What influences cross-border e-commerce consumer satisfaction? A global consumer perspective

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Abstract
Purpose: Starting from perspective to cross-boundary e-business consumers and based on the customer perceived value model, this paper examines consumer satisfaction and establishes a model for cross-border e-commerce consumer satisfaction.
Methodology: Data was collected through questionnaires, using online as main and offline as the auxiliary methods to distribute questionnaires. A total of 332 questionnaires were collected on total but only 294 questionnaires were available for use.
Findings: Perceived quality of cross-border e-commerce consumers has a significant positive impact on consumer satisfaction; perceived quality of cross-border e-commerce consumers has a significant positive impact on perceived value; consumer expectations have a significant positive impact on cross-border e-commerce consumer satisfaction; consumer expectations have a significant positive impact on perceived quality of cross-border e-commerce consumers; perceived value has a positive effect on cross-border e-commerce consumer satisfaction; User Trust has a significant positive impact on cross-border e-commerce consumer satisfaction; consumer complaints have a significant negative impact on cross-border e-commerce consumer satisfaction.
Research limitations/implications: The perspective of consumer value was considered and a comprehensive and in-depth study was conducted on the factors influencing consumer loyalty towards cross-boundary e-business platforms, promoting diversification for research on field of cross-boundary e-business and consumer loyalty.
Practical implications: Suggestions such as strict control of product quality, enhancing the perceived value of customers, and improving after-sales service system are proposed, aiming to contribute to the development of the cross-boundary e-business trading floor.
Originality/value: Literature related to consumer value and consumer loyalty to imported cross-boundary e-business from this perspective is relatively scarce. This paper focuses on exploring the influencing factors of customer loyalty in the context to imported cross-boundary e-business from the perspective of consumers.

Keywords: Cross-border e-commerce, Consumer satisfaction, Consumer loyalty

Introduction

Cross-boundary e-business recently years with the rapid to be on the increase of e-business transactions consumer scale gradually revealed the trend of slow growth, after researching the

main reasons for two points: one is due to the growth recently years, many of customers e-business transactions has been very large, tends to be saturated, and the second is due to the cross-boundary e-business trading model in the initial to be on the increase after the to be on the increase of further to be on the increase is also greatly development in the difficulty of the to be on the increase. Therefore, at future to be on the increase, cross-boundary e-business model development should not only be placed on the attraction of more customers this aspect, but through the investigation and analysis of past consumers, after the increase in many to repeat purchases of consumers and the depth of consumption of products in two aspects of the two-pronged approach, to achieve the purpose of increasing turnover. Accompanied by the industry mixed chaos, in which there are some fake sellers. According to cross-border e-commerce consumer complaints, cross-boundary e-business goods, logistics services and money problems are still prominent, and these have always been stubborn factors hindering cross-boundary e-business consumers from getting the shopping experience, and if such problems are not properly dealt with, it will greatly frustrate consumers' motivation to cross-boundary shopping, which in turn will affect healthy and sustainable development for cross-boundary e-business. Once the reputation of cross-boundary e-business merchants is not guaranteed, the service is not considerate, and the quality of merchandise is not good enough, it is easy to be complained by consumers. Whenever such negative incidents occur, they will spread in a very short period of time, which will surely have a negative impact on the merchants' operation. Negative impacts are generally difficult to control, and therefore, there is a situation that cross-boundary e-business is difficult to gain customers' trust. The network information age is an era in which the status of consumers has been greatly improved, but "the customer is God" has not been truly realized, so cross-boundary e-business and take the long-term road, we need to work hard on the satisfaction of online consumers for goods.

Literature Review

1. Studies related to the development of cross-border e-commerce
For the research on cross-boundary e-business, academics mostly stand for on government perspective and e-commerce platform perspective, and seldom from the consumer perspective. Studies from the government's macro perspective mainly include: cross-boundary e-business and financial development, tax collection and management issues, legal regulation, or customs supervision. For example, Zhao (2018) proposes that the expansion of imports by cross-boundary e-business is conducive for adjustment for structure to foreign trade; Gao (2019) analyzes the dilemma of value-added tax (VAT) levies on Chinese cross-boundary e-business retail imports and proposes relevant countermeasures; and Taherdoost (2021) conducts a relevant research on the dilemma for legal regulation for Chinese cross-boundary e-business retail imports and countermeasures.

