

Chinese Consumers' Satisfaction with Online Shopping Platforms

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Abstract: With the rapid development of Internet technology, China's online shopping industry is also expanding rapidly, becoming an important part of global e-commerce. This article investigates Chinese consumers' satisfaction levels with Taobao, Jingdong (JD.com), and Pinduoduo, three of the country's most popular e-commerce sites. The article reviews the historical development of these platforms, their market positioning, and some of the unique spending habits of Chinese consumers. This paper analyzes several key factors that affect consumer satisfaction, including delivery accuracy, price, information quality, payment convenience, and security. The way that these aspects are handled by each platform greatly affects the buying experience of users. Technological innovations on platforms such as Taobao, such as AI-driven recommendations, have dramatically improved user experience and satisfaction. Jingdong has improved its delivery efficiency and customer satisfaction by building its own logistics system, and Pinduoduo's logistics are both slightly inadequate in comparison. However, Jingdong's logistics during peak hours still needs to be improved. The paper also points out that while price is a very important factor for consumers when choosing a platform, Pinduoduo still needs to find a balance between low price and service quality. Lastly, future studies can explore how cross-border e-commerce and the behavioral inclinations of various user groups could impact the platform's subsequent development stage. These findings suggest that continued attention to these factors can provide online shopping platforms with strategies to increase consumer satisfaction and improve service quality, as well as provide new ideas for academic research.

Keywords: Chinese Consumers; Online Shopping Platforms; Consumer Satisfaction; Accuracy of Delivery; Delivery Price; Quality of Information; Convenience of Payment; Security of Payment

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1. Introduction

With the rapid development and popularization of Internet technology, China's online shopping industry has experienced an amazing metamorphosis from scratch, from small to large, and has now become an important force in global e-commerce (Wu et al., 2021). The emergence of this industry has not only greatly changed people's lifestyle and consumption pattern, but also provided a strong driving force for the rapid development of China's economy^[1].

In terms of the history of online shopping, China's online shopping industry has actually developed relatively early, starting in the late 1990s, with the establishment of Taobao.com in 2003 officially kicking off C2C e-commerce (Li et al., 2020). Since 2010, the rise of cell phone shopping has allowed consumers to shop more easily and conveniently, which has greatly enhanced the shopping experience (Li, Xuan, & Chen, 2024)^[2]. Meanwhile, the introduction of new channels such as social media and short video platforms has also boosted the e-commerce industry (Guan & Zhou, 2024). New business models like social e-commerce and live streaming of products have made shopping easier and more engaging, which has accelerated the industry's growth.

Second, in terms of e-shopping market size, China has become one of the world's major e-tailing markets in recent years (Duan, Jiang, & Qi, 2024)^[3-6]. The total online sales of China's top 100 e-tailing enterprises reached 1.91 trillion yuan in 2024, according to the most recent statistics (Qiu et al., 2024). This number shows how big the e-commerce market is in China and how quickly the sector is expanding. Due to their combined advantages in product variety, price competitiveness, user trust, and after-sales service, companies like Taobao, Jingdong, and Pinduoduo have drawn a sizable number of customers (Dong et al., 2024)^[7-8]. In the meantime, as platforms for short videos have grown in popularity, e-commerce platforms like Douyin have also quickly

xpanded thanks to their distinctive algorithmic recommendation engine and robust content ecosystem, making them an emergent force to be reckoned with (Shi, 2024).

Then, in terms of consumption characteristics, Chinese consumers show unique consumption characteristics in online shopping. On the one hand, they focus on the diversity of commodity choices and price advantages. Online shopping platforms provide a wide range of goods and clear pricing information, enabling consumers to evaluate the cost and quality of various goods and make more informed purchasing decisions^[9-13]. However, they also enjoy the ease and convenience of shopping^[14]. With the continuous improvement of mobile payment, logistics and distribution infrastructure, consumers can complete the shopping process anytime and anywhere and enjoy a convenient and efficient shopping experience (Huang & Kumarasinghe, 2024)^[15]. In addition, Chinese consumers also show a strong sense of identification with national brands. In recent years, as the quality of national products continues to improve and cultural self-confidence grows, Chinese consumers are choosing to buy national products. According to the Blue Book on the Development of Digital Consumption Powered by the Internet, the percentage of users who have purchased national products is close to 60%, and more than 60% of national product users believe that the quality of national products is no longer inferior to foreign brands (Yang & Chaiyasoonthorn, 2024).

Additionally, one of the primary drivers of China's e-tailing industry's growth is technological innovation. In recent years, the extensive application of technologies such as big data, cloud computing, and artificial intelligence has led to unprecedented changes in the field of e-commerce^[16-18]. Through intelligent recommendation algorithms, e-commerce platforms can accurately match user needs and product information to improve shopping conversion rates and satisfaction. At the same time, logistics distribution and commodity traceability are made more intelligent through the use of blockchain and Internet of Things technologies (Li & He, 2024). This not only provides a better development environment for e-commerce enterprises, but also injects a new impetus for the high-quality development of China's economy (Wu et al., 2021)^[19].

2. China's Online Shopping Platforms

Competitors in China's online retail market are increasingly diverse. The business is becoming more and more diverse. Comprehensive e-commerce platforms represented by Taobao, Jingdong, and Pinduoduo dominate the market. These platforms have won the favor of a large number of consumers by virtue of their rich variety of goods, convenient shopping process, perfect after-sales service system, and strong logistics and distribution capabilities (Gulfraz et al., 2022). According to current data, Alibaba's Taobao still maintains its dominant position in China's e-commerce sector in 2023, with a market share of about 50.8 percent. It is closely followed by Jingdong with 15.9% of the market share, while Pinduoduo is in third place with 13.2% (Xie & Nallalathan, 2024). Pinduoduo has been growing at an exceptionally fast rate in recent years, and its revenue growth rate of 63% in 2023 clearly outpaces other e-commerce platforms^[20-23]. In comparison, Jingdong's growth rate is 4.7%, while Alibaba's is 8%. This market landscape suggests that while Taobao remains the industry giant, the rapid rise of Pinduoduo is particularly notable^[24]. Pinduoduo is particularly popular in third- and fourth-tier cities, relying on its social e-commerce and low-pricing strategies. In addition, Jingdong has won over high-end consumers with its high-quality products and fast logistics services (Wang, 2024)^[25].

2.1 Taobao

Founded in 2003, Taobao is an important part of Alibaba Group. Taobao has become the leader in China's e-commerce market with its rich product assortment, convenient shopping experience, and comprehensive payment system (Pfadler et al., 2020). As of 2023, Taobao's monthly active users have exceeded 895 million, occupying 50.8% of China's e-commerce market share, far exceeding other competitors (Fangqingyun, 2023). These figures fully demonstrate Taobao's dominant position. Taobao, the biggest C2C marketplace in China, offers a vast array of options for anything from electronics and clothes to everyday necessities, meeting nearly all of the needs of consumers. In addition, Taobao offers individual merchants the opportunity to display and sell their products, providing a platform for many small and medium-sized enterprises (SMEs) and individual entrepreneurs. Through Alibaba's ecosystem, Taobao realizes a full range of services from product display to logistics and distribution (Zhang & Nuangjamnong, 2022)^[26-30].

