" period in the Internet Era. On the one hand, traditional retail is declining; on the other hand, the development path of e-commerce retail is becoming narrower. In the face of this situation, the concept of "new retail" has attracted the attention of relevant people in the retail industry once it was proposed. This also indicates that a retail model that is different from pure e-commerce is about to start, and a new wave of retailing is also about to come. Jack Ma, Chairman of the Board of Directors of Alibaba Group, put forward the concept of "new retail" for the first time at the "2016 Yunqi Conference", pointing out that online and offline and logistics must be combined to create a true new retail. Offline companies must go online, online companies must go offline, online and offline combined with modern logistics with using big data and new technologies, can truly create new retail (Cao, 2018 [1]). Currently, the growth of "new retail" is in its infancy. Although there have been some gratifying results, such as the unmanned supermarkets and vending stores launched by Alibaba Group in 2017, however, its development has limited time and space scope and limited fields, resulting in a slower growth rate. In order to have a thorough understanding of "new retail", it is necessary to start with the foundation of the growth of "new retail". Therefore, this article introduces concepts to allow readers to further understand Internet Finance and "new retail" first. With the relationship between the two as the background, In-depth analysis of the birth and development of "new retail" in our country in recent years with the help of the "wheel of new retail" as the theoretical basis, to provide theoretical support for the further growth of our country's "new retail" industry.

2. Definition and theoretical basis

2.1 Internet Finance (IF)

Internet finance refers to a new financial business model in which traditional financial institutions and Internet companies use Internet technology and information and communication technology to achieve financial communication, payment, investment and information intermediary services (Hou, et

²The data comes from the National Bureau of Statistics, the website is: <http://www.stats.gov.cn/>.

al.2016 [2]). IF is not a simple combination of the financial industry and the Internet. But on the premise of using security, mobile and other network technologies, a novel model accepted by users (especially the acceptance of e-commerce) adapt to new needs naturally. Simply, IF is a new financial model that has emerged with the rise of the Internet. Although it is a kind of networked finance, it relies on big data and cloud computing, and uses advanced networked technology to ensure the security of financial products and transactions, so as to provide rapid and convenient services for people participating in the financial industry.

Besides, IF is not only the combination of traditional financial institutions and Internet technology, but also the combination of non-financial institutions and Internet technology. Non-financial institutions mainly refer to e-commerce companies, online lending platforms in P2P models, crowdfunding online investment platforms, wealth-digging mobile wealth management apps (such as Wukong Wallet), and third-party payment platforms, etc that use Internet technology for financial operations. The most popular is the third-party payment platform. A typical representative is Alipay, the third-party payment platform of Ali Group. The emergence of Alipay has brought a huge impact to the transaction payment methods of our people. Since the emergence of Alipay, people do not need to carry cash for food, clothing, housing and transportation. Electronic payment has almost replaced cash payment. At the same time, online shopping has become faster due to the emergence of Alipay. Almost any online platform can use Alipay for payment excluding JD.com etc.), this has also become the fuse for the retail e-commerce industry to move towards the climax of the times. With the support of the IF, the development of e-commerce retail is in full swing, and more and more companies have begun to invest in this boom, which has led to increasingly fierce competition in the e-commerce retail market. Therefore, the market has gradually become saturated and profits have begun to decline. An imminent change is going to begin.

2.2 New Retail (NR)

In recent years, in the face of increasingly fierce competition in the e-commerce industry, Jack Ma proposed "NR" for the first time in his speech and pointed out that "there is no such thing as e-commerce, only NR the future decade or two decades." at the Alibaba Cloud Conference in October 2016. This is the advent of "NR". NR, which is a NR business model, means that companies rely on the Internet to upgrade and transform the production, circulation, and sales process of commodities through the use of advanced technology such as big data and artificial intelligence, reshape the business structure and ecosystem, deeply integrates online services, offline experience, and modern logistics. (Taylor, 2016 [3]). Its purpose is to apply the experience and advantages of e-commerce to physical retail, and provide consumers with high-quality, high-priced, and genuine products (Wang, et al.2016 [4]). To put it simply, "NR" is not "new" in the old and new sense. It has not changed the essence of retail. "NR" still implements the people-oriented tenet and satisfies the needs of consumers. The difference is that "NR" combines the high efficiency, cross-temporal, low-cost advantages of online services with the rich shopping experience of offline retail, and with the help of intelligent logistics services, so as to provide consumers with an unprecedented and more fulfilling shopping experience on the premise of meeting consumer needs.