Research for perspective of e-business display environment mainly includes: operation mode, logistics mode, supply chain optimization strategy, marketing strategy, competition strategy, and enterprise development status, problems and countermeasures. For example, by summarizing the various modes of cross-border logistics, Oliver (2022) points out the problems existing in the current logistics mode and puts forward suggestions for improvement; Zhang (2018) carries out an in-depth analysis of the problems existing in the marketing process of Xiaohongshu and proposes that the platform should further enhance Xiaohongshu's marketing strategy through the adjustment and improvement of its own marketing strategy to further enhance the competitive advantage of the Xiaohongshu platform.

Research from the perspective of consumers mainly includes: purchase intention, satisfaction, logistics service quality evaluation and so on. For example, Chen (2019) conducted a relevant

analysis and research on consumer recognition, influencing factors and countermeasures of imported cross-boundary e-business for perspective of logistics services and commodity personalization. However, literature related to consumer value and consumer loyalty to imported cross-boundary e-business from this perspective is relatively scarce, this paper focuses on exploring the influencing factors of customer loyalty in the context to imported cross-boundary e-business from the perspective of consumers.

2. Research on the impact of cross-border e-commerce consumer satisfaction and loyalty

Regarding to impact for cross-boundary e-business customer recognition, among them, customer value is the root of marketing activities, representing the reasons of customers' purchasing behaviors; while customer satisfaction is used to measure whether customers' expectations and visions of the product or service prior to the occurrence of purchasing behaviors are in line with what they obtain after purchase or whether they obtain an overall perception that exceeds their expectations. The results of related empirical studies indicate that consumer value directly and positively influences consumer satisfaction in both traditional and online shopping environments. For example, Zhang (2022) suggests that maximizing consumer value is a prerequisite for achieving consumer satisfaction, and that the greater the consumer value, the higher the consumer will certainly be for any consumer who purchases goods. Enterprises should improve consumer satisfaction by increasing the benefits consumers obtain while reducing the cost of consumer purchases and ultimately maximizing consumer value.

Regarding the influence to cross-boundary e-business consumer loyalty, some scholars have concluded through empirical research that consumer perceived value in online shopping is the key antecedent variable of their loyalty. Whether in the traditional shopping environment or online shopping environment, only when the consumer perceived value meets or is higher than the pre-purchase expectation, it will make the consumer satisfied and thus continue to repeat shopping on the platform, i.e., achieve consumer loyalty. Zheng's (2022) research results show that consumer loyalty is mainly influenced by consumer value, because consumers will be satisfied and loyal to a company only if they buy the products produced or services provided by the company and have a better process experience. Chen and Li (2018) also found that consumer loyalty cannot be separated from consumer value and consumer satisfaction in their marketing of online apparel category. In addition, Ma's (2018) study of online consumer value also concluded that consumer value affects consumer loyalty by influencing consumer purchase decisions.

To summarize, if import cross-boundary e-business platforms want to improve customer satisfaction of consumer loyalty, improvement of consumers' perceived value should be put in the first place. Therefore, this paper will synthesize relevant research results and data to empirically analyze the consumer satisfaction to cross-boundary e-business platforms, hoping to make some additions to the research for cross-boundary e-business consumer satisfaction.

Hypothesis Development

The proposal of relevant assumptions
1. Perceived Quality

Perceived quality is consumers' overall subjective evaluation for series of shopping processes through various sensory means and can be divided into two aspects: product and service. Online shopping is different from traditional shopping methods, as sellers and buyers communicate through the internet. Consumers are unable to judge the authenticity for product information provided by the merchants on the website. As a result, consumers' perceived quality will be affected. Therefore, the following hypothesis is proposed:

H1: Perceived quality of cross-boundary e-business consumers has a significant positive impact for consumer recognition.