Taobao's development is significantly influenced by customer satisfaction. Additionally, Taobao's evaluation system also provides consumers with a reference for purchasing decisions and makes users more assured in the shopping process. This system not only improves consumer satisfaction, but also enhances the competitiveness of merchants (Liu & Zhang, 2024).

In terms of technology, Taobao has significantly improved the user experience in cloud computing and artificial intelligence. For example, Taobao's personalized recommendation system is able to provide users with accurate product recommendations by analyzing their shopping habits and behavioral data. This not only increases user stickiness, but also improves the platform's conversion rate (Pfadler et al., 2020). Taobao's intelligent customer service system also uses artificial intelligence technology to automate customer service, greatly reducing user waiting time and improving service efficiency.

In terms of marketing, Taobao has successfully expanded its user base and increased sales on the platform through large-scale promotions and diversified marketing tactics (Quan, 2021). For instance, Taobao transformed the typical November 11 holiday into the popular "Double Eleven" shopping event, drawing throngs of shoppers annually and establishing itself as one of China's most well-known online shopping occasions.

Taobao's success also lies in its keen insight into market changes. With the rise of short videos and live e-commerce, Taobao has quickly adapted to this trend by introducing features such as Taobao Live. This innovation allows merchants to interact directly with consumers through live streaming, thus increasing consumer engagement and desire to buy^[31-35]. In addition to drawing a sizable user base of younger consumers, Taobao's initiative has also sparked reform throughout the sector (Rungruangjit, 2022).

In conclusion, Taobao continues to maintain its leading position in China's e-commerce market by virtue of its strong market share, rich product assortment, innovative technological applications and increasing consumer satisfaction. It is believed that as the market continues to change and consumer needs diversify, Taobao will continue to consolidate its leadership in the e-commerce space through technological innovation and market strategy adjustments.

2.2 Jingdong

Jingdong is a well-known B2C e-commerce platform in China, founded in 2004 (Wang, 2021)^[36-38]. Particularly in terms of big-ticket items and electronic products, Jingdong is known for its efficient logistics and distribution and high-quality products. Jingdong has a nationwide self-owned logistics system that allows it to quickly deliver goods to customers. As of 2023^[39-41], Jingdong has over 500 million active users and a market share of 25.5% (Yunlin, 2023).

Jingdong owes much of its success to its logistics system. Unlike the logistics of other platforms, Jingdong builds its own logistics, and while building its own logistics can cost the company a lot of money and time, it puts Jingdong at the forefront of speed of delivery of goods and after-sales service (Dong & Chamchang, 2021)^[42-45]. For example, Jingdong's "Jingdong to Home" service can deliver goods to consumers in just a few hours. Jingdong also provides comprehensive after-sales service, and users' after-sales problems can usually be solved quickly (Fang, 2023).

Technological innovation is also an important factor in Jingdong's success. In recent years, Jingdong has invested heavily in cloud computing, big data and artificial intelligence (Yunlin, 2023). For example, based on customers' browsing and purchasing habits, Jingdong's intelligent recommendation engine can provide tailored product recommendations. In addition, Jingdong has introduced intelligent customer service robots, which have greatly improved the efficiency and quality of customer service. In terms of logistics, Jingdong uses big data analysis to optimize delivery routes, further improving delivery efficiency (Dong & Chamchang, 2021)^[46].

In terms of marketing, Jingdong has attracted a large number of users through diversified marketing strategies. For example, JD.com's "618" shopping festival has developed into a carnival shopping festival as big as "Double 11". Through large-scale promotions and precise advertising, Jingdong has successfully expanded its user base and increased platform sales (Fang & Huang, 2020). It is anticipated that Jingdong would maintain a significant portion of the Chinese e-commerce market in the future due to its robust logistics infrastructure, superior merchandise services, cutting-edge technological innovations, and varied marketing strategies.

2.3 Pinduoduo

Pinduoduo is a relatively new e-commerce platform founded in 2015, which owes its success to a unique "Group Together" model that allows users to share Group Together links. Users can purchase goods at a discounted price or receive cash rewards for sharing the link. This strategy is particularly popular with price-sensitive consumers, especially in lower-tier cities and rural markets. Pinduoduo has won a large number of users by leveraging the power of social networks and its unique "group" model. By 2023, Pinduoduo will have over 400 million active users and a market share of 13.8% (Yifeng, 2024). It can be said that Pinduoduo deeply understands users' needs, accurately positions itself in the sinking market, and the prices and marketing

strategies on the platform are in line with the consumption habits and levels of the target users, so that users can buy high-quality goods at lower prices^[47-50].

Pinduoduo has also adopted unique strategies in marketing. For example, Pinduoduo has attracted a large number of users to participate in group purchases through its deep integration with WeChat and other social media. Pinduoduo also increases the platform's exposure and user stickiness through a large number of advertisements and promotions (Zhou, 2021). Especially during the holiday season, Pinduoduo further increases users' shopping enthusiasm through large-scale promotions.

Despite Pinduoduo's great success in the market, its low-priced strategy also poses some challenges. For example, the quality of some goods on the platform varies, leading to some consumer dissatisfaction. In addition, Pinduoduo's low price strategy may put some pressure on the platform's profitability while increasing the number of users (Bie, 2020). Therefore, in order to maintain customer loyalty, Pinduoduo must continue to offer low prices while improving the quality of its products and services. Pinduoduo's low price strategy, technological innovation, creative social e-commerce model and keen market positioning have all contributed to its rapid rise in China's e-commerce field (Yoon & Tan, 2022). However, as market competition intensifies, Pinduoduo needs to maintain its competitive advantage through technological innovation and improved user experience.

3. Chinese Consumers' Satisfaction with Online Shopping Platforms

In order to delve into the determinants of consumer satisfaction, many scholars have made studies. Satisfaction is often considered as the emotional response consumers have after experiencing a service or product compared to their expectations (Palacios & Jun, 2020). Simply put, if the service or good performs better than expected, consumers will be satisfied, and vice versa. Some studies have found that consumer satisfaction is actually the overall feeling consumers have when using a product or service, and this feeling will directly affect whether they will choose the platform again (Lim et al., 2021). Therefore, it is very important for e-commerce platforms to understand these factors affecting satisfaction to retain users, improve competitiveness, and optimize services. Studies have shown that consumer satisfaction with online shopping platforms is mainly affected by five aspects: delivery accuracy, delivery price^[51-54], information quality, payment convenience, and payment security (Chen & Wu, 2023). With the rapid development of these platforms, Taobao, Jingdong, and Pinduoduo, in China's e-commerce market, consumers' needs and expectations of them are increasing. To better understand Chinese consumers' satisfaction with these platforms, the next section analyzes the specific consumer experience and satisfaction situation in terms of the five key aspects mentioned above.

