

Retraction

Retracted: Influencing Factors of Cross-Border E-Commerce Consumer Purchase Intention Based on Wireless Network and Machine Learning

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This article has been retracted by Hindawi, as publisher, following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of systematic manipulation of the publication and peer-review process. We cannot, therefore, vouch for the reliability or integrity of this article.

Please note that this notice is intended solely to alert readers that the peer-review process of this article has been compromised.

Wiley and Hindawi regret that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] C.-W. Lu, G.-H. Lin, T.-J. Wu, I.-H. Hu, and Y.-C. Chang, "Influencing Factors of Cross-Border E-Commerce Consumer Purchase Intention Based on Wireless Network and Machine Learning," *Security and Communication Networks*, vol. 2021, Article ID 9984213, 9 pages, 2021.

Research Article

Influencing Factors of Cross-Border E-Commerce Consumer Purchase Intention Based on Wireless Network and Machine Learning

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In recent years, with the continuous development of Internet technology and the deepening of economic globalization, cross-border e-commerce has become a new international trade model and an important growth point of foreign trade. With the popularity of international trade, domestic consumers have a deeper understanding of foreign products and brands and willingness to purchase, but at this stage, cross-border e-commerce transactions are not as close to domestic online shopping, and a few have business opportunities. PortUnity is the first among overseas consumers and some avant-garde consumers with a sense of consumption. Most people have not yet reached real cross-border e-commerce, so cross-border e-commerce has broad development potential on a global scale. As a high-tech field, cross-border e-commerce has few relevant theories and literature. Therefore, this article aims to explore the influencing factors of consumer purchase intention of cross-border e-commerce based on a wireless network and machine learning and to provide decision support for the management and operation of e-commerce in order to promote the better development of cross-border e-commerce. This article analyzes the influencing factors of consumers' intention in cross-border e-commerce shopping by combining literature research and empirical research. With the support of wireless networks and machine learning, perceptual-based ease of use and perceived usefulness of the original TAM, the individual influencing factors of cross-border e-commerce consumers' purchase intention and e-commerce platform factors are summarized according to the characteristics and technology acceptance model of cross-border e-commerce. In this questionnaire survey, the author fully explored the survey value of each respondent, and all the 100 questionnaires were successfully recovered, with a 100% utilization rate of data. The research results of this article show that in addition to the originally perceived usefulness and perceived ease of use, consumers' income level, education level, age, gender, service, safety index and price of cross-border e-commerce platform, and other factors also affect the cross-border consumption frequency of consumers.

1. The Introduction

Since the 1980s, China has become increasingly connected with various economies in the world, and commercial trade has become more and more frequent. Correspondingly, in recent years, China's e-commerce trade has also developed rapidly, and various policies have been issued to support the development of cross-border e-commerce enterprises [1].

More and more traditional enterprises have started to enter the industry, fully driving the rapid growth of the economic index [2–4]. According to statistics, just in 2018, the overall transaction scale of cross-border e-commerce in China reached an astonishing 4.3 trillion yuan, with a year-on-year growth of 37%, and the transaction volume of imported e-commerce also reached 723.7 billion yuan [5]. With the increasingly close links between countries, cross-border

