Analysis of the Influencing Factors and Consequences of E-commerce Return Rate

Peikun Jiang

Business School, Sungkyunkwan University, Seoul, South Korea

peikun@fsu.edu.pa

Abstract. E-commerce, as an important component of the global retail market, has deeply integrated into modern people's lives. However, in recent years, the issue of high return rates has become a major challenge faced by the e-commerce industry. This not only directly affects the sales profits and brand image of retailers, but also impacts the operational efficiency and customer satisfaction of e-commerce platforms. Therefore, this article analyzes the main factors that lead to an increase in e-commerce return rates from the perspectives of retailers and consumers and reveals the consequences that high return rates will bring to the future development of the e-commerce industry—for example, high hidden costs, unsolvable vicious cycles, and distorted business models. Meanwhile, based on the above analysis and thinking, relevant coping strategies have been compiled. This includes recommending a probability sales strategy to merchants and a Buy Online and Return in Store (BORS) strategy, proposing to the platform to establish consumer trust, targeted supervision of its merchants, and developing relevant incentive measures.

Keywords: E-commerce, e-commerce returns, return strategy, journals reviewed.

1. Introduction

With the booming rise of the e-commerce industry, e-commerce enterprises have become an indispensable part of the modern consumer market. However, in recent years, the return rate in the e-commerce industry has been continuously increasing, and the issue of returns has dealt a serious blow to the e-commerce industry. Clothing and footwear products are particularly prominent, frequently becoming the focus of consumer complaints. According to data from the Black Cat Complaints Platform, there were over 22000 valid complaints regarding the quality issues of such products in 2023 alone [1]. According to the latest 618 consumer rights protection data report in 2024 released by the People's Daily Online, the number of complaints and rights protection generated by consumers when they purchase goods on e-commerce platforms is close to half [2]. In addition, during this year's 618 shopping festival, the return rate for clothing categories has reached as high as 80%, far exceeding the average return rate of 40% to 60% for normal e-commerce clothing products [3]. Behind this wave of returns, there are both traditional factors such as uneven product quality and difficulty in choosing sizes, as well as new challenges brought by emerging consumer models such as live streaming, pre-sale, and e-commerce platform return and exchange policies. These issues have hurt the development of e-commerce enterprises and even spawned a vicious cycle. Therefore, this article aims to deeply analyze the factors and consequences of high return rates, to find effective solutions for the return situation faced by retailers, and to provide strong theoretical support for future platform policy formulation and e-commerce enterprise sales and return strategy formulation.

2. Factors Influencing High Return Rates on E-commerce Platforms

2.1. Retailer's Perspective

2.1.1. Platform customized return service policy

To protect consumer rights and enhance the shopping experience of users, e-commerce platforms have formulated relevant return service policies. Chinese e-commerce platforms have launched a free return shipping insurance service (RFI) return policy, in which retailers purchase insurance and the

insurance company compensates consumers for the loss of return shipping fees when returning goods [4]. This type of insurance is also known as freight insurance in China. The operational strategy of retailers bearing the return shipping costs for consumer returns has become a signal of confidence in the quality of their products. This signal can quickly establish trust among a large number of consumers towards the platform and retailers that provide shipping insurance, enabling them to make purchases. However, in the real e-commerce environment, the platform's return service policies such as freight insurance, pay before use, and seven-day no reason return also mean that consumers can return goods at almost no cost. This zero risk 'shopping experience reduces consumers' worries when making purchasing decisions and also greatly alleviates their psychological burden when returning goods. Due to the lowered return threshold, consumers are more inclined to choose returns rather than compromise when facing products that do not meet expectations. In addition, Shidao Geng et al. demonstrated through a model that in an elastic demand market, heterogeneous consumers generally consider providing return service policies as a "quality signal", which in turn provides opportunities for many retailers selling low-quality products to mislead and deceive consumers [4]. They cleverly exploited this by providing these services originally intended to protect consumer rights as a "quality signal" to create a false impression of "worry-free shopping", thereby misleading and attracting more consumers. Although this approach may increase sales in the short term, it hurts product return rates in the long run. For consumers, when they receive a product and find that the quality is far below expectations, despite potential sunk costs such as delivery waiting time and return shipping fees beyond the coverage of shipping insurance, most consumers still choose to return the product. This is because these services do provide consumers with a certain level of protection, giving them the courage to say no to products they are not satisfied with.