3.1 Delivery Accuracy

Delivery accuracy is one of the core factors affecting consumer satisfaction. Delivery accuracy refers to the ability of goods to be delivered on time, at the time and place agreed upon by the consumer, and by the order information. Consumers expect goods to not only arrive on time but also match the description of the order. Research has found that if courier systems fail to deliver on time, consumer satisfaction decreases significantly, which in turn affects the platform's reputation and user loyalty (Du & Wang, 2022). Furthermore, according to certain research, customers' trust in the platform declines and may even have an impact on their decision to make future purchases if they receive delayed or untimely deliveries (Tzeng et al., 2021). This explains why, following a bad delivery experience, some customers switch to platforms with better logistics performance. In China, consumers place great importance on whether their purchases are delivered on time and by the order information. In this sense, the purchasing experience is directly related to the development of e-commerce platforms (Dias et al., 2021). With the continuous development of logistics technology, major online marketplaces such as JD.com and Taobao have been able to offer next-day delivery services nationwide, greatly improving the customer experience when shopping^[55].

The accuracy of delivery is not only about speed but also related to the cooperation of the entire logistics supply chain. The platform has to ensure that every step from the warehouse, and sorting to distribution goes smoothly to avoid delays or errors in transportation. Because of the complexity of the process, platforms need to spend a lot of resources and technology to optimize, especially when there is a sudden increase in orders. Optimizing the logistics supply chain is critical for platforms to improve delivery accuracy. However, certain platforms have shortcomings when it comes to delivery accuracy. For instance, Pinduoduo's low pricing has drawn a lot of customers, but because most of its logistics partners are outside companies, delivery accuracy can occasionally be problematic. For consumers, delayed or incorrect deliveries can lead to great dissatisfaction and may affect their trust in the platform. Therefore, logistics and distribution are one of the shortcomings of Pinduoduo^[56].

Logistics accuracy doesn't just mean delivering on time, but also ensuring the integrity and accuracy of the goods. For example, consumers want to receive something that matches the description they gave when they placed the order, and that there are no missing items or quality issues. These issues often trigger negative feedback from consumers, which affects the platform's brand image and market reputation (Moon et al., 2021). Jingdong's self-owned logistics is a unique presence, and most consumers are satisfied with it, mainly because of its fast delivery and good service. Self-managed logistics have the advantage of allowing the platform to oversee the entire delivery process, guaranteeing that every detail is in order^[57-60]. This not only allows goods to be delivered more efficiently, but also reduces the chances of errors, giving users a better experience. However, some consumers believe that delivery times on online shopping platforms increase significantly during promotional events such as the Double Eleven Shopping Festival. Although most users are satisfied with Jingdong's self-managed logistics, it is still slow during peak periods (ENKHTUYA & Kang, 2024).

One of the main elements influencing customers' happiness with online buying platforms is delivery accuracy. To solve these problems, online shopping platforms can optimize their intelligent logistics systems to detect and solve possible delivery problems in advance through real-time monitoring and forecasting, ensuring fast and accurate delivery services even during peak periods. In addition, online shopping platforms can also provide more personalized delivery services, such as timed delivery and designated delivery personnel, which can also improve consumer satisfaction (Xi et al., 2020).

3.2 Distribution Prices

One thing that consumers consider when choosing an online shopping platform is the cost of delivery. Simply put, it is the cost that the consumer pays to have the item delivered to his or her home. On e-commerce platforms, low or even free delivery services tend to attract more users, especially those who are price sensitive. One of the most important tools for platforms to increase their competitiveness in the market is the availability of free delivery, which has been demonstrated by research to be prioritized by many customers when they buy for goods (Saha et al., 2020). For instance, Taobao's mass delivery approach draws a lot of consumers, particularly during shopping festivals when free delivery becomes the standard.

The reasonableness of the delivery price is not only reflected in the absolute price but also in consumers' psychological expectations of the price. If the delivery cost exceeds their expectations, consumers may hesitate to buy even if the difference is small. Especially in the case of small orders, the high proportion of delivery costs relative to the price of goods is likely to trigger consumer dissatisfaction. Therefore, e-commerce platforms usually offer free delivery for a certain spending amount as a way to encourage more order fulfillment (de Magalhães, 2021)^[61-65]. However, not all consumers are happy with the price of delivery. For consumers living in remote areas, delivery costs can be much higher than in urban areas. This price difference can also trigger dissatisfaction among some consumers, who may feel that the platform is not treating all users fairly. In addition, when they buy small items, some customers feel that even very cheap delivery costs are not worth it (Tokar et al., 2020).

The relationship between delivery price and service quality is also very close. For high-income consumers, they are more willing to pay higher delivery costs in exchange for faster logistics and better service. Such consumers value the speed of delivery, the safety of goods, and the service experience during delivery (Rossolov et al., 2021). Therefore, platforms need to balance the needs of different consumer groups when formulating takeaway pricing strategies^[66]. In the future, with the further development of logistics technology and the intensification of competition, e-commerce platforms can reduce costs through smarter delivery programs, thus providing consumers with more competitive delivery prices. In order to accommodate the various demands of customers, platforms can also offer more adaptable delivery price schemes for various locations and consumption patterns.

3.3 Quality of Information

Information quality is very important, and it directly affects consumers' purchasing decisions and trust in online shopping platforms. Information quality refers to the accuracy, completeness, and reliability of all product-related information that consumers can see when shopping, such as product descriptions, pictures, and user reviews. For consumers, clear and truthful information can reduce the uncertainty of their purchases, thus enhancing the shopping experience and satisfaction. On the contrary, if the information is vague or untrue, consumers will be confused or misled, which in turn affects the purchase decision (Kim et al., 2021). Since customers cannot physically see and feel the things while they are shopping online^[67-69], the quality of the information they receive—such as the number, clarity, and quality of product images—becomes crucial in determining what they decide to buy (Madiawati et al.)

The authenticity of the information about the goods is also important. If this information does not match the real thing, consumers will feel cheated and thus reduce their trust in the platform. Therefore, platforms need to ensure that every piece of information provided by merchants is verified to minimize the occurrence of misleading information (Qalati et al., 2021). Take the Taobao platform as an example, the platform has won the trust of many consumers with its strict merchant access mechanism and detailed display of product information. Most consumers are satisfied with the quality of information on the Taobao platform, a result that reflects the important impact of information transparency and authenticity on consumer satisfaction (Rahman et al., 2022).

However, information quality varies widely across platforms. For example, some small e-commerce platforms lack a strict auditing mechanism, which leads to the occurrence of some cases in which the description of goods does not match the real thing, and the pictures do not match the real thing. These information quality issues directly affect consumers' purchasing experience and may lead to a loss of trust in the platform. Research has indicated that a significant determinant of information quality is the veracity of user evaluations. Many people read the reviews of other users to judge the quality and actual use of goods before placing an order. If there are false reviews, consumers may have the wrong perception of the goods, which in turn affects their purchasing decisions. Platforms can use machine learning to filter user reviews, eliminate fake reviews, and improve the authenticity and accuracy of the information they contain (Hallikainen et al., 2022). In short, the platform must strengthen the supervision of merchants to ensure the authenticity and correctness of product information, so as to improve the quality of information. It also utilizes big data and artificial intelligence technology to screen user reviews and remove false reviews to improve the quality of information and consumer trust on the platform.

3.4 Ease of Payment

Payment convenience is one of the most important factors influencing consumers' choice of online shopping platforms. Ease of payment refers to the ease with which consumers can complete their payments while shopping. A good payment system should be fast, simple and secure so that users can easily complete the transaction without spending too much time and effort (Melović et al., 2021)^[70-72]. With the popularity of mobile payments, more and more Chinese consumers are relying on convenient payment methods such as Alipay and WeChat Pay. The payment process is simple and fast, which directly enhances consumers' shopping experience.