e-commerce is showing a trend of booming development [6, 7]. Relevant surveys indicate that about 75% of online shoppers in China have ever intended to buy or browse goods provided by cross-border e-commerce companies [8]. Furthermore, some surveys indicate that about 30% of domestic e-commerce companies or self-employed people intend to engage in cross-border e-commerce [9]. The development of the Internet has also driven the development of Internet-related industries, among which the most important contributor is e-commerce. China has a big population and a huge amount of online consumption. At the present time, many consumers in China reached an astonishing 500 million, ranking first in the century with great advantages [10–12]. At the international import expo held in 2018, China stated its position of continuing to open up to the outside world. Therefore, in the foreseeable next decade, China's e-commerce revenue and expenditure will inevitably keep growing [13–16]. Compared with the previous closed period, the country is more concerned about the improvement of people's living standards at this stage. People's demand for consumer goods has changed from only pursuing usability in the past to focusing on the quality of goods. To put it simply, there are more and more consumer groups focusing on high-quality products in the international market [17]. In fact, since the outbreak of 2008 domestic milk time, the cross-border electricity showed powerful security advantages; this is mainly because the domestic consumer demand upgrade helped cross-border e-commerce development and the economic contacts between our country and trading nation culture also influence each other, thus affecting people's consumption idea [18, 19]. After decades of development and evolution, cross-border e-commerce has changed from overseas personal online shopping in the past to today's e-commerce platform resale, gradually overcoming the problems of the past trading methods, for example, product quality problems cannot be guaranteed, consumers cannot purchase goods as they wish, the delivery period is too slow, and the handling fee is too high. Nowadays, the experience of cross-border e-commerce consumers has been gradually improved and expanded [20, 21]. In view of this background, this article intends to conduct a comprehensive analysis and study on the factors influencing the purchase intention of cross-border e-commerce consumers when they engage in consumption activities from the perspective of consumers.

It cannot be ignored that data and communication security is paramount in the communication of many networks [22]. Because there are so many risk factors on the Internet, targeted measures must be taken to prevent leaks. First, if multiple networks are not allowed to communicate with each other, the host with multiple network cards is not allowed to install routing and data exchange protocols, let alone configure related protocols. Second, users connected to this computer cannot actively connect to other networks through this software. Finally, when transmitting data, the data must be processed, as required, to enhance security. Due to the early start of information and the long development of e-commerce in foreign countries, foreign scholars have studied cross-border e-commerce earlier.

Among them, foreign scholars have pointed out that cross-border e-commerce can play a very important role in promoting international trade [23]. Paul Krugman took the iceberg model as a research method and studied the impact of e-commerce on international trade by combining e-commerce with the international trade model [24]. Research showed that e-commerce can affect the price of products, corporate profits, product production, and global trading volume. Martens and Turlea in the 27 EU Member States of Consumer Research Data, and by constructing B2C e-commerce, analyzed the data collected by the cross-border commercial model and concluded that the electronic payment system, the accounting model, and cost-effectiveness are the main reasons for the impact of cross-border e-commerce growth on the conclusion; they also suggested, through perfect laws and regulations, refinement of the financial system and parcel delivery method to improve the speed of cross-border e-commerce [25–27].

Experts at home and abroad also have many studies on the purchase intentions of cross-border e-commerce customers. Wang believed that my country has certain advantages compared with other countries. For example, my country has international e-commerce platforms such as Alibaba, which can be used at the same time. There are also many electronic payment methods, and the cost of various express logistics is relatively low. Cai Jing believed that cross-border e-commerce has reduced operating costs, broadened overseas marketing channels, and helped small- and medium-sized enterprises to go global. It has gradually become a new trend in my country's import and export trade. Xu analyzed the management of the cross-border online shopping market from the Chinese government and found that my country is gradually liberalizing the cross-border e-commerce market and has provided policy support and improved relevant laws. MOU proposed a research model of CBEC purchase intention and, from the perspective of psychology, studied the impact of product description and participation on purchase intention in the cross-border e-commerce (CBEC) environment. The research model was tested using structural equation modeling technology based on covariance. As a result, high-quality product description has no obvious positive influence on purchase intention but has an obvious positive influence on product cognition, product emotion, platform persistence, and platform contextuality. In addition, product emotional participation, platform persistent participation, and platform contextual participation all have a significant positive impact on purchase intention, but this effect is not significant in the relationship between product cognitive participation and purchase intention. The research method has ambiguity. These studies provide some references for this article, but due to the imperfect samples and methods of the study, it is difficult to reproduce the study.