2.1.2. Promotional activities

Taking full reduction and making up an order as an example, is a promotional tactic used by retailers to increase the sales rate of their products. Consumers can enjoy discounts by combining different products and services when purchasing goods to reach the merchant's set discount threshold. For this reason, many businesses choose to customize the full discount threshold slightly higher than the product price, prompting consumers to purchase multiple products at once to achieve the conditions of full discount. This promotional method greatly drives the sales volume of products in retailers' stores, bringing greater profits to merchants. But the reality is quite the opposite. Yang Shuo believes that after launching this activity, it will instead attract some opportunistic consumers [5]. After enjoying the full discount, they will use the return service policy formulated by the above platform to return all the products used for making up the order for free. Such behavior not only affects the normal sales of retailers but also brings them additional return losses.

2.1.3. Existence of impulsive consumers

Attracting consumers to purchase through promotional methods or preferential policies is a common strategy on e-commerce platforms and even in the entire consumer market. In the e-commerce industry, to stand out among peers and better attract the attention of consumers, in addition to providing the above-mentioned convenience policies, merchants also consider stimulating consumer activities through live sales, celebrity live broadcasts, and other activities. Yi Qu et al. found through research that the emotional fluctuations caused by watching live broadcasts can affect consumers' purchasing decisions, and emotions such as "loss if missed" and "limited quantity, first come, first served" cause regret when not purchasing products significantly enhance the likelihood of consumers making purchasing decisions [6]. The interactive emotional contagion and scarcity-induced promotional language of live-streaming hosts can stimulate the audience's impulse buying behavior. After the live broadcast ends, consumers regain their rationality and are prone to regret, which increases their return behavior.

2.2. Consumer Perspective

2.2.1. False advertising and quality issues

Online shopping provides consumers with a more convenient channel to purchase goods. Consumers can browse products from various places without leaving their homes, but at the same time, the spatial gap means that consumers can only learn about the products through the advertisements and promotions of merchants, and cannot personally access these products. He Peng et al. found through empirical research that when most consumers receive products that do not match their advertising, they will choose to return them. This not only prevents retailers from increasing product sales revenue but also increases their return compensation costs [7]. Similarly, Nazmun et al. also found that product quality is an important determinant of customer satisfaction by analyzing and surveying product quality and customer feedback data from different companies [8]. When the quality of the product does not match the merchant's advertising and does not meet the level expected by consumers, consumers will inevitably choose to return it.

2.2.2. Consumer's reasons

One drawback of online shopping is that consumers cannot compare different products by hand, and some consumers achieve this goal through returns. Especially, e-commerce platforms have introduced a series of return policies to protect consumer rights and reduce return costs, such as seven-day no-reason return and refund only. Zhu Bikai found that some consumers would purchase different colors or sizes of similar products at the same time, and after personally comparing them upon receipt, they would return the unsuitable products [9]. In addition, the previously mentioned e-commerce platform's return policy guarantees that consumers can initiate returns without any burden. Although these behaviors are allowed at the legal level, such consumption habits still result in a high return rate.

3. The Consequences of High Return Rates on E-commerce Platforms

Firstly, a high return rate will have an impact on merchants, which is a series of implicit costs incurred due to returns. The cost of return logistics is particularly prominent. Every return means that the product needs to be repackaged and transported. In addition, the handling of returned goods also requires merchants to invest a lot of manpower and material resources in inspection, understand the reasons for returns, and observe whether they need to be destroyed or restored. These links not only cause merchants to bear a large amount of return logistics costs but also affect their energy in selling goods through communication with consumers during the return and after-sales process.

Secondly, a high return rate not only directly increases the cost burden on merchants, but may also trigger a series of chain reactions, forming a vicious cycle. In fierce market competition, businesses often adopt price reduction and promotion strategies to attract consumers, and an increase in return rates will directly lead to a decrease in business profit margins. To make up for the losses, merchants have to seek new profit growth points. For example, purchasing cheap raw materials to reduce product quality or selling at a markup to preserve one's profits. However, both of these methods are equivalent to drinking poison to quench thirst. Reducing product quality can damage consumers' trust and loyalty, not only causing damage to the brand image but also increasing the return rate of low-quality products. Selling at a markup not only loses competitiveness among low-priced products in the same industry but may even trigger dissatisfaction and resistance from loyal fans and consumers, further exacerbating the increase in return rates and forming an unsolvable vicious cycle.