2.3 Theoretical Basis

Although the concept of "NR" came out recently, some theoretical hypotheses about retail were made as early as the middle of the twentieth century. As early as 1958, Harvard University professor Melkell P. McNair put forward the hypothesis of the "wheel of retail" theory. This theory points out that emerging retailers tend to enter the market with low-cost, low-price, and low-margin "three lows" as a strategy to compete fiercely with the original retailers and gain an advantage. After success, it will continue to improve software and hardware equipment, improve the quality of operation and service level, and become the same as the retailer it replaces with the "three highs" characteristics of high cost, high price, and high gross profit. Then it will be attacked by a new batch of new entrants who also adopt the "three lows" strategy and replace them. (Zhu and Chen, 2016 [5]). Such iterative updates accompanied by technological progress and improvements in quality and service levels do not only exist in the future. At present, the large-scale retail platforms Taobao and Tmall in the era of pure e-commerce are facing the hypothesis of the "wheel of retail" theory.

The times are advancing, and various new technologies and new applications are emerging in an endless stream. The traditional "wheel of retail" theoretical hypothesis can no longer adapt to the pace of changes in the retail industry. In 1996, Japanese scholar Masao Nakanishi proposed the "Wheel of NR" theory based on the "Wheel of Retail" theory and the "Vacuum Zone" theory (Freathy, 1997). The "Wheel of NR" theory mainly explains the changing process and laws of the retail business from an industrial

perspective. Its theoretical framework consists of four elements: "technical boundary", "equivalent line", "retail price" and "retail service level". Among them, the "technical boundary line is used to describe the minimum retail price level of the retail format under a certain service level constraint. It is true that different retail prices correspond to different retail services, and the combination of the two is affected by logistics, information, technology, management level and other factors.

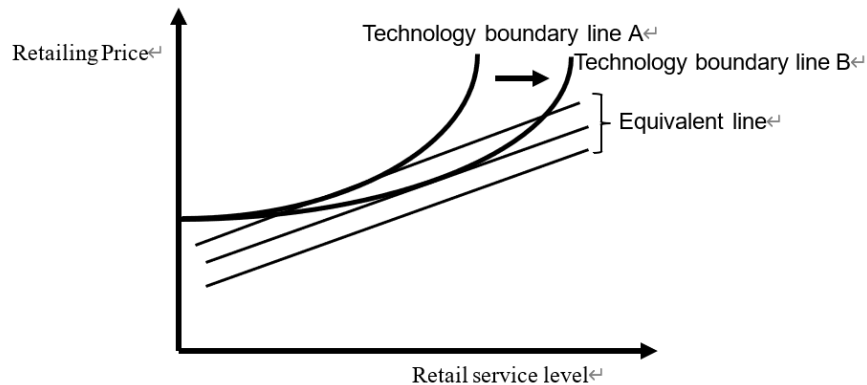


Figure 2: Schematic diagram of the theoretical changes of the "Wheel of New Retail"

As shown in Figure 2, the technology boundary line is affected by the law of diminishing returns and presents a curve extending to the upper right (such as technology boundary line A). The best combination of price and service lies on the technology boundary line. The line below it means that retail companies are adopting a low-price, low-service marketing strategy. On the contrary, if the equivalent line is located above the technical boundary line, a high-price, high-service marketing strategy is adopted. The competition between retail companies is often reflected in the combination of service and price, that is, moving on the technological boundary. However, in real life, the technological boundary line will move to the lower right along with the constraint conditions, that is, technological changes and innovations (such as technological boundary line B). At this time, NR formats have appeared. Over time, this has also formed a "new retail wheel" cycle. (Sen and Song, 2017 [7]). According to the cycle of the "new retail wheel" theory, it can be concluded that the future development of the retail industry will not be constant, nor will it be irregular. Instead, it will follow the steps of technology and iterate naturally in the future development, which will also provide a certain theoretical basis for the future development, changes and updates of our country's retail industry.