H2: Perceived quality of cross-boundary e-business consumers has a significant positive impact to the perceived value.

2.Consumer Expectation

In order to obtain the best consumer experience, consumers collect information about products from various channels. This information prompts consumers to make a preliminary prediction about the upcoming shopping experience, and this subjective prediction constitutes consumer expectation. When consumers go through the actual shopping process, they compare the actual level of product and service experience with this expectation. If the actual level of product and service meets and exceeds consumers' psychological expectation level, it will have a positive to impact consumer recognition. Conversely, it will have a negative impact. So, the following hypothesis is proposed:

H3: Consumer expectation with meaningful positive to impac consumer recognition in cross-boundary e-business.

H4: Consumer expectation with significant positive to impact the perceived quality of cross-boundary e-business consumers.

3.Perceived Value

After consumers complete the shopping process, they will form an overall perception of the entire shopping process, mainly comparing the time and money spent on shopping, the quality of the actual goods received, the user experience, and the service experience. The perceived value to cross-boundary e-business consumers is specifically manifested in their perception of the cost-effectiveness of products and services. The following assumptions are proposed:

H5: Perceived value with positive to impact satisfaction to cross-border e-commerce consumers.

4.User Trust

Having consumer trust is very important for operators. In this study, website trust is mainly focused on the guarantee of product services, personal privacy, and individual rights. The following assumption is made:

H6: User trust with positive meaningful to impact satisfaction for cross-boundary e-business consumers.

5.Consumer Complaints

Consumers will continuously provide feedback to sellers during the shopping process. Poor handling of negative feedback by sellers may lead to serious consequences such as customer loss, while resolving them properly can help shape a good reputation. Research on user complaints and the following assumption is proposed:

H7: Consumer complaints with meaningful negative to impac satisfaction for cross-boundary e-business consumers.

The cross-border e-commerce consumer satisfaction indicators compiled by referring to the literature are shown in Table 1.

Table 1 Cross-border e-commerce consumer satisfaction indicator system

Assumption	Indicator	Question number
	I hope to purchase reliable products .	X1

Consumer Expectations	I hope to enjoy high-quality services.	X2
	I hope the purchased products can meet my needs.	X3
Perceived Quality	I believe that the received goods match the platform's description .	X4
	I am satisfied with the quality of the goods I purchased.	X5
	I am satisfied with the quality of the logistics service.	X6
	I am satisfied with the quality of the after-sales service.	X7
	I think the cross-border e-commerce platform website has complete functions and convenient and accurate product search.	X8
Perceived Value	I think the cost performance of the goods I purchased is satisfactory .	X9
	I think the logistics service provided by the platform is worth the time and money I spent .	X10
	I think the price fluctuations of the goods and logistics services are acceptable.	X11
	I think cross-border online shopping is overall cost-effective.	X12
User Trust	I think the logistics service of the platform is trustworthy.	X13
	During the consumption process, my personal information and rights have been protected.	X14
	I think the after-sales service of the platform is trustworthy.	X15
	I think the brand of goods provided by the platform is trustworthy.	X16
	I think the customer service can professionally answer my questions and handle my dissatisfactions in a timely manner.	X17
Consumer Complaints	I have complained about the quality of cross-border e-commerce products twice or more.	X18
	I have complained about cross-border e-commerce logistics services twice or more.	X19
	I have complained about cross-border e-commerce platform after-sales services twice or more.	X20
Consumer Satisfaction	I am satisfied with the overall cross-border online shopping experience .	Y1
	I feel that cross-border online shopping meets or even exceeds my expectations.	Y2

Methods

1. Questionnaire Design

Data was collected through questionnaires, using online as main and offline as the auxiliary methods to distribute questionnaires. The questionnaire refers to Likert scale to design objective questions and collect data. The questionnaire is divided into five dimensions with equidistant options. The specific option questions and question numbers are shown in Table 1. A total of 332 questionnaires were collected on total. To ensure the accuracy for the endings, illogical questionnaires were first excluded before conducting statistical analysis. After organizing, a total of 294 questionnaires were available for use. The proportion of invalid questionnaires is 11%, indicating acceptable data quality.