In recent years, due to the rapid economic development and the continuous and in-depth development of foreign trade, domestic experts and scholars engaged in e-commerce research have also done a lot of research. For example, Professor Wang Xingping explained the development status

of cross-border e-commerce and third-party payment and put forward the theory that strengthening risk management and control pilot management can promote the healthy and stable development of e-commerce [28]. From the perspective of the rapid development of global e-commerce, Zhang Xiaoheng pointed out that the main factors affecting China's e-commerce are marketing factors, social and cultural factors, logistics, e-commerce platforms, payment methods, tariffs, and six major factors. For recommendations related to the development of e-commerce [29], Yuan Xuli, a scholar, introduced the current development of e-commerce at home and abroad and raised malignant problems. He believed that malicious competition, payment risks, and inconsistencies in the logistics chain are the main problems that need to be resolved in development of e-commerce in China [30, 31]. In the research of e-commerce at home and abroad, it is not difficult to find that it focuses on the existing e-commerce research, which involves the impact of international trade, e-commerce logistics issues, and e-commerce payment security. However, it does not break things for e-commerce, and for cross-border e-commerce research, the influencing factors of consumer purchase intention are basically still in the blank stage [32].

This article tries to break through the limitations of existing researches and analyzes the influencing factors of consumers' willingness in cross-border e-commerce shopping by combining literature research and empirical research. The main innovation of this article is to put forward the concept that consumers' willingness to purchase cross-border e-commerce is affected by multiple factors from the technical support of wireless network and machine learning and explore the factors that influence consumers' choice of goods in the process of cross-border shopping. From a practical point of view, in terms of the selection of research objects, young and energetic consumers are carefully selected as the main research objects. They are easy to accept emerging electronic technologies and dare to pursue cutting-edge shopping methods. Moreover, this group is the important interactor of e-commerce and has a strong representation.

2. Theoretical Review of Factors Influencing Purchase Intention of Cross-Border E-commerce Consumers

2.1. Research Route. In order to facilitate readers to understand the research context and research methods of this study, the author used descriptive statistics to describe the samples in the research process and conducted correlation analysis and regression analysis on the experimental samples to verify the research theme using relevant analysis reliability and validity tests. The research route of this article can be summarized as a flowchart, and the research roadmap is shown in Figure 1.

Unlike the domestic shopping model that can be consumed online and offline, consumers have greater difficulty

contacting imported products and cannot obtain first-hand information. Consumers will rely more on users when shopping online for cross-border products. In view of this demand, many cross-border e-commerce platforms have begun to build communities while meeting the shopping needs of consumers so that users can discuss and exchange product experiences in the community. The community has become part of the development of cross-border e-commerce platforms. The booster is the main means to attract and retain users. It can be seen from the usage and data of cross-border e-commerce applications that the operation of the community is a means to maintain high user retention and high stickiness, which will directly affect consumer behavior. A good user experience will affect consumer attitudes, increase consumers' willingness to buy, and even bring about impulsive consumption. Therefore, it is necessary to study the influence of community user experience on consumers' purchase intention.

2.2. Core Concepts

2.2.1. Cross-Border E-Commerce. Cross-border e-commerce can also be referred to as cross-border e-commerce business. In essence, it refers to the buying and selling behaviors of trading entities in different regions through cross-border trading platforms. It can also be called a brand new modality of international trade, in which both parties learn about relevant products through the Internet, negotiate and sign a transaction agreement, then pay in the form of third-party payment, and then complete the transaction through international express delivery or logistics companies with international freight capacity. Most of the buyers in this form are small- and medium-sized businesses or individuals. With the research of cross-border e-commerce in academia, the definition of cross-border e-commerce has formed a general consensus. It refers to the transaction entities belonging to different customs that negotiate through e-commerce platforms, reach transaction intentions, settle accounts through electronic payment, and finally complete the entire transaction process by delivering goods through international logistics.

2.2.2. Consumers' Purchase Intention. Purchase intention refers to the possibility that consumers want to buy a certain product. The more the purchase intention is, the more likely the purchase behavior is to occur. So, purchase intention has become an important indicator to predict consumer behavior. Professor Hu Huaibin found in his research that the subjective will of consumers plays a direct decisive role in the occurrence of consumer behaviors, and the will of consumers can be used to predict whether consumer behaviors will exist or not. Scholar Li Ruide pointed out that consumers' purchase intentions can be divided into positive intentions and negative intentions. If the purchase power is positive, the probability of purchase behavior is greatly improved; on the contrary, if the purchase power is negative, the probability of purchase behavior is greatly reduced.