3. Opportunities for the development of "NR"

3.1 Internet finance provides a solid trading foundation for the growth of "NR"

Less than five years after the concept of "NR" was proposed, a large wave of retailers engaged in the "NR" industry has emerged in China. The most prominent among them is the stubbornness of the unmanned retail industry, such as Bingo Box, Ali's "Tao Coffee", etc. These unmanned retail businesses have been questioned from the beginning to today's steadfast landing, and they are consumed and recognized by people, which fully demonstrates the unstoppable development trend of "NR".

The rise of our country's "NR" format is closely related to the gradual improvement of IF. The emergence of IF is in line with the needs of the times. It makes various financial services more open, transparent and accessible, and further reduces the costs required for various financial operations. At the same time, it plays an important role in the development of the times. It is not so much IF, it is better to say that it is an important transaction method in people's daily life in the new era. People can make online transfers, transactions and shopping without leaving their homes with it, and they don't need to carry cash even when they go shopping. The third-party payment that can be achieved by scanning the QR code opens up more windows of opportunity for our country's network economy, at the same time improves the efficiency of the entire transaction process, and further promotes the transformation and upgrading of our country's retail industry. In the era of IF, consumers are the most profitable, followed by practitioners in all walks of life in e-commerce. Through IF, online consumers and online retailers are connected, driving the rapid transformation and upgrading of our country's retail industry. Therefore, for "NR", IF is an important cornerstone and guarantee for the growth of "NR", as well as an indispensable key link.

3.2 The implementation of "NR" is a realistic product of the development of Internet finance

With the support of Internet financial technology, the development of the "NR" industry is in full swing. According to the statistical data of the "Market Prospect Forecast and Investment Strategic Planning Analysis Report of China's Self-service Vending Industry" released by the Qianzhan Industry Research Institute, by 2022, the transaction volume of China's unmanned retail market will reach more than 1.8 trillion yuan, and the user scale will 245 million people. Just a branch of the "NR" industry has such a huge market scale, and the future "NR" will surely become the leader in the development of the retail industry. While developing, we must be aware that whether it is for traditional e-commerce, new unmanned retail stores, vending machines, or other models under the "NR" branch, electronic finance realized by the Internet Payment is the key to the conclusion of the transaction. Network-based transactions have accounted for half of the transaction methods under the "NR", and such network transactions are inseparable from the support of Internet finance. Therefore, in a certain sense, although IF is a virtualized operation, the emergence and growth of "NR" is the epitome of its actualization.

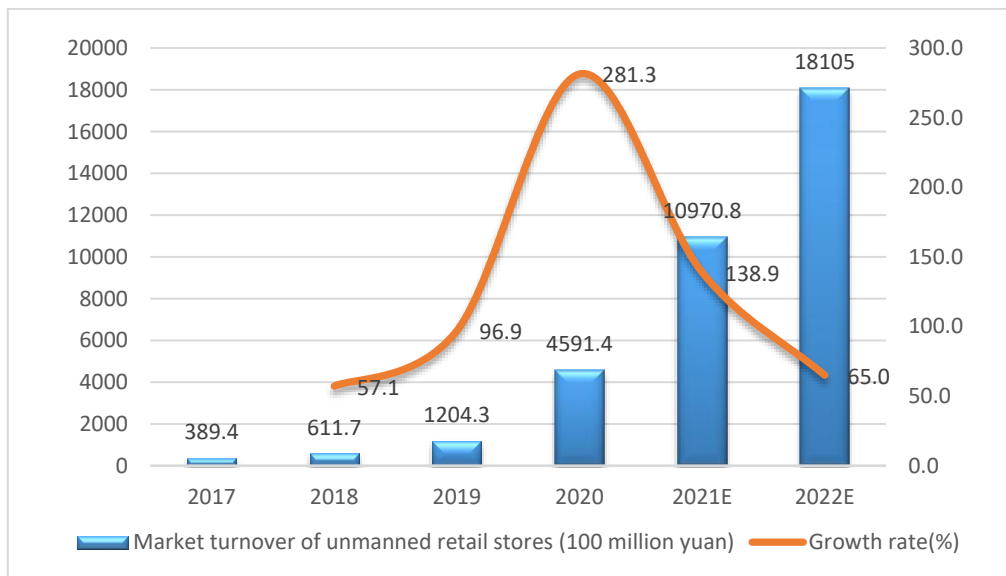


Figure 3: 2017-2022 China's unmanned retail store market transaction volume and growth forecast