In addition, a vicious cycle caused by the "refund only" service system has emerged on Chinese e-commerce platforms. The "refund only" service system was first launched on the Pinduoduo e-commerce platform in 2021 and later adopted by Alibaba. On December 29, 2023, the last leading e-commerce platform JD.com also announced the implementation of a "refund only" policy. E-commerce platforms constantly introduce platform policies that can attract consumers to be competitive in the crowded e-commerce market. However, in reality, this non-return-only refund service has attracted some consumers with low moral standards to engage in malicious coupon

clipping behavior. After receiving the goods, they initiated a refund-only application through intentional damage, PS image manufacturing quality issues, etc., to achieve the goal of falsely claiming compensation or even earning compensation. Merchants not only cannot receive payment and return goods, but these malicious consumers' complaints about quality issues will also affect their reputation. In this way, the merchant will also be forced by the system to deduct the deposit and compensate the buyer. The malicious returns of speculative consumers have led to an increase in return rates, while also enviously squeezing the profit margins of e-commerce merchants. Some merchants are forced to leave the market, while the remaining merchants undoubtedly fall into the vicious cycle mentioned above to preserve their profits.

Thirdly, facing the dilemma of high return rates and inventory backlog, businesses have to adopt some non-traditional business models to cope. For example, extending the pre-sale period and conducting pre-sales in batches. The pre-sale model can indeed alleviate the inventory pressure caused by returns. However, this model also brings new problems. A longer pre-sale period not only causes consumers to lose patience and interest but also exacerbates their risk aversion. Shi Baoli et al. found through research that both homogeneous and heterogeneous risk aversion of consumers can affect pre-sale strategies, therefore simply extending pre-sale time is not the optimal sales strategy [10]. In addition, some businesses choose to sell in batches to reduce inventory pressure caused by return rates, that is, wait for the first batch of products to be returned before selling the returned products in the second batch. This behavior not only prolongs the time for consumers to receive products, but may also harm their rights and trust, and even lead to legal disputes and damage to brand image.

4. Relevant Response Strategies

4.1. E-commerce Merchants' Response Strategies

Firstly, the inventory management pressure brought about by high return rates not only leads to a decrease in merchant profits but also causes consumers to wait for too long due to inventory accumulation, which further leads to an increase in return rates. Wu Qianqian and others found through research that probability sales can reduce inventory pressure and help businesses obtain higher profits [11]. The concept of probabilistic sales is to sell products with random probabilities, and consumers do not know that they will ultimately receive a specific product before receiving it. This sales model, compared to traditional on-demand sales, greatly reduces the inventory pressure and backlog problem for merchants in stocking up. In addition to contributing to inventory management, probabilistic sales also increase the fun and interactivity of consumers' shopping due to the uncertainty and diverse choices in its sales model. Moreover, consumers' purchase of probability-based sales products represents their willingness to pay for their choices. This type of product will also reduce consumers' dissatisfaction and willingness to return products with a single choice. This can also reduce the cost burden and brand image damage incurred by sellers due to returns. However, probability-based sales may not be suitable for all products, such as specific high-demand items. Merchants should consider the situation of their products when choosing sales strategies.

Secondly, the return channels provided by e-commerce merchants should also be updated and improved. At present, the traditional return channels are mainly online original returns, with little consideration given to consumer disappointment and risk aversion caused by online uncertainty. Moreover, consumers who exchange or repurchase goods are still shipped online without any guarantee provided. Yinhai Shen et al. proposed the concept of Buy Online and Return in Store (BORS) strategy based on previous literature in their article [12]. The general idea is that consumers who purchase products through online channels can choose to return the returned goods to online or offline stores, providing consumers with a cross-channel return strategy that integrates online and offline channels. This dual channel return concept takes into account consumers' consumption psychology and behavior, providing an offline platform return channel for consumers who experience uncertainty due to consumption on e-commerce platforms. Compared to the traditional original

channel return strategy, consumers have the opportunity to personally experience the product, which can reduce the risk of returning it. At the same time, from the perspective of consumers, this channel can also save a return shipping fee.