2. Descriptive Statistical Analysis

The basic information of the questionnaire respondents is as follows: the gender ratio is 45.1% male and 54.9% female. The proportion of respondents with a high school education or below is 34.4%, and the proportion with a bachelor's degree or higher is 65.6%. The proportion of respondents under the age of 20 is 29.4%, those aged 20 to 40 account for 59.3%, and those over 40 account for 11.3%. Overall, the characteristics of the cross-border consumer population

mainly consist of females and knowledgeable middle-aged and young people. Preliminary analysis suggests that the collection of questionnaire data is reasonable.

3. Validity Analysis and Reliability Test

(1) Validity Analysis

Exploratory Factor Analysis (EFA) was conducted of test to structural validity of the data. This involved analyzing all measurement issues, including six hypotheses related to consumer expectations and perceived quality, together using SPSS software. The factor extraction was carried out without any assumptions according to the endings for these measurement items.

The adaptability test, namely the Kaiser-Meyer-Olkin (KMO) and Bartlett's test, produced to following results as shown in Table 2. The KMO result was 0.811, which exceeds the standard of 0.7. Bartlett's Test of Sphericity yielded a Sig. value of 0.000, which is below standard of 0.1. Both results meet the necessary conditions, indicating that the data is suitable for exploratory factor analysis to examine validity.

Table 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy		0.811
Bartlett's Test of Sphericity	Approx. Chi-Square	1 240.375
	df	231
	Sig.	0.000

According to the factor loadings of the rotation component matrix, X1-X3 can be classified into one group, which is used to explain consumer expectations; X4-X8 can be classified into one group, which is used to explain perceived quality; X9-X12 can be classified into one group, which is used to explain perceived value; X13-X17 can be classified into one group, which is used to explain user trust; X18-X20 can be classified into one group, which corresponds to explaining consumer complaints.

(2) Reliability Test

Reliability requires that all measurement items of the same observed variable are interrelated and have a certain degree of convergence, while they are also different from the measurement items of other variables. Stability requires that the same subjects repeatedly fill out the same questionnaire for measurement. Through reliability analysis of the measurement items and the overall questionnaire using SPSS, the measurements of each group and the measurements of the overall questionnaire are all greater than 0.6. Therefore, it can be considered that the measurements in this group are reliable in terms of reliability and further analysis can be conducted.

4. Structural equation model analysis

(1) Model verification method

AMOS 22.0 is used to construct a model of the relationship between variables in cross-boundary e-business consumer satisfaction. Firstly, the model is plotted in the drawing area based on various hypotheses, and then the survey questionnaire data is input for initial operation calculation. The model is judged based on relevant indicators to determine whether it meets the standards. The model is adjusted and modified repeatedly according to various indicators, and the endings for modified fit indices are shown in Table 3.

Table 3. Modified fit indices

Statistical test value	CMIN /DE	RMR	GEI	AGFI	NFI	REI	IFI	CFI	RM-SEA
Ideal value	<3	0.05	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	<0.05
result	2.374	0.057	0.892	0.900	0.919	0.932	0.930	0.947	0.073

It can be seen that all the fitting indexes are basically within the appropriate range. The chi-square/degree of freedom (CMIN/DF) is 2.374, which is less than 3. The root mean square residual (RMR) and the root mean square error of approximation (RMSEA) are both within the reasonable range of 0.05-0.08. The adjusted goodness-of-fit index (AGFI), the normalized fit index (NFI), the comparative fit index (CFI), the relative fit index (RFI), and the incremental fit index (IFI) are all greater than 0.9. Although the goodness-of-fit index (GFI) is 0.892, it is close to the threshold of 0.9. Therefore, overall, the fit is reasonable, indicating a high degree of fit between the hypothetical model and the empirical data. The model is basically reasonable and meets the standards for testing factor influencing mechanisms, further hypotheses can be validated.