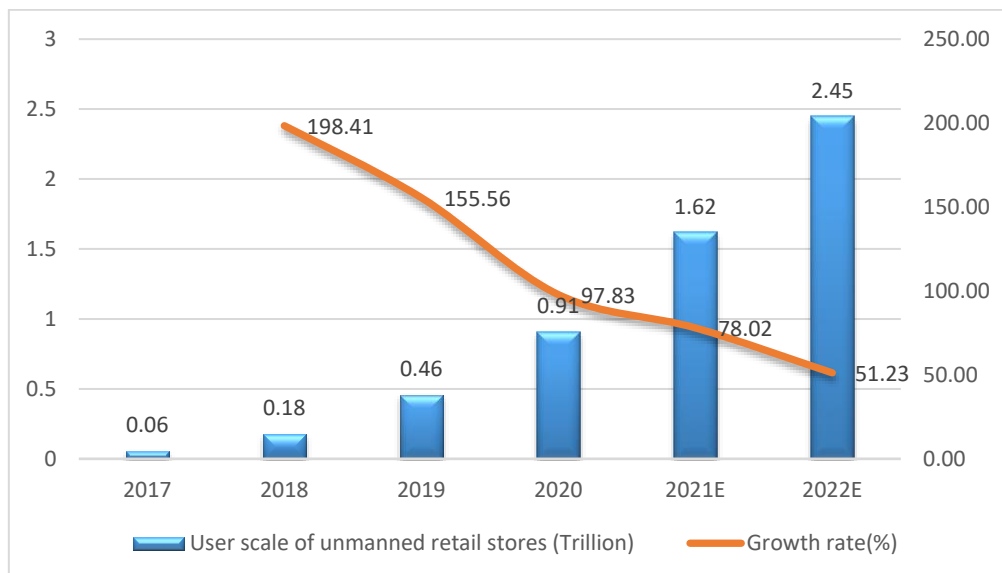


Figure 4: 2017-2022 China's unmanned retail store user scale and growth forecast

3.3 The two complement each other and are indispensable

Without internet finance, "NR" has lost the important link with consumers and cannot conclude transactions; similarly, internet finance has lost "NR", and its future development may be stagnant as a

result, and gradually return to dust accompanied by e-commerce. Therefore, for both, neither party can exist independently without the other. Only by "cooperating" with each other will the future development path be smooth sailing. With IF, the "NR" transaction method will be more in line with popular demand, allowing consumers to enjoy more efficient and convenient services and improving consumer satisfaction. Internet finance will have a steady stream of demand with "NR". With the help of the platform of "NR", IF can better play its irreplaceable role.

4. The development status of "NR"

The emergence of Internet finance has improved the efficiency of people's shopping and accelerated the frequency of shopping. It is a booster that leads the upgrading of my country's retail industry. From the traditional physical retail store model to the increasingly saturated e-commerce retail model to the future "NR" model, the transformation and development of these three models are inseparable from the support of Internet finance. Based on the theory of Internet finance and the "Wheel of New Retail", my country's retail formats have undergone earth-shaking changes, which are mainly reflected in the following aspects.

4.1 Concise payment

In the context of Internet finance, the change of transaction payment methods is the most essential feature of the reform in my country's retail industry. Traditional retail is mainly cash transactions, supplemented by card transactions, but both have the disadvantages of limited time and space, and cash has risks such as easy wear and tear and fraud. During the transaction, the two parties involved in the transaction need to spend a certain amount of time, cost and energy, which leads to the inefficiency of the transaction, and the failure of the transaction in severe cases. In the era of e-commerce retail, IF, which follows the trend of the times, has taken the initiative in transactions. Various electronic payments have begun to appear and quickly become the first choice for people's transactions. Traditional cash payments have gradually retreated to the second line.