According to the study, the diversity of payment methods is also an important part of payment convenience. Consumers expect to be able to choose payment tools they are familiar with, whether through bank cards, Alipay, WeChat, credit cards or e-wallets, and the diversity of payment systems directly affects consumer satisfaction with the platform. A wider range of payment options not only makes consumers feel convenient, but also enhances their trust in the platform (Çera et al., 2020). Large e-commerce platforms, such as Taobao and Jingdong, perform particularly well in terms of payment diversity, as these platforms integrate a variety of payment options, allowing consumers to choose the most convenient payment method according to their needs. Many consumers are satisfied with Taobao's payment methods, mainly because Taobao has an independent payment software, Alipay, which allows you to add bank cards and credit cards from major banks for a variety of payment methods.

Consumers also value the smoothness of the payment process. The optimal payment procedure should aim to reduce superfluous processes and maintain a straightforward and comprehensible operation. Especially in mobile payment, platforms need to optimize the interface design and user interaction so that consumers can complete the payment in a few clicks. Such a simplified process can effectively avoid payment interruptions due to complicated operations and enhance user experience and platform satisfaction (Alzoubi et al., 2022). However, some consumers are not satisfied with the payment experience of some small platforms. Some platforms do not have enough payment options, which seriously affects the shopping experience of consumers (Nababan et al., 2021). To address these issues, small online shopping platforms can consider partnering with third-party payment platforms, which can provide more payment options and increase user satisfaction. Some online shopping platforms can simplify the payment process to give users a more convenient and faster payment experience (Daroch et al., 2021).

3.5 Payment Security

Payment security is also a very important aspect of online shopping. Against the backdrop of increasing cases of online fraud and the growing demand for secure transactions, consumers are increasingly focusing on payment security. Payment security refers to the ability of the platform to adopt technical means to protect user payment information from cyber-attacks or data leakage during the online shopping process. Good payment security is not only reflected in the transaction process but also

includes the confidentiality of personal information and account security. Consumers are most concerned about whether payment information can be properly protected from being intercepted or stolen by malicious attackers during payment (Indiani & Fahik, 2020).

In terms of payment security, large platforms such as Jingdong and Taobao have taken a variety of measures to ensure transaction security. For example, these platforms use multiple authentication mechanisms and encryption to protect users' payment information from being leaked. Through these measures, these platforms not only enhance consumers' trust, but also improve their shopping experience. Research shows that multiple authentication mechanisms and encryption are the most common payment security methods today. Multiple verification mechanisms further ensure authentication during the payment process by requiring users to enter passwords, SMS verification codes or use fingerprint recognition. Encryption technology, on the other hand, encrypts the user's payment information so that even if the data is intercepted during transmission, attackers cannot decipher or crack it. These protective measures can effectively reduce payment risks and enhance consumers' sense of payment security (Ardiansah et al., 2020).

According to the survey, about 70% of consumers are satisfied with the payment security of large platforms. However, some small e-commerce platforms have not invested enough in payment security, resulting in some risks for consumers during the payment process. This insecurity may seriously affect consumers' trust and satisfaction with the platforms (Sahi et al., 2022). Research shows that payment security involves not only protection at the technical level, but also the establishment of a risk control system for the platform. A good risk control system can utilize machine learning to track customers' payment habits in real time, spot anomalous transactions, and stop them. Such a system can detect and deal with potential security threats in a timely manner, thus effectively preventing fraudulent transactions and safeguarding consumer funds (Mombeuil & Uhde, 2021). Therefore, in order to strengthen payment security, platforms need to continuously update and optimize security technologies, introduce smarter risk control systems, and ensure data security during transactions. At the same time, platforms should also strengthen user education to help consumers improve their security awareness and avoid security problems caused by improper operation.

3.6 References to Customer Satisfaction Factors

According to the reference data in the Figure 1, consumers' satisfaction with online shopping platforms is mainly affected by five key factors: delivery accuracy, delivery price, information quality, payment convenience and payment security. Together, these factors influence consumers' overall satisfaction with online retailers; The relevant studies are listed in the References section below.