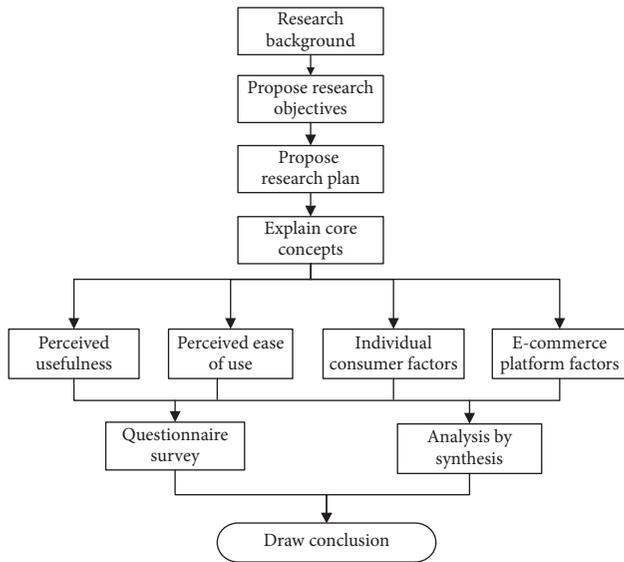


FIGURE 1: Research roadmap.

Obviously, both e-commerce and traditional shopping are influenced by consumers' purchase intentions. Although e-commerce is quite unlike traditional shopping in terms of purchase channels, consumption atmosphere, and consumption method, the purchase mode relying on the Internet mainly depends on consumers' search and comparison on the Internet. However, the objective factors that affect the purchase power of consumers still exist. The intention to purchase e-commerce can be understood as the tendency of consumers' purchasing behavior after searching information on the Internet. In short, whether it is traditional shopping or e-commerce shopping, purchase intention plays an important role. Therefore, in the process of studying consumers' purchasing intention, it is of great significance to our research.

2.2.3. TAM. The TAM, also known as the technology acceptance model, is based on rational behavior theory, which combines the introduction of variables, perceived usefulness, and perceived convenience and simulates the main variables that influence the cognitive and emotional factors accepted by the information system. David first proposed and applied the model in 2003. TAM holds that two core variables exist in the technology acceptance model: usefulness and ease of use. Perceived usability is the degree to which a person believes that a particular system is being used to improve the performance of their work. Perceived usability reflects how people think a particular system is being used.

TAM studies customer attitudes primarily to explain the system message. After the TAM was put forward, many studies on the model began to emerge. With the deepening of research, the TAM has been constantly improved research on consumer attitudes and willingness to become a classic pattern.

2.2.4. Machine Learning. Machine learning (ML) belongs to a relatively young and important branch of artificial intelligence (AI). It involves multiple disciplines and is widely used in intelligent systems. ML is related to the capabilities of a computer system or machine in order to improve performance during the learning of its entire experience automatically. In machine learning, a computer program is assigned to perform some tasks, and the "machine" can learn relevant experience from these tasks. As the computer program has gained more and more experience in performing tasks, its practical performance in these tasks has been improved. Therefore, "machines" can make decisions and make predictions based on data. Take the application of machine learning in the medical field as an example. The computer program learns to detect and predict cancer from the medical investigation report of the patient. Moreover, by analyzing medical investigation reports of more patients, it will accumulate more experience and improve performance. Among them, the performance of the computer program will be measured by the number of correct predictions verified by experienced oncologists and the number of cancer cases found. It has certain credibility and authority.

Machine learning is widely used in the following fields: Computer Vision (CV), wireless communication, intelligent robotics, computer games, pattern recognition, natural language processing, data mining, traffic prediction, virtual personal assistants (such as Google), online transportation Internet (e.g., Uber estimates peak prices during peak hours), product recommendations, market forecasts, medical diagnosis, online fraud predictions, agricultural consulting, search engine results optimization (e.g., Google search engine), BoT (chatbot for online customer support), spam filtering, crime prediction surveillance system through video, and social media services (recognizing faces in Facebook). Machine learning usually optimizes applications in these fields, which may also lead to noisy gradients; that is, it may lead to a jump in the error rate instead of a slow drop. An example application of Stochastic Gradient Descent (SGD) is to evaluate three types of problems, namely, classification, regression, and clustering. According to the availability of training data types and categories, machine learning algorithms need to choose from available technologies such as "supervised learning," "unsupervised learning," "semi-supervised learning," and "reinforcement learning" and guide their algorithms to adjust.