In the era of "NR", the emergence of online electronic payments with the support of IF still dominates. The difference is that the current electronic payment presents a variety of forms, such as QR code payment, face payment, etc. Face-swiping payment refers to a new type of transaction method that allows transactions to be carried out only through facial recognition without relying on mobile phones. This transaction method is still in its infancy and is commonly used in transactions on vending machines. Compared with the scan code payment, the face payment does not require any electronic equipment, and one-click transactions can be achieved by recognizing the consumer's facial information. It is believed that in the near future, the face payment will also be favored by consumers. Until September 2020³, the scale of online shopping users in our country reached 749 million, and the scale of mobile phone online shopping users reached 747 million, accounting for 99.7% of the total online shopping users. Along with the launch of Alipay's face payment device----Dragonfly and WeChat's face payment device----frog, people enjoy the convenience brought by networked payment while also experiencing new technology belts. The unique experience that comes, thereby injecting a steady stream of vitality into the development of my country's retail industry.

4.2 Consumer-oriented

Consumers dominate, personalization is highlighted. The traditional retail industry is product-oriented, and strictly controls all links from purchasing raw materials to product manufacturing to product sales, trying to reduce the cost of each link, and ultimately achieving the goal of minimizing the production cost of its own products and maximizing profits. Its flaw is that it does not consider the real needs of consumers, but blindly follows the trend and pursues the maximization of its own profits. Regardless of whether it is e-commerce retail or "NR" era, consumers occupy an absolute leading position. Consumers in the new era are no longer satisfied with standardized living habits, and begin to pursue higher levels of consumption and quality of life, and seek personalized material and spiritual enjoyment. Therefore, traditional large-scale production can no longer meet the increasingly diversified shopping needs of consumers. In the upgrade from e-commerce retail to "NR", retailers are daring and good at grasping the pain points of consumers. Its products always follow high-quality service

³The data comes from the 45th "Statistical Report on China's Internet Development Status" issued by China Internet Information Center (CNNIC).

characteristics such as customization, virtual purchasing channels, transparent logistics services, and humanized after-sales service. Therefore, they have been unanimously praised and favored by consumers at the beginning of their birth. According to the latest 46th "Statistical Report on Internet Development in China" released by the China Internet Network Information Center, as of September 2020, the number of online shopping users in our country has reached 749 million, an increase of 39.12 million compared to March 2020. It accounts for 79.7% of the total netizens, and more and more consumers are entering e-commerce retail and are beginning to be exposed to "NR". In addition, after the transformation, retail merchants start from themselves and do their best to create an atmosphere where consumers' needs are paramount. Everything is based on the needs of customers, and truly "customers are God", with their own sincere attitudes and perfect products and quality services firmly grasp the hearts of consumers, and also grasp the lifeblood of the development of the retail industry.

4.3 Lower cost

Along with the transformation and upgrading of the retail industry, it has also promoted the reduction of operating costs in the retail industry. Traditional offline retail often requires a lot of manpower, material resources, and time management costs. The time and location are fixed, and at the same time, it also pays expensive shop rents. Therefore, offline retail can hardly obtain the price advantage in cost. After the transformation, e-commerce retail occupies a sufficient price advantage. For example, e-commerce retail does not require shop rent. Products are displayed on shopping websites in the form of pictures. Consumers can browse the products they want to buy through mobile phones or computers. At the same time, you can shop around, and finally choose the right product, and the time and space are unlimited. You can place an order online 24 hours a day, and you can buy everything from overseas shopping and overseas purchases. Moreover, in the e-commerce retail industry, whether it is a large retail mall or a private store, there is no need for a large number of workers to be guarded 24 hours a day. It only needs to upload product pictures and do the layout work when the store is created. Normally, only store customer service and customer communication, the store can be open 24 hours a day and do a good job of receiving customers. However, e-commerce retail also has its inevitable congenital defects. It not only requires human customer service to answer questions for consumers, but also considers logistics and transportation costs, which increases the burden of e-commerce retail. The "NR" has truly achieved cost reductions, a one-time arrangement of shopping malls, through the use of advanced technologies such as big data, artificial intelligence, cloud computing, and only a small amount of labor costs can achieve the purpose of transactions, and enrich consumers' shopping experience, not only made profits but also gained a good reputation.