(2) Model parameter estimation and hypothesis testing.
The summarized path coefficients and parameter estimation the endings are shown in table 4. It can see that standardized path coefficients for each path are generally less than 1, which is reasonable. Except for the parameter of the path from consumer expectations to consumer satisfaction, the C.R. value is less than the requirement and not significant, the values of other items are all above 2, and the p-value is significantly greater than 0. This indicates that the estimation effect of the model is good, the hypotheses can be analyzed.
From table 4, it can be seen that the path coefficient from perceived quality to consumer satisfaction is 0.604, the p-value is significant, indicating a significant difference from the null hypothesis. Therefore, the H1 hypothesis is supported, and perceived quality will positively affect consumer satisfaction. The path coefficient for the relationship between perceived quality and perceived value is 0.591, with a meaningful p-value, thus H_2 is supported.
The path coefficients for H4, H5, and H6 are 0.348, 0.641, and 0.353 respectively, with all p-values being significant, thus H4, H5, and H6 are also supported.
The value for the path from consumer complaints to consumer satisfaction (H7) is -0.198, with a p-value less than 0.001, indicating a significant decrease in consumer satisfaction due to consumer complaints. When consumers experience dissatisfaction without a reasonable resolution, it leads to negative evaluations. It is necessary for businesses to address these issues promptly, otherwise it may result in loss of profits.

Table 4 Path Coefficients

Path	Unstandardized Path Coefficient	S.E.	*t*-value	C.R.	*P*-value	Standardized Path Coefficient
Perceived Quality ← Consumer Expectations	0.348	0.031	0.003	3.09	＊＊＊	0.345
Consumer Satisfaction ←	-0.091	0.088	-0.001	-1.023	0.209	-0.090

Consumer Expectations						
Perceived Value ← Perceived Quality	0.591	0.158	0.244	3.423	∗∗∗	0.347
Consumer Satisfaction ← Perceived Quality	0.604	0.157	0.207	3.712	∗∗∗	0.391
Consumer Satisfaction ← Perceived Value	0.641	0.073	-0.051	7.901	∗∗∗	0.692
Consumer Satisfaction ← User Trust	0.353	0.032	-0.029	3.121	∗∗	0.384
Consumer Satisfaction ← Consumer Complaints	-0.235	0.180		-3.225	∗∗∗	-0.198

Note: ∗∗∗, ∗∗, and ∗ indicate significance at the 1%, 5%, and 10% levels respectively.The p-value of the path from H3 consumers' expectations to consumer satisfaction is not significant, indicating that the hypothesis is rejected. This may be because consumers' cross-border online shopping is done through online platforms, where they can only judge the authenticity and reasonableness of product information based on the images and text displayed on the platform. Furthermore, the abundance of platform information makes it difficult to form definite judgments. Therefore, consumers' expectations are relatively vague, and their impact on consumer satisfaction is minimal. The final adjusted model is shown in Figure 1.
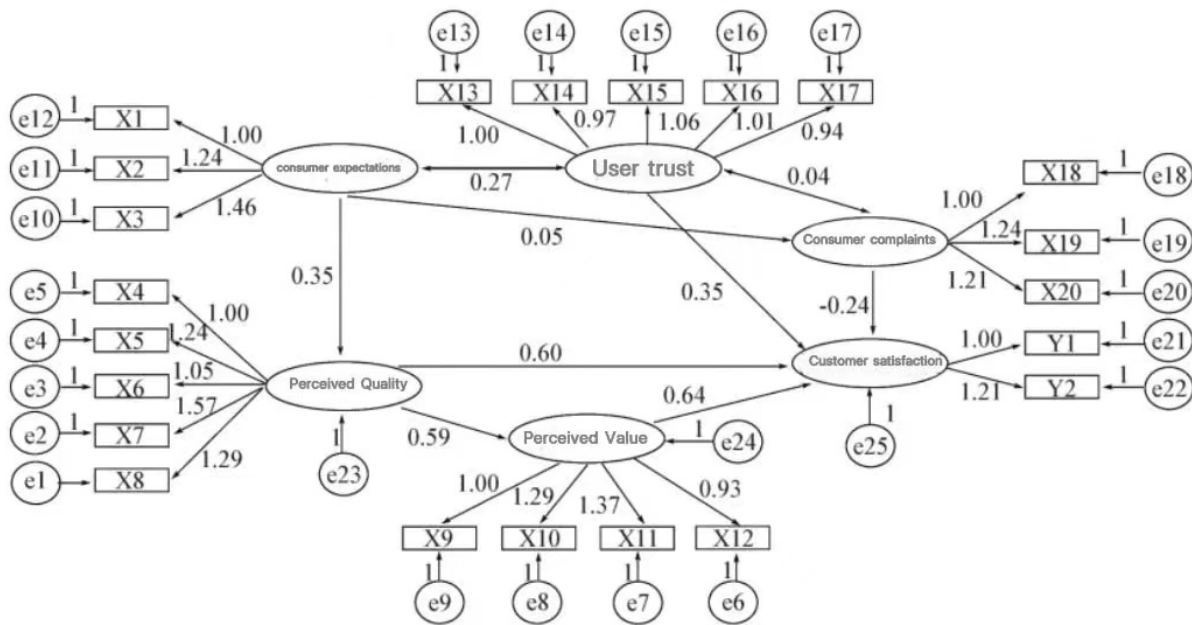
Figure 1 Final model of consumer satisfaction in cross-border e-commerce.