2.3. Overview of Influencing Factors of Cross-Border E-Commerce Consumers' Purchase Intention. It is obvious that in the process of cross-border commodity trading, consumers will be affected not only by traditional perceived usefulness and perceived ease of use but also by their own factors, such as consumers' income level, age, education level, interests and hobbies, and gender.

The research in this article indicates that users may form a good interactive relationship with members due to a good user experience so that users have a better value perception

of the overall value of the community, thereby generating purchase intentions. (1) The composition of user experience is that people's reactions and results of products and systems or services used or expected to be used mainly involve three factors: users, products or services, and interactive environment. In addition to the practical experience of the product itself, the user experience should also consider the hedonic experience from the perspective of consumer psychology; in addition to the functional experience brought by the product itself, more attention should be paid to the psychological level of consumers, that is, emotion. Experience should be measured from three levels: the instinct layer refers to the visual experience and brand experience that users directly contact through the senses; the behavior layer refers to the user's experience after contacting the product, mainly the experience of the product's functional performance; the reflection layer represents the emotional experience that users get in the process of interacting with the product, the recognition of the product's brand value, and even the realization of self-worth through the product.

In summary, user experience mainly involves users, products, and interactive environments. In addition to the experience of product functions, it also emphasizes the psychological feelings of users in the process of experiencing products, that is, emotional experience. Since virtual communities have very obvious social genes and are based on the relationship between people, the social experience is taken as a separate factor here.

3. Experiments on Influencing Factors of Purchase Intention

3.1. Questionnaire Design. The literature research goal is to elaborate on the factors of cross-border e-commerce consumers proposed in this article, but literature review cannot overcome the disadvantage of lack of objective data, so in order to obtain rich data support, research must be supplemented by a questionnaire survey. In the design of the questionnaire, the most valuable data information can be reflected in the research topic only by designing the questionnaire in accordance with the research focus of the article. The questionnaire should avoid personal privacy as much as possible. Measuring the number of items should be appropriate. Considering the respondents' ability to receive replies, it is not advisable to set too many items, and only 5 minutes is the most appropriate time.

In addition to usefulness, ease of use, the questionnaire design for influencing factors of consumers' purchase power in e-commerce established in this article also involves several basic elements of consumers themselves and several main reference values of e-commerce platforms. Assuming that the basic elements of these consumers and the reference value of the e-commerce platform will affect the purchase intention of consumers, the following research analysis is based on this assumption. To make the data more intuitive, ensure the efficient availability of data; this article believes that it is necessary to do some visual processing on the questionnaire. Combined with the research purpose, this

article makes the following quantitative processing on the questionnaire design, as shown in Table 1.

3.2. Questionnaire Survey. Factors affecting consumer purchasing intentions in e-commerce are mainly divided into three steps. In the first stage, the questionnaire was designed. The main content of this work is to sort out the relevant background factors that affect consumers' intention to purchase e-commerce, and propose hypotheses based on the influencing factors, and complete the design of the questionnaire. In the second stage, questionnaires were conducted. The main task is to conduct the survey within the scope of the designed questionnaire and modify the questions in the questionnaire to achieve the next step. In the third stage, questionnaires will be officially issued, respondents will be guided to accept the survey truthfully, and data will be sorted out and analyzed.

A total of 100 respondents were randomly selected in this questionnaire survey. In order to keep the authenticity and validity of the data, it is necessary to select the respondents specifically.

3.2.1. Income Level. Of the 100 respondents, 9, or 9 percent, have a monthly income below 2000 yuan. Twenty-nine percent have a monthly income of 2,000 to 4,000 yuan. A total of 38 people, accounting for 38 percent, have a monthly income of 4,000–6,000 yuan. Fourteen people, accounting for 14%, have a monthly income of 6,000–8,000 yuan. Ten people have monthly income above 8,000 yuan, accounting for 10%. See Table 2.