4.2. E-commerce Platform Response Strategies

Firstly, when purchasing goods online, because consumers cannot personally experience the goods, companies cannot avoid consumers developing uncertainty and risk aversion. So it is necessary to study how e-commerce platforms can establish consumer trust when motivating consumers to make purchases. Ahmad Samed Al Adwan et al. mentioned three important factors that promote customer trust in their research, namely return policy leniency (RPL), cash on delivery (COD), and social commerce constructs (SCCs) [13]. He confirmed through research that these three signals are effective mechanisms for reducing purchase uncertainty and risk, increasing customer trust, and not only reducing return rates but also attracting consumers to make purchases. So this author hopes that the future development direction of the platform can focus on considering the above three elements. In addition to establishing consumer trust, the platform should also make targeted adjustments to the supervision of its merchants. He Peng et al. have demonstrated through research that different types of merchants have different attitudes towards high return rates [8]. When the return rate is high, brands tend to choose to disclose product information truthfully and accurately and display products honestly. When faced with high return rates, Multi-Channel Networks (MCNs) may exaggerate or mislead product information for short-term benefits. Because they generally focus more on short-term sales growth and commission income, rather than long-term brand reputation or consumer trust. So when e-commerce platforms discover an increase in return rates, they should not blindly impose strict supervision on all e-commerce merchants, including brand owners and MCNs. This will bring high costs and may also have negative incentive effects, such as dampening the enthusiasm of brand owners and MCNs. So when managing merchants and MCNs, the platform should consider them separately. Firstly, it is necessary to appropriately weaken the supervision of e-commerce merchants and focus on protecting consumer rights. This not only reduces the compliance costs and psychological burden incurred by businesses due to excessive regulation, but also enables them to focus more on improving product quality and service levels, better meeting consumer needs, and thereby reducing return rates. However, for MCN, relevant mechanisms should be established to strengthen its supervision. For example, optimizing the push mechanism to only push live channels that can correctly disclose product information and service quality, improving market transparency and self-discipline. In the long run, by continuously promoting high-quality and authentic live channel content, e-commerce platforms will gradually establish consumer trust in the platform. Make consumers feel more at ease when shopping on e-commerce platforms, reducing hesitation and return behavior caused by concerns about false advertising and product quality issues.

In addition, the longer waiting time for shopping on e-commerce platforms compared to traditional offline shopping is also one of the current problems. However, the total waiting time required for consumers from purchasing goods on e-commerce platforms to receiving them is largely determined by third-party logistics companies, and it is difficult for platforms and merchants to interfere with it. So it is not feasible to directly reduce waiting time to satisfy consumers and thus lower the return rate. So this article suggests that some new operational methods can be used to induce consumers to accept long delivery times. Melanie Dietl et al. found through empirical research that consumers are willing to extend the waiting time for online orders (w2w) when they feel substantial discounts or benefits (including monetary and nonmonetary incentives) for these additional values [14]. For example, some female consumers expressed willingness to accept an extended delivery time when they learned that it would help reduce carbon dioxide emissions. Therefore, considering that incentive measures have a positive effect on alleviating the problem of consumer waiting time, e-commerce platforms can meet consumers' personalized needs by formulating relevant incentive measures, thereby improving customer satisfaction with purchased products and services, and reducing return rates.

In addition to safeguarding consumer rights, platforms should also consider protecting the legitimate rights and interests of e-commerce merchants under the platform and reducing malicious returns. Taking into account the existing personal credit reporting system in the context of Internet consumer finance, e-commerce platforms can establish credit accounts to monitor consumers' return behavior. For example, introducing a credit account system to record the shopping behavior of each registered user, including their returns, exchanges, complaints, and dispute resolution. Evaluating the user's credit rating through big data analysis not only provides a reference for merchants but also facilitates the platform to take corresponding punishment measures for users with low credit ratings. Subsequent platforms can also integrate this system with the return process, for example, consumers with higher credit ratings can enjoy a faster and more convenient return process, while consumers with lower credit ratings need to go through stricter reviews and longer processing times. The credit account system mentioned above promotes the formation of a good environment for honest shopping on e-commerce platforms. The formation of such an honest shopping environment will help reduce the overall return rate, thereby improving the overall efficiency of the e-commerce industry and contributing to its healthy development. Although existing literature has not yet fully demonstrated the direct data support of establishing credit accounts on e-commerce platforms to reduce return rates, this is undoubtedly an area worthy of further exploration and empirical research.