Aspect	References
Accuracy of Delivery	Dias, E. G., Oliveira, L. K. D., & Isler, C. A. (2021). Assessing the effects of delivery attributes on e-shopping consumer behaviour. <i>Sustainability</i> , 14(1), 13. https://doi.org/10.3390/su14010013 Du, J., & Wang, X. (2022). Matching model for multiple delivery methods in last-mile delivery for online shopping. <i>Transportation Research Record</i> , 267(1), 556-572. https://doi.org/10.1177/03611981211036361 ENKHTUYA, E., & Kang, M. J. (2024). The Effect of Delivery Service Quality in Online Shopping Mall on Customer Value, Customer Trust, and Relationship Persistence Intention. <i>International Journal of Internet, Broadcasting and Communication</i> , 16(1), 215-225. https://www.earticle.net/Article/A445428 Indrayani, R. (2021). Identify consumer behavior in choosing delivery services in shopping in the digital era. <i>Journal of Research in Business, Economics, and Education</i> , 3(6), 198-203. Moon, N. N., Talha, I. M., & Salehin, I. (2021). An advanced intelligence system in customer online shopping behavior and satisfaction analysis. <i>Current Research in Behavioral Sciences</i> , 2, 100051. https://doi.org/10.1016/j.orbeha.2021.100051 Tzeng, S. Y., Ertz, M., Jo, M. S., & Sangöllü, E. (2021). Factors affecting customer satisfaction on online shopping holiday. <i>Marketing Intelligence & Planning</i> , 39(4), 516-532. https://doi.org/10.1108/MIP-08-2020-0346 Xi, G., Cao, X., & Zhen, F. (2020). The impacts of same day delivery online shopping on local store shopping in Nanjing, China. <i>Transportation Research Part A: Policy and Practice</i> , 136, 35-47. https://doi.org/10.1016/j.tra.2020.03.030
Delivery Price	Mofokeng, T. E. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. <i>Cogent Business & Management</i> , 8(1), 1968206. https://doi.org/10.1080/23311975.2021.1968206 Rossolov, A., Rossolova, H., & Holguin-Veras, J. (2021). Online and in-store purchase behavior: shopping channel choice in a developing economy. <i>Transportation</i> , 48(6), 3143-3179. https://doi.org/10.1007/s11116-020-10163-3 Saha, S. K., Zhuang, G., & Li, S. (2020). Will consumers pay more for efficient delivery? An empirical study of what affects E-customers' satisfaction and willingness to pay on online shopping in Bangladesh. <i>Sustainability</i> , 12(3), 1121. https://doi.org/10.3390/su12031121 Song, Z. (2022). The geography of online shopping in China and its key drivers. <i>Environment and Planning B: Urban Analytics and City Science</i> , 49(1), 259-274. https://doi.org/10.1177/23998083211002189 Tokar, T., Williams, B. D., & Fugate, B. S. (2020). I heart logistics—just don't ask me to pay for it: online shopper behavior in response to a delivery carrier upgrade and subsequent shipping charge increase. <i>Journal of Business Logistics</i> , 41(3), 182-205. https://doi.org/10.1111/jbl.12239 de Magalhães, D. J. A. V. (2021). Analysis of critical factors affecting the final decision-making for online grocery shopping. <i>Research in Transportation Economics</i> , 87, 101088. https://doi.org/10.1016/j.retrec.2021.101088
Quality of Information	Hallikainen, H., Luongo, M., Dhir, A., & Laukkanen, T. (2022). Consequences of personalized product recommendations and price promotions in online grocery shopping. <i>Journal of Retailing and Consumer Services</i> , 69, 103088. https://doi.org/10.1016/j.jretconser.2022.103088 Kim, Y., Wang, Q., & Roh, T. (2021). Do information and service quality affect perceived privacy protection, satisfaction, and loyalty? Evidence from a Chinese Q2O-based mobile shopping application. <i>Telematics and Informatics</i> , 56, 101483. https://doi.org/10.1016/j.tele.2020.101483 Madiawati, P. N., Pradana, M., Sulistiyo, S., Hidayat, A. M., & Wahyudin, S. (2020). CUSTOMERS'SATISFACTION OF ONLINE SHOPPING MEASURED BY INFORMATION QUALITY AND TRUST FACTORS. <i>International Journal of Management (IJM)</i> , 11(8), doi: 10.34218/IJM.11.8.2020.098 Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong, Thuy, T. T., & Merani, S. H. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. <i>Cogent Business & Management</i> , 8(1), 1869363. https://doi.org/10.1080/23311975.2020.1869363 Rahman, S., Fadrul, F., Yusrizal, Y., Marlina, R., & Momin, M. M. (2022). Improving the satisfaction and loyalty of online shopping customers based on e-commerce innovation and e-service quality. <i>Gadjah Mada International Journal of Business</i> , 24(1), 56 - 81. https://search.informit.com/doi/10.3316/informit.28984883328877
Convenience of Payment	Alzoubi, H., Alshuhdeh, M., Kurdi, B. A., Alhyasat, K., & Ghazal, T. (2022). The effect of e-payment and online shopping on sales growth: Evidence from banking industry. <i>International Journal of Data and Network Science</i> , 6(4), 1369-1380. doi: 10.5267/j.ijdns.2022.5.014 Çera, G., Phan, Q. P. T., Androniceanu, A., & Çera, E. (2020). Financial capability and technology implications for online shopping. <i>E a M. Economie a Management</i> . doi: https://doi.org/10.15240/tul.001/2020-2-011 Daroch, B., Nagrath, G., & Gupta, A. (2021). A study on factors limiting online shopping behaviour of consumers. <i>Rajagiri Management Journal</i> , 15(1), 39-52. https://doi.org/10.1108/RMJ-07-2020-0038 Hossain, S. F. A., Xi, Z., Nurunnabi, M., & Hussain, K. (2020). Ubiquitous role of social networking in driving M-Commerce: evaluating the use of mobile phones for online shopping and payment in the context of trust. <i>Sage Open</i> , 10(3), 2158244020939536. https://doi.org/10.1177/2158244020939536 Melović, B., Šehović, D., Karadžić, V., Dabić, M., & Ćirović, D. (2021). Determinants of Millennials' behavior in online shopping—Implications on consumers' satisfaction and e-business development. <i>Technology in Society</i> , 65, 101561. https://doi.org/10.1016/j.techsoc.2021.101561 Nababan, T. S., Panjaitan, F., Panjaitan, R., Silaban, P., & Silaban, P. H. (2021). Analysis of consumer consideration factors on moderated purchase decisions in online shopping by consumer trust (Study on Students of Master of Management Study Program, Postgraduate at HKBP Nommensen University, Medan). <i>Strategic Journal of Management Sciences</i> , 1(2), 80-93. http://jurnal.stiesultananung.ac.id/index.php/strategic
Security of Payment	Ardiansah, M., Charini, A., Rahardja, S., & Udin, U. (2020). The effect of electronic payments security on e-commerce consumer perception: An extended model of technology acceptance. <i>Management Science Letters</i> , 10(7), 1473-1480. doi: 10.5267/j.msl.2019.12.020 Indiani, N. L. P., & Fahik, G. A. (2020). Conversion of online purchase intention into actual purchase: the moderating role of transaction security and convenience. <i>Business: Theory and Practice</i> , 21(1), 18-29. Ingaldi, M., & Brožova, S. (2020). Safety of online shopping according to customers. <i>System Safety: Human-Technical Facility-Environment</i> , 2(1), 73-81. doi: 10.2478/czoto-2020-0010 Mombueil, C., & Uhde, H. (2021). Relative convenience, relative advantage, perceived security, perceived privacy, and continuous use intention of China's WeChat Pay: A mixed-method two-phase design study. <i>Journal of Retailing and Consumer Services</i> , 59, 102384. https://doi.org/10.1016/j.jretconser.2020.102384 Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F., & Al Amosh, H. (2022, April). The research trend of security and privacy in digital payment. <i>In Informatics (Vol. 9, No. 2, p. 32)</i> . MDPI. https://doi.org/10.3390/informatics9020032

Figure 1. References to the satisfaction factors of online shopping platforms

4. Prospects for Future Research

China's e-commerce platforms have advanced significantly in terms of customer experience and service quality as a result of the ongoing growth of the e-commerce industry. However, online shopping platforms must continue to push the envelope and improve their services to meet changing customer needs and escalating levels of market competition. The following areas can be the focus of future research to further improve user satisfaction and consolidate the platform's market position.

4.1 Further Enhancement of Service Quality

Improving the service level of online shopping platform plays a crucial role in its competitive advantage. Subsequent research can target customer service, logistics and distribution and after-sales service to further improve service quality through technological innovation and process optimization.

Among them, intelligent customer service based on customer experience is one of the important ways to improve the service quality of online shopping. In the future research, we can further optimize the customer service system through artificial intelligence to make the customer service system more intelligent and humanized. Let the intelligent customer service system respond more quickly to the customer's request and solve the problem in a timely manner.

In the field of logistics and distribution, future research can focus on how to optimize the logistics network and adopt more efficient distribution modes (e.g., drone distribution, intelligent express lockers, etc.) to improve the rate and precision of

distribution and reduce the error rate of distribution (Tandon & Ertz, 2024). Meanwhile, future research can also explore how to maintain the stable operation of the logistics system during peak hours to avoid affecting the service quality due to the increase in the number of orders.

In addition, the improvement of after-sales service quality should also be the direction of future research. After-sales service is of great significance in enhancing users' trust and satisfaction, and future research can explore more perfect return and exchange policies, more efficient customer service response mechanisms, and more transparent transaction guarantee systems to further improve the quality of after-sales service (Sihombing et al., 2023).

4.2 More Segmented User Behavior Analysis

Future research can analyze consumers' shopping behaviors and preferences more deeply and enhance user satisfaction through personalized services. For example, platforms can use AI and big data to examine customers' browsing history, shopping cart contents, and previous purchases to suggest products that are more appropriate for them (Wang et al., 2024).

It is also possible to analyze specific user needs, such as changes in demand for certain products at certain times of the day, or differences in shopping preferences among different consumer groups. These analyses can help platforms develop better marketing strategies and optimize better products.