3.2.2. Age Distribution. Of the 100 respondents, 11, or 11%, were under the age of 18. A total of 79 people were between the ages of 18 and 40 years, accounting for 73%. Ten people, accounting for 10%, were 40–70 years old (see Table 3).

3.2.3. Education Level. Of the 100 respondents, 7, or 7 percent, had a high school education. There are 18 people with a college degree or above, accounting for 18%. There are 42 people with bachelor's degree, accounting for 42%. There are 27 people with master's degree, accounting for 27%. Six people had other educational backgrounds, accounting for 6%. See Table 4 below.

3.2.4. Gender. Of the 100 respondents, 34 were men, or 34 percent; 66 were women, 66 percent (see Table 5).

4. Regression Analysis

In this article, SPSS20.0 was used to analyze the reliability of survey data, and principal component analysis Alpha was used to test the reliability of questionnaires. It is generally believed that the greater the value of the Alpha coefficient, the greater the consistency and stability of variables. SPSS can effectively ensure the validity of data surveys and can clearly display the results of the survey. Generally speaking, when the Alpha coefficient is higher than 0.8, the scale can be

TABLE 1: Visual table of questionnaire design.

The serial number	The problem	Options			
1	Do you know cross-border e-commerce	Know very well	A basic understanding of	Complete strangers	—
2	You have had several overseas shopping activities in the past 2017	More than ten times	5–10 times	1–5 times	Zero
3	How many overseas shopping behaviors did you have in 2018	More than ten times	5–10 times	1–5 times	Zero
4	What limits you to overseas shopping behavior	Economic ability	Deemed unsafe	Product dislike	Others
5	What motivates you to engage in overseas shopping behavior	The product is good	Safe and secure	The service is good	Others
6	Do you think overseas shopping is the consumption behavior of economy	Yes	No	Don't know	—

TABLE 2: Descriptive statistics of income levels.

Income level distribution	Number	The proportion (%)
Less than 2000	9	9
2000–4000.	29	29
4000–6000.	38	38
6000–8000.	14	14
More than 8000	10	10

TABLE 3: Descriptive statistics of age.

Age distribution	Number	The proportion (%)
Under 18 years old	11	11
18 to 40 years of age	73	73
40–70 years of age	10	10

considered to have a very good consistency. When the Alpha value is higher than 0.7, the reliability of the questionnaire is quite high. Apache coefficient is lower than 0.5, and the reliability of the questionnaire is low and unacceptable. When it is between 0.5 and 0.7, the reliability of the questionnaire is acceptable. The statistical results of this article are shown in Table 6. The coefficient of 27 items among the total factors that affect the purchase power of e-commerce consumers is greater than 0.7, indicating that the questionnaire of this study has good reliability, and the total table has good overall stability and acceptability, as shown in Figure 2.

In this questionnaire survey, the author fully explored the survey value of each respondent, and all the 100 questionnaires were successfully recovered, with a 100% utilization rate of data. According to the result of the recycling questionnaire combined with the national bureau of statistics data released as you can see, a lot of people in the electronic commerce in the process of cross-border often have scruples, but with the ascension of e-commerce trading platform technology and related international logistics industry development, e-commerce is better for the user experience, and the scale of e-commerce business has maintained a growth trend in the last few years and is expected next still keep growing, but at a slower pace, as shown in Figure 3.

TABLE 4: Descriptive statistics of education level.

Distribution of education level	Number	The proportion (%)
High school degree	7	7
College degree	18	18
Bachelor degree	42	42
Master's degree	27	27
Others	6	6

TABLE 5: Survey of descriptive statistics of sex.

Gender	Number	The proportion (%)
Male	34	34
Female	66	66

Along with the continuous expansion of transaction scale, the volume of e-commerce consumers will continue to increase. According to data released, the number of e-commerce consumers in China has reached 73 million person-times in 2018. With this trend, China's e-commerce consumer population is likely to exceed 100 million by 2020, experts said. Meanwhile, experts also pointed out that the growth rate of e-commerce consumers reached its peak in 2018 and is expected to slow down in the future, as shown in Figures 4 and 5.