Findings

From the results, perceived quality has a positive effect on consumer satisfaction. When the product quality improves by 1 unit, it may lead to a positive perception increase of 0.6 units. Product quality has always been one of the most important factors for online shoppers, and domestic consumers turn their attention to imported products not only for more purchasing options but also for higher quality and cost-effectiveness, especially in the early development stage of cross-border e-commerce. However, as quality for domestic products continues to improve, cross-boundary e-business is facing certain challenges.

High logistics costs: The data shows that perceived value has a positive effect on consumer satisfaction. Since imported products originate from other countries, unfamiliarity with China's customs regulations can lead to increased dissatisfaction with the purchase process as the delivery time lengthens. The options related to perceived value are analyzed from both the perspectives of logistics and products. The results confirm that the improvement of perceived value depends on the cost-effectiveness of goods and logistic services, which requires cross-boundary e-business to provide consumers with more favorable prices while ensuring product service quality.

Difficulty in after-sales returns and exchanges. In the current era of widespread Internet and highly developed social media, once a platform or business encounters problems, negative word-of-mouth can quickly spread and have a detrimental impact. Research has found that consumer complaints have a negative effect on satisfaction. Consumer complaints directly reflect existing issues. The high price of a certain product has led to strong feelings of annoyance in the customer, who believes they have been deceived or misled by the merchant. Therefore, cross-boundary e-business platforms should focus on customer feedback and cultivate customer service personnel with professional expertise. By connecting with consumers through customer service representatives and engaging in timely communication, the platforms can gain insight into consumer needs and dissatisfaction.

Discussion and Conclusion

1. Strict control of product quality

According to the "Annual Report on Cross-Border E-commerce Consumer Complaints Data and Typical Cases in 2021" released by E-Complaints, product quality ranks third in consumer complaints. Therefore, relevant platforms need to strictly control product quality. They can enhance cooperation with brand owners, implement full industry chain traceability from production to sales, regularly conduct quality inspections, and collaborate with third-party organizations to issue authoritative inspection reports. This not only ensures product quality, but also enhances consumer trust, eliminates information asymmetry, and improves order placement rates. Before consumers make purchases, they should be clearly informed about the required logistics costs, estimated delivery time, and customs clearance time to reduce unnecessary disputes caused by logistics issues.

2. Enhancing consumer perceived value.

The display environment can directly connect with overseas factories or brands, establish supply channels, eliminate intermediate circulation links, not only save costs, but also facilitate the traceability for products, allowing consumers to buy cost-effective products. Logistics experience is also a key concern from consumers. Cross-boundary e-business has longer logistics lead time and products are more prone to damage. On one hand, it can strengthen the cooperation with foreign logistics companies, improve the speed of products entering country. On the other sides, it can enhance the construction of bonded warehouses and domestic express delivery points to solve the problem of "last mile" delivery and improve customer logistics experience.