In the future, the research can also focus on the differences in shopping behaviors of different consumer groups (e.g., young people, the elderly, urban residents, rural residents, etc.), which can help platforms segment the market and provide more targeted services and promotions. This kind of precision marketing can not only improve user satisfaction but also increase user loyalty (Schiessl et al., 2023).

4.3 Research on Cross-Border E-Commerce

Due to the speed of globalization, the situation of Chinese consumers in cross-border shopping can also be studied in the future. Cross-border e-commerce is complex and involves multiple links, including logistics, payments and taxes in multiple countries and regions. Research can focus on how to optimize the cross-border logistics process to reduce delivery time and cost; how to solve the payment problems in different countries to ensure the security and convenience of transactions; and how to deal with the possible problems of tariffs and difficulty in returning goods that may arise in cross-border shopping (Hazarika & Mousavi, 2021).

In addition, the study can explore the behavioral patterns and demand preferences of Chinese consumers in cross-border shopping. For example, which goods are more popular in cross-border shopping, and which aspects of service quality consumers are more concerned about. These studies will provide strong support for market expansion and service optimization of cross-border e-commerce platforms (Chen & Luo, 2024).

Future research is promising in terms of further improving service quality, more segmented user behavior analysis, and cross-border e-commerce research. Future research will not only help to improve consumer satisfaction, but will also provide strong support for the long-term development of e-commerce platforms. E-commerce platforms will be able to effectively respond to market difficulties, satisfy the varied needs of consumers, and propel the industry's sustained development through constant innovation and optimization.

References

- [1] Alzoubi, H., Alshurideh, M., Kurdi, B. A., Alhyasat, K., & Ghazal, T. (2022). The effect of e-payment and online shopping on sales growth: Evidence from banking industry. *International Journal of Data and Network Science*, 6(4), 1369-1380. <https://doi.org/10.5267/j.ijdns.2022.5.014>
- [2] Ardiansah, M., Chariri, A., Rahardja, S., & Udin, U. (2020). The effect of electronic payments security on e-commerce consumer perception: An extended model of technology acceptance. *Management Science Letters*, 10(7), 1473-1480. doi: 10.5267/j.msl.2019.12.020
- [3] Bie, Y. (2020, April). Consumer Psychology Analysis of Sinking Users Based on E-Commerce Platform—Taking Pinduoduo as an Example. In 2020 International Conference on E-Commerce and Internet Technology (ECIT) (pp. 28-31). IEEE. doi: 10.1109/ECIT50008.2020.00014
- [4] Chen, K., & Luo, S. (2024). Cross border e-commerce development and enterprise digital technology innovation—Empirical evidence from listed companies in China. *Heliyon*, 10(15). doi: 10.1016/j.heliyon.2024.e34744

- [5] Daroch, B., Nagrath, G., & Gupta, A. (2021). A study on factors limiting online shopping behaviour of consumers. *Rajagiri Management Journal*, 15(1), 39-52. <https://doi.org/10.1108/RAMJ-07-2020-0038>
- [6] Dias, E. G., Oliveira, L. K. D., & Isler, C. A. (2021). Assessing the effects of delivery attributes on e-shopping consumer behaviour. *Sustainability*, 14(1), 13. <https://doi.org/10.3390/su14010013>
- [7] Dong, W., & Chamchang, P. (2021). Customer satisfaction on E-commerce logistics distribution service quality: a case study of jingdong. *Science, Technology, and Social Sciences Procedia*, 2021(1), acm008-acm008. <https://wjst.wu.ac.th/index.php/stssp>
- [8] Dong, Y., He, X., & Blut, M. (2024). How and when does digitalization influence export performance? A meta-analysis of its consequences and contingencies. *International Marketing Review*. <https://doi.org/10.1108/imr-02-2024-0044>
- [9] Du, J., & Wang, X. (2022). Matching model for multiple delivery methods in last-mile delivery for online shopping. *Transportation Research Record*, 2676(1), 556-572. <https://doi.org/10.1177/03611981211036361>
- [10] Duan, W., Jiang, M., & Qi, J. (2024). Poverty or pollution: The environmental cost of E-commerce for poverty reduction in China. *Journal of Environmental Economics and Management*, 127, 103029. <https://doi.org/10.1016/j.jeem.2024.103029>
- [11] ENKHTUYA, E., & Kang, M. J. (2024). The Effect of Delivery Service Quality in Online Shopping Mall on Customer Value, Customer Trust, and Relationship Persistence Intention. *International Journal of Internet, Broadcasting and Communication*, 16(1), 215-225. <https://www.earticle.net/Article/A445428>
- [12] Fang, L., & Huang, C. C. (2020). Targeted poverty alleviation in China: Evidence from Jingdong e-commerce poverty alleviation. *Poverty & Public Policy*, 12(4), 386-396. <https://doi.org/10.1002/pop4.292>
- [13] Fang, X. (2023, June). Asymmetric Information Analysis on Supply Chain Finance's Profit Model: Based on E-Commerce Platform JingDong. In *Proceedings of the 6th International Conference on Economic Management and Green Development* (pp. 295-302). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-19-7826-5_29
- [14] Fangqingyun, W. (2023). The Analysis of Influential Factors of College Students' Purchasing Behaviors on Taobao Snacks. *Academic Journal of Business & Management*, 5(1), 55-73. doi: 10.25236/AJBM.2023.050110
- [15] Guan, Z., & Zhou, O. T. (2024). Wanghong e-commerce in/as China's economic transformation: A case study of beauty wanghong. *Global Media and China*. <https://doi.org/10.1177/20594364241278103>
- [16] Gulfranz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading E-commerce platforms. *Journal of Retailing and Consumer Services*, 68, 103000. <https://doi.org/10.1016/j.jretconser.2022.103000>
- [17] Hallikainen, H., Luongo, M., Dhir, A., & Laukkanen, T. (2022). Consequences of personalized product recommendations and price promotions in online grocery shopping. *Journal of Retailing and Consumer Services*, 69, 103088. <https://doi.org/10.1016/j.jretconser.2022.103088>
- [18] Hazarika, B. B., & Mousavi, R. (2021). Review of cross-border e-commerce and directions for future research. *Journal of Global Information Management (JGIM)*, 30(2), 1-18. doi: 10.4018/JGIM.20220301.0a1
- [19] Hossain, S. F. A., Xi, Z., Nurunnabi, M., & Hussain, K. (2020). Ubiquitous role of social networking in driving M-Commerce: evaluating the use of mobile phones for online shopping and payment in the context of trust. *Sage Open*, 10(3), 2158244020939536. <https://doi.org/10.1177/2158244020939536>
- [20] Huang, Q., & Kumarasinghe, P. (2024). Unleashing global opportunities: Exploring the digitalization journey of small and medium-sized enterprises in China and Sri Lanka's thriving E-commerce landscapes. *Heliyon*, 10(17), e36621. <https://doi.org/10.1016/j.heliyon.2024.e36621>
- [21] Huang, W., & Li, X. (2019). The E-commerce Law of the People's Republic of China: E-commerce platform operators liability for third-party patent infringement. *Computer Law & Security Review*, 35(6), 105347. <https://doi.org/10.1016/j.clsr.2019.105347>
- [22] Indiani, N. L. P., & Fahik, G. A. (2020). Conversion of online purchase intention into actual purchase: the moderating role of transaction security and convenience. *Business: Theory and Practice*, 21(1), 18-29.
- [23] Indrayani, R. (2021). Identify consumer behavior in choosing delivery services in shopping in the digital era. *Journal of Research in Business, Economics, and Education*, 3(6), 198-203.