4.4 Logistics convenience

In the traditional retail industry, the role of the logistics industry has not been highlighted. With the rise of e-commerce retail, the logistics industry has become an important bridge between the retail industry and consumers. Its emergence has made e-commerce retail Industry is more complete. The traditional retail industry is limited by time and space, so its radiation range is limited to consumers around the store. Consumers experience the products firsthand and choose what they like to buy, and then the consumers themselves decide how to carry the products. To a certain extent, this also brings inconvenience to consumers, which affects consumers' shopping emotions. While bearing the pain of walking, it also increases the burden on themselves, which will also reduce customer satisfaction. In the era of e-commerce retail, convenient logistics services will provide consumers with convenient home delivery services. This also saves consumers a lot of physical energy and energy, but the consumption experience that affects the shopping experience of consumers due to the slow logistics speed has put an indelible stain on the e-commerce retail, thereby greatly reducing the e-commerce retail reputation. In the new "NR" era, people have more diversified channels for purchasing goods. A typical representative is the "in-store pickup" service launched by Uniqlo. Consumers place orders online and can go to nearby offline stores without waiting for cargo pickup service. It not only shortens the time for consumers to receive goods, but also enriches the shopping experience of consumers, then can buy desirable products. Another example is a vending machine. Consumers can experience the service of picking and receiving goods immediately. At the same time, offline unmanned retail stores urgently need the cooperation of logistics services that arrive on the same day or even within a few hours, which also promotes the upgrading of my country's logistics industry to meet the needs of consumers in the new era.

4.5 Resource integration

Driven by the Internet financial environment, the resources of my country's retail industry have been further integrated. The traditional retail industry is no longer suitable for the emerging networked retail era, let alone the "NR" era. Instead, it is a cooperative and win-win model. This is because the decentralization of resources is not conducive to enhancing mutual communication between merchants, and will increase the cost of trade between partners. Therefore, the model of win-win cooperation has been unanimously affirmed by retailers in the e-commerce retail era and has gained widespread popularity. From daily life, we can understand that online retailers did not appear in the public's vision with a single face from the beginning, but appeared as a comprehensive shopping platform after integrating resources online, such as Tmall, Taobao and other resource integration platforms, and provide merchants with free deposit and some technical support. This way, on the one hand, it reduces the financial and technical pressure for small and medium businesses to enter the platform, and on the other hand, the comprehensive platform also provides convenience for consumers to shop. Consumers don't need to cross-platform to buy the products they need. They only need to find the products in the search bar of the platform to place an order, and they can fully realize overseas shopping and overseas purchase. This is also one of the unparalleled advantages of the traditional retail industry. Secondly, in the "NR" era, merchants pay more attention to the importance of resource integration. For example, the unmanned retail store represents Ali's "Tao Coffee", which integrates shopping and catering. It not only meets consumers' dietary needs, but also meets consumers' shopping needs, and maximizes benefits. In the future retail era, resource integration is still the general trend of the times. Only by following the development trend of the times can it occupy a place in the new era.

5. Research conclusions and prospects

The popularization of IF has provided continuous power support for the transformation and upgrading of the retail industry. Cloud computing and big data technology have laid a solid foundation for information and data for the emergence and development of "NR", and blockchain technology is firmly locked in. Based on data and prevent deliberate destruction by others, the emergence of artificial intelligence is to escort the "NR", and everything is moving in the direction that is conducive to the development of the "NR" industry. But, after all, "NR" is in its infancy. The "online + offline + logistics" model requires us not only to pay attention to the technical means or models directly related to "NR", but also to understand the retail industry behind these technologies, that is the essence of the commodity itself. Such as the quality of goods, this defect still exists in e-commerce retail at present. As a new model of e-commerce retail, it is necessary to consider potential key issues more from the source and solve fundamentally. In this way, the "NR" in the future is the "NR" that can meet the needs of consumers with high quality and high efficiency in the true sense.

Driven by the IF model, the transformation and upgrading of the retail industry has become inevitable, but "NR" may not be the final retail format. On the basis of the circular theory of "the wheel of NR", the innovation of various technologies will still promote the various retail industries to explore emerging retail models under fierce competition. From today's perspective, the "NR" model will soon dominate the retail industry, and online and offline will also present a trend of integration and symbiosis. Perhaps a new social profession will follow suit and never do so. The society provides more jobs and alleviates the employment pressure of the society. And along with the cycle theory, the needs of consumers will be more diversified in the future, and living standards and quality will also be greatly improved and improved.

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