3. Strengthen the construction of after-sales service system.

Nowadays, people's consumption behaviors are becoming increasingly personalized. Enjoying consumption from a spiritual perspective, the consumption share of knowledge products is rising, credit consumption is prevailing, and ecological consumption is becoming more popular. Complaints and grievances from consumers should be communicated and dealt with in a timely and effective manner. Use the information provided by consumers to discover and improve problems continuously. Failure to resolve the problems in a timely manner will not only cause dissatisfaction among existing consumers, create a trust crisis, and reduce their repurchase willingness and trust in the brand, but also ruin the good brand image established by the enterprise, and potential consumer groups will hesitate to choose the brand. If cross-border e-commerce can develop towards omni-channel direction, combining online and offline stores, and transform consumers' involuntary behavior in terms of marketing into actions from their hearts, good after-sales service can reduce negative emotions and negative comments from consumers, improve their shopping experience, and contribute to the construction of a positive image for platform companies.

Theoretical Implications

Through comprehensive collection of domestic and foreign research documents on consumer loyalty, this article searches with keywords such as "consumer value, consumer satisfaction, consumer loyalty, and the internet", and finds that there are already quite a few studies on consumer loyalty both domestically and internationally. However, there is comparatively less literature on loyalty towards the internet, and even scarcer literature on loyalty face to cross-boundary e-business platforms. Despite the rapid to be on the increase for online shopping,

related research has also been conducted to loyalty for e-business customers, providing many constructive suggestions. However, most of the research on consumer loyalty is based on domestic e-commerce, lacking research on consumer loyalty in the field for cross-boundary e-business. On other hand, study cross-boundary e-business mostly focuses on the impact to cross-boundary e-business on trade development, platform operating models, and to be on the increase strategies, from the perspective of the government or e-commerce platforms. There is very little research conducted from the perspective of consumers. Therefore, this article will take the perspective of consumer value and conduct a comprehensive and in-depth study on the factors influencing consumer loyalty towards cross-boundary e-business platforms, promoting diversification for research on field of cross-boundary e-business and consumer loyalty.

Practical and Social Implications

1. Practical Value

As an emerging business operation approach, cross-boundary e-business become opened a door of borderless online shopping, providing consumers with a more convenient channel compared to overseas shopping and purchasing through agents when buying imported goods. However, with the emergence of new cross-boundary e-business platforms of the industry, competition has become increasingly fierce. Due to the unique nature of the online environment, consumers are able to transfer to other platforms at a lower cost and with more convenience. Additionally, Pareto's 80/20 theory suggests that 20% of consumers generate 80% of the company's profits, and these 20% of consumers are considered to have a high level of loyalty. Therefore, it is worth studying how to fully utilize their own advantages, retain consumers, improve consumer loyalty, and achieve long-term development. Therefore, in the context of cross-boundary e-business, this paper provides theoretical foundations and action guidelines for e-commerce platforms to improve consumer retention and profit.

2. Social Impact

With the rapid to be on the increase of our country's economy, the living standards of the people have improved, too. And the demand for consumption has also increased. Especially for high-quality foreign goods, the demand has been greatly released. Especially as the "80s" and "90s" become the mainstream of consumption, their attention to goods tends to be more focused on safety, quality, diversification of categories, and personalization, and their sensitivity to price has decreased. At the same time, frequent problems with domestic merchandise quality and safety have stimulated people's demand for high-quality overseas merchandise. E-commerce, as a new marketing method, has had a great to impact for country's economic development and people's way of life, and it has received increasing attention from scholars in various countries and has been subject to extensive research for a long time.After years of research and analysis, the research results in this area mainly focus on the evaluation of customer satisfaction in online shopping, analyzing its influencing factors, and how to improve satisfaction. Researching the satisfaction of e-commerce online shoppers can explore the main reasons that affect their satisfaction, so that businesses can improve the quality of merchandises in a targeted manner, make online services more in place, and make the management process more perfect. This can cultivate long-term fixed customers and ultimately contribute to the development of our country's economy.