- [24] Ingaldi, M., & Brožova, S. (2020). Safety of online shopping according to customers. *System Safety: Human-Technical Facility-Environment*, 2(1), 73-81. doi: 10.2478/czoto-2020-0010
- [25] Jiang, X., Shi, Q., & Yang, X. An Analysis on Business Risk of Jingdong and Meituan.
- [26] Kim, Y., Wang, Q., & Roh, T. (2021). Do information and service quality affect perceived privacy protection, satisfaction, and loyalty? Evidence from a Chinese O2O-based mobile shopping application. *Telematics and informatics*, 56, 101483. <https://doi.org/10.1016/j.tele.2020.101483>
- [27] Kuang, J. (2022, April). Research on the Marketing Strategy of Pinduoduo—Based on the STP and 4Ps Methods. In *2022 7th International Conference on Social Sciences and Economic Development (ICSSED 2022)* (pp. 2128-2133). Atlantis Press. doi: 10.2991/jnmp.2006.13.4.1
- [28] Li, H., Yuan, P., Xu, S., Wu, Y., He, X., & Zhou, B. (2020). Aspect-Aware multimodal summarization for Chinese E-Commerce products. *Proceedings of the AAAI Conference on Artificial Intelligence*, 34(05), 8188–8195. <https://doi.org/10.1609/aaai.v34i05.6332>
- [29] Li, J., & He, Y. (2024). Switching costs and users' intentions of an app-enabled cross-border e-commerce platform: examples of Amazon and Tmall Global. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/apjml-10-2023-0979>
- [30] Li, N., Xuan, C., & Chen, R. (2024). Different roles of two kinds of digital coexistence: The impact of social presence on consumers' purchase intention in the live streaming shopping context. *Journal of Retailing and Consumer Services*, 80, 103890. <https://doi.org/10.1016/j.jretconser.2024.103890>
- [31] Lim, K. B., Fern, Y. S., & Singh, H. S. K. a. B. (2021). The study of customer satisfaction of Shopee customers in Malaysia. *International Journal of Entrepreneurship Business and Creative Economy*, 1(2), 30–44. <https://doi.org/10.31098/ijebce.v1i2.602>
- [32] Liu, J., & Zhang, M. (2024). Formation mechanism of consumers' purchase intention in multimedia live platform: a case study of taobao live. *Multimedia Tools and Applications*, 83(2), 3657-3680. <https://doi.org/10.1007/s11042-023-15666-6>
- [33] Liu, J., & Zhang, M. (2024). Formation mechanism of consumers' purchase intention in multimedia live platform: a case study of taobao live. *Multimedia Tools and Applications*, 83(2), 3657-3680. <https://doi.org/10.1007/s11042-023-15666-6>
- [34] Madiawati, P. N., Pradana, M., Sulistijono, S., Hidayat, A. M., & Wahyuddin, S. (2020). CUSTOMERS'SATISFACTION OF ONLINE SHOPPING MEASURED BY INFORMATION QUALITY AND TRUST FACTORS. *International Journal of Management (IJM)*, 11(8). doi: 10.34218/IJM.11.8.2020.098
- [35] Melović, B., Šehović, D., Karadžić, V., Dabić, M., & Ćirović, D. (2021). Determinants of Millennials' behavior in online shopping—Implications on consumers' satisfaction and e-business development. *Technology in society*, 65, 101561. <https://doi.org/10.1016/j.techsoc.2021.101561>
- [36] Mofokeng, T. E. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. *Cogent Business & Management*, 8(1), 1968206. <https://doi.org/10.1080/23311975.2021.1968206>
- [37] Mombeuil, C., & Uhde, H. (2021). Relative convenience, relative advantage, perceived security, perceived privacy, and continuous use intention of China's WeChat Pay: A mixed-method two-phase design study. *Journal of Retailing and Consumer Services*, 59, 102384. <https://doi.org/10.1016/j.jretconser.2020.102384>
- [38] Moon, N. N., Talha, I. M., & Salehin, I. (2021). An advanced intelligence system in customer online shopping behavior and satisfaction analysis. *Current Research in Behavioral Sciences*, 2, 100051. <https://doi.org/10.1016/j.crbeha.2021.100051>
- [39] Nababan, T. S., Panjaitan, F., Panjaitan, R., Silaban, P., & Silaban, P. H. (2021). Analysis of consumer consideration factors on moderated purchase decisions in online shopping by consumer trust (Study on Students of Master of Management Study Program, Postgraduate at HKBP Nommensen University, Medan). *Strategic: Journal of Management Sciences*, 1(2), 80-93. <http://jurnal.stiessultanagung.ac.id/index.php/strategic>
- [40] Palacios, S., & Jun, M. (2020). An exploration of online shopping convenience dimensions and their associations with customer satisfaction. *International Journal of Electronic Marketing and Retailing*, 11(1), 24-49. <https://doi.org/10.1504/IJEMR.2020.106431>