5. Conclusion

The high return rate has had an undeniable impact on the e-commerce industry. This article analyzes the reasons from both the perspectives of retailers and consumers and provides an in-depth analysis and interpretation of the negative impact that high return rates may have on the e-commerce industry. The issue of e-commerce returns is still an emerging and constantly changing field, and research on returns based on e-commerce platforms still needs further updates and improvements. With the gradual expansion of the e-commerce market and consumer market, various new return issues will still arise in the future of the e-commerce industry, which deserves further in-depth research. Firstly, most of the existing literature is based on protecting consumer rights, starting from analyzing consumer psychology and needs, and setting more protection policies for consumers. Future research can develop more effective response strategies for businesses and consumers while considering their interests equally. Secondly, with the development of big data and artificial intelligence technology, it is possible to consider using technological means to predict consumer return behavior in advance. For example, by analyzing multidimensional information such as historical data, consumer behavior, and product attributes, an e-commerce return prediction model can be established. Through it, platforms and retailers can not only predict the specific values of possible return risks in advance but also use models to make more accurate decision deployments.

References

[1] Black Cat Complaints. Black Cat Complaints releases 2023 clothing industry red and black list, 2024. Retrieved from: https://tousu.sina.com.cn/articles/view/378396/

[2] People's Daily Online. The "People's Complaints" platform of People's Daily Online releases the "618" consumer rights protection data report, 2024. Retrieved from: http://health.people.com.cn/n1/2024/0621/c14739-40261100.html

[3] Yu J X. The frequent closure of women's clothing e-commerce stores has forced the rise of personalized tracks. Chins Business Herald, 2024-07-30 (005).

[4] Geng S, Zeng Q, Liu F, et al. Complimentary return-freight insurance serves the dark side: An innovative online return policy in China. Journal of Management Science and Engineering, 2023, 8(2): 244-257.

[5] Yang S. Research on retailer operation decision problems considering consumer returns. Dongbei University of Finance and Economics, 2023.

[6] Qu Y, Khan J, Su Y, et al. Impulse buying tendency in live-stream commerce: The role of viewing frequency and anticipated emotions influencing scarcity-induced purchase decision. Journal of Retailing and Consumer Services, 2023, 75: 103534.

[7] Zhu B K. Research on return cost control of B2C e-commerce enterprises. Jiangxi Agricultural University, 2023.

[8] He P, Shang Q, Wang X J, et al. Game analysis of e-commerce supply chain evolution considering platform regulation under the background of "live streaming+". System engineering theory and practice, 2023, 43(08): 2366-2379.

[9] Moon N N, Talha I M, Salehin I. An advanced intelligence system in customer online shopping behavior and satisfaction analysis. Current Research in Behavioral Sciences, 2021, 2: 100051.

[10] Shi B L, Xu Q, Sun Z M, et al. Pre-sale and return strategies for retailers under consumer risk aversion. System engineering, 2024, 1-24.

[11] Wu Q, Hao H, Hao J. Research on inventory problems under probability sales considering the impact of returns. Journal of Hefei University of Technology (Natural Science Edition), 2023, 46(02): 280-284.

[12] Shen Y, Zhang Q, Zhang Z, et al. Omnichannel retailing return operations with consumer disappointment aversion. Operations Research Perspectives, 2022, 9: 100253.

[13] Al-Adwan A S, Alrousan M K, Yaseen H, et al. Boosting online purchase intention in high-uncertainty-avoidance societies: A signaling theory approach. Journal of Open Innovation: Technology, Market, and Complexity, 2022, 8(3): 136.

[14] Dietl M, Voigt S, Kuhn H. From rush to responsibility: Evaluating incentives on online fashion customers' willingness to wait. 2024.