Limitations and Suggestions for Future Research

This article still has many shortcomings, such as insufficient external factors, such as insufficient sample collection, which may lead to inaccurate research results. The samples are

obtained from questionnaire surveys, and it is difficult to control the quality. The limitations of the author's knowledge also lead to insufficient understanding of customer satisfaction. Continuous improvement is needed in exploring cross-boundary e-business consumer satisfaction.

In the future investigations, the author will choose a more representative product for more detailed research, and strive to achieve random sampling to avoid the influence of overly dense age groups on survey results.

References

Army, J., Rini, S., & Nadhila, R. A. (2019). Customer Satisfaction Analysis of Online Taxi Mobile Apps. *Journal of Information Systems Engineering And Business.*

Chen, W. X. (2019). Consumer satisfaction, influencing factors and countermeasures in imported cross-border e-commerce, taking logistics service and commodity personalization as perspectives. *Fortune Times*, (11),52.

Chen, Y., Li, Y. C. (2019). Research on online customer loyalty enhancement of apparel products based on customer value. *Modern Marketing, 10*(2), 79-82.

Eric, C., Hetty, K. T. (2019). Brand Image Dan Product Performance Terhadap Customer Loyalty, Customer Satisfaction Sebagai Mediasi. *Jurnal Manajerial Dan Kewirausahaan.*

Gao, X., Jia, L. L. (2019). Empirical research on cross-border e-commerce consumer satisfaction based on ECSI. Shandong Social Science, (5), 149-154.

Huang, P-L., Lee, B. C. Y., & Chen, C-C. (2019). The Influence of Service Quality on Customer Satisfaction and Loyalty in B2B Technology Service Industry. *Total Quality Management & Business Excellence.*

Jiang, Y. R., Xu, L., Cui, N., Zhang, H., & Yang, Z. L. (2019). How Does Customer Participation in Service Influence Customer Satisfaction? The Mediating Effects of Role Stressors. *International Journal of Bank Marketing.*

Lenny, M. W., Theresia, M, & Gusti, N. A. (2020). Effect of service quality and brand trust on customer satisfaction and customer loyalty pertamina hospital balikpapan.

Martinus, T., Pauline, H. P. T., & Widodo, S. (2021). Obtaining Customer Satisfaction By Managing Customer Expectation, Customer Perceived Quality and Perceived Value. *Uncertain Supply Chain Management.*

Mohammed, I. E-A. (2019). Modelling The Relationship Between Hotel Perceived Value, Customer Satisfaction, and Customer Loyalty. *Journal Of Retailing and Consumer Services.*

OLIVER R L,DESARBO W S. Response determinants in satisfaction judgment[J]. Journal of Consumer Research,2022, 14(4),495-507.

Suci, A. S., Arun, K. T., Ali, K., & Jacquline, T. (2019). Measuring The Critical Effect of Marketing Mix on Customer Loyalty Through Customer Satisfaction in Food and Beverage Products. *Management Science Letters.*

TAHERDOOST H, MADANCHIAN M. Empirical modeling of customer satisfaction for e-services in cross bordere commerce[J]. Electronics, 2021,10(13), 1547-1547.

YANG Xiaorong,DU R. Research on the impact of IT-driven virtual community knowledge sharing on cross-border e-commerce service quality[J]. China Management Science,2022,30(2),226-233.

Zhao, Y., Li Q. Q., Chen, Y. H., et al. (2018). Research on user satisfaction of haitao APP based on sentiment analysis of online reviews. *Data Analysis and Knowledge Discovery, 2*(3), 90.

Zhang, X. D., He, P. (2018). Research on the influence mechanism of brand preference of cross-border e-commerce consumers. *Consumer Economy, 34*(4), 82-89.

Zhang, M. (2017). *Research on the relationship between consumer experience and consumer loyalty of third-party mobile payment platform under social influence*. Capital University of Economics and Business.