- [41] Pfadler, A., Zhao, H., Wang, J., Wang, L., Huang, P., & Lee, D. L. (2020, April). Billion-scale recommendation with heterogeneous side information at taobao. In 2020 IEEE 36th International Conference on Data Engineering (ICDE) (pp. 1667-1676). IEEE. doi: 10.1109/ICDE48307.2020.00148
- [42] Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., & Merani, S. H. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Business & Management*, 8(1), 1869363. <https://doi.org/10.1080/23311975.2020.1869363>
- [43] Qiu, H., Zhang, X., Feng, M., Zhang, Z., Wang, J., & Wang, Z. (2024). Exploring the Income-Increasing Benefits of Rural E-Commerce in China: Implications for the sustainable development of farmers. *Sustainability*, 16(17), 7437. <https://doi.org/10.3390/su16177437>
- [44] Quan, Y. (2021, June). Analysis of Taobao Single's Day Shopping Festival from the Perspective of Managerial Economics. In 2021 International Conference on Enterprise Management and Economic Development (ICEMED 2021) (pp. 226-230). Atlantis Press. doi:10.2991/jnmp.2006.13.4.1
- [45] Rahman, S., Fadrul, F., Yusrizal, Y., Marlyna, R., & Momin, M. M. (2022). Improving the satisfaction and loyalty of online shopping customers based on e-commerce innovation and e-service quality. *Gadjah Mada International Journal of Business*, 24(1), 56–81. <https://search.informit.org/doi/10.3316/informit.289848833328877>
- [46] Rossolov, A., Rossolova, H., & Holguín-Veras, J. (2021). Online and in-store purchase behavior: shopping channel choice in a developing economy. *Transportation*, 48(6), 3143-3179. <https://doi.org/10.1007/s11116-020-10163-3>
- [47] Rungruangjit, W. (2022). What drives Taobao live streaming commerce? The role of parasocial relationships, congruence and source credibility in Chinese consumers' purchase intentions. *Heliyon*, 8(6).
- [48] Saha, S. K., Zhuang, G., & Li, S. (2020). Will consumers pay more for efficient delivery? An empirical study of what affects E-customers' satisfaction and willingness to pay on online shopping in Bangladesh. *Sustainability*, 12(3), 1121. <https://doi.org/10.3390/su12031121>
- [49] Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F., & Al Amosh, H. (2022, April). The research trend of security and privacy in digital payment. In *Informatics* (Vol. 9, No. 2, p. 32). MDPI. <https://doi.org/10.3390/informatics9020032>
- [50] Schiessl, D., Korelo, J., & Dias, H. B. A. (2023). How online shopping experiences shape consumer webrooming behavior. *Marketing Intelligence & Planning*, 41(1), 16-30. <https://doi.org/10.1108/MIP-08-2021-0254>
- [51] Shi, X. (2024). Business Success Strategies of Chinese Cross-Border E-Commerce: macro and micro environments, challenges, and SWOT. *International Journal of Global Economics and Management*, 4(1), 521–531. <https://doi.org/10.62051/ijgem.v4n1.62>
- [52] Sihombing, N. S., Simbolon, S., Susanto, A., & Tarigan, S. A. (2023). E-Service Quality And E-Trust Toward Online Shop Customers E-Loyalty: Satisfaction as Mediation. *Amwaluna: Jurnal Ekonomi dan Keuangan Syariah*, 7(2), 274-289. doi: <https://doi.org/10.29313/amwaluna.v7i2.11458>
- [53] Song, Z. (2022). The geography of online shopping in China and its key drivers. *Environment and Planning B: Urban Analytics and City Science*, 49(1), 259-274. <https://doi.org/10.1177/23998083211002189>
- [54] Tandon, U., & Ertz, M. (2024). Modelling gamification, virtual-try-on technology, e-logistics service quality as predictors of online shopping: an empirical investigation. *Current Psychology*, 43(16), 14289-14303. <https://doi.org/10.1007/s12144-023-05379-2>
- [55] Tokar, T., Williams, B. D., & Fugate, B. S. (2020). I heart logistics—just don't ask me to pay for it: online shopper behavior in response to a delivery carrier upgrade and subsequent shipping charge increase. *Journal of Business Logistics*, 41(3), 182-205. <https://doi.org/10.1111/jbl.12239>
- [56] Tzeng, S. Y., Ertz, M., Jo, M. S., & Sarigöllü, E. (2021). Factors affecting customer satisfaction on online shopping holiday. *Marketing Intelligence & Planning*, 39(4), 516-532. <https://doi.org/10.1108/MIP-08-2020-0346>
- [57] Wang, W. (2021). Research on Development and Pricing of Fresh E-commerce Platform in China—A Case Study of Jingdong Fresh. In 4 th International Conference on Global Economy, Finance and Humanities Research (pp. 135-147).

- [58] Wang, Y. (2024). Analyzing the Marketing Strategy of Chinese Cross-border E-commerce from the Perspective of Chinese-American Cultural Differences. *Highlights in Business Economics and Management*, 37, 64–70. <https://doi.org/10.54097/vtztp865>
- [59] Wang, Z., Zhu, Y., He, S., Yan, H., & Zhu, Z. (2024). Llm for sentiment analysis in e-commerce: A deep dive into customer feedback. *Applied Science and Engineering Journal for Advanced Research*, 3(4), 8-13. <https://doi.org/10.5281/zenodo.12730477>
- [60] Wu, T., Liu, X., Qin, J., & Herrera, F. (2021). An interval type-2 fuzzy Kano-prospect-TOPSIS based QFD model: Application to Chinese e-commerce service design. *Applied Soft Computing*, 111, 107665. <https://doi.org/10.1016/j.asoc.2021.107665>
- [61] Xi, G., Cao, X., & Zhen, F. (2020). The impacts of same day delivery online shopping on local store shopping in Nanjing, China. *Transportation Research Part A: Policy and Practice*, 136, 35-47. <https://doi.org/10.1016/j.tra.2020.03.030>
- [62] Xiao, Q., Wan, S., Zhang, X., Siponen, M., Qu, L., & Li, X. (2022). How consumers' perceptions differ towards the design features of mobile live streaming shopping platform: A mixed-method investigation of respondents from Taobao Live. *Journal of Retailing and Consumer Services*, 69, 103098. <https://doi.org/10.1016/j.jretconser.2022.103098>
- [63] Xie, L., & Nallalathan, K. (2024). Integration and Innovation: An overview of the development status and trends of Chinese tea e-commerce live streaming. *International Journal of Global Economics and Management*, 4(1), 121–126. <https://doi.org/10.62051/ijgem.v4n1.18>
- [64] Yang, G., Chaiyasoonthorn, W., & Chaveesuk, S. (2024). Exploring the influence of live streaming on consumer purchase intention: A structural equation modeling approach in the Chinese E-commerce sector. *Acta Psychologica*, 249, 104415. <https://doi.org/10.1016/j.actpsy.2024.104415>
- [65] Yifeng, D. (2024). The Effect of Service Quality on Customer Loyalty of Social E-commerce: A Case Study of Pinduoduo (Doctoral dissertation, Dhonburi Rajabhat University). <http://hdl.handle.net/123456789/1875>
- [66] Yoon, S., & Tan, Y. L. (2022). What makes people revisit e-commerce platform? A case study on Pinduoduo platform in China. *International Journal of Electronic Commerce Studies*, 13(4), 061-080. <https://doi.org/10.7903/ijecs.2090>
- [67] Yunlin, C. (2023). Awareness of green logistics technology, certification, and standards by logistics practitioners at Chinese e-commerce company, Jing Dong. *The Asian Journal of Shipping and Logistics*, 39(4), 37-46. <https://doi.org/10.1016/j.ajsl.2023.10.004>
- [68] Zhang, Z., & Nuangjamnong, C. (2022). The impact factors toward online repurchase intention: A case study of Taobao e-commerce platform in China. *International Research E-Journal on Business and Economics*, 7(2), 35-56. <http://orcid.org/0000-0002-6909-2690>
- [69] Zhen, L. Z., Pandey, A., Traiwanmakij, S., & Samarkjarn, J. (2021). FACTORS RELATED TO CHINESE CUSTOMERS'ONLINE PURCHASE INTENTION: THE CASE STUDY OF JINGDONG. COM ONLINE SHOPPING'S CUSTOMER IN CHINA. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(1), 13-22. <https://jurnal.stie-aas.ac.id/index.php/IJEBAR>
- [70] Zhou, Z. (2021, March). Application of Customer Analysis Methods to Online Business Services—Take Pinduoduo for Example. In 6th International Conference on Financial Innovation and Economic Development (ICFIED 2021) (pp. 648-651). Atlantis Press. doi: 10.2991/jnmp.2006.13.4.1
- [71] de Magalhães, D. J. A. V. (2021). Analysis of critical factors affecting the final decision-making for online grocery shopping. *Research in Transportation Economics*, 87, 101088. <https://doi.org/10.1016/j.retrec.2021.101088>
- [72] Çera, G., Phan, Q. P. T., Androniceanu, A., & Çera, E. (2020). Financial capability and technology implications for online shopping. *E a M: Economie a Management*. <https://doi.org/10.15240/tul/001/2020-2-011>