In fact, wireless networks and machine learning have a profound impact on cross-border e-commerce. Because there are many parts of the e-commerce consumption that may be "suitable for ML applications." This makes it very effective to use wireless network and machine learning technology in collecting related work tasks, data information, and demand information in the TAM. The impact of machine learning on the economy is defined as the automation of knowledge work: "Using computers to perform tasks that rely on complex analysis, subtle judgments, and creative problem solving." In particular, the advancement of machine learning technologies such as deep learning and neural networks is the main driving force for the automation of knowledge work, and natural user interfaces such as e-commerce consumer-related business platforms are other driving factors that benefit greatly from ML technology. Therefore, it can be concluded that wireless network and machine learning have effectively processed the

TABLE 6: Statistical results scale.

The research variables	Study of the measurement of variables	Alpha coefficient
Perceived usefulness	E-commerce can obtain a wealth of services or goods to meet your needs	0.823
	E-commerce purchases can save you time	
	You can get cheaper services or goods through e-commerce	
Perceived ease of use	E-commerce platforms can provide comprehensive commodity information	0.834
	You can easily find the service or goods you need through e-commerce platform	
	You think the operation process of e-commerce is easy	
Consumer factors	You think e-commerce purchase is easy to master	0.745
	You are quite proficient in the Internet	
	You have rich experience in e-commerce (more than 10 times in half a year)	
	You browse the online store more often	
Cross-border e-commerce platform factors	You are concerned about the leakage of personal information in the process of e-commerce shopping	0.878
	You worry that the after-sales service of e-commerce products is not guaranteed	
	You think it is difficult to judge the quality of e-commerce products	
	If problems occur in e-commerce, merchants will solve them in time	
	Compared with traditional shopping stores, you think the price of e-commerce products is relatively cheap	
	When e-commerce, you usually choose relatively cheap products	
According to the information provided by shopping website, many people use e-commerce		

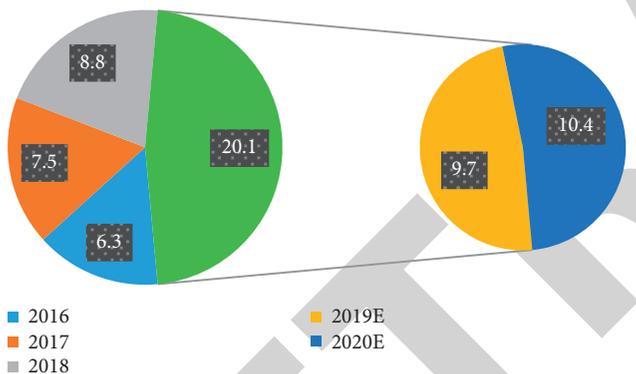


FIGURE 2: E-commerce 2016–2018 transaction size and 2019–2020 transaction size forecast picture.

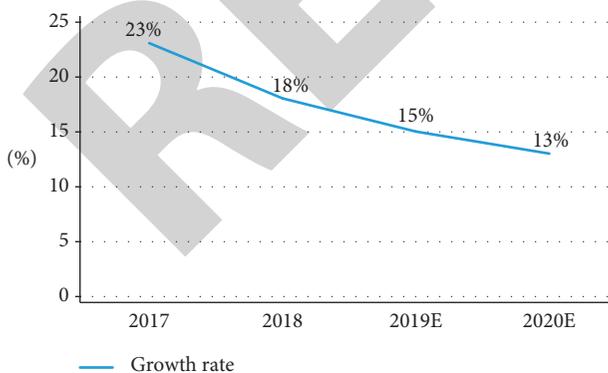


FIGURE 3: E-commerce 2017–2018 growth rate and 2019–2020 growth rate forecast chart.

consumption data and information of cross-border e-commerce, which has a positive impact on consumers' purchase intention in cross-border e-commerce.

Forecast of the scale of cross-border e-commerce consumers in 2016-2018 and 2019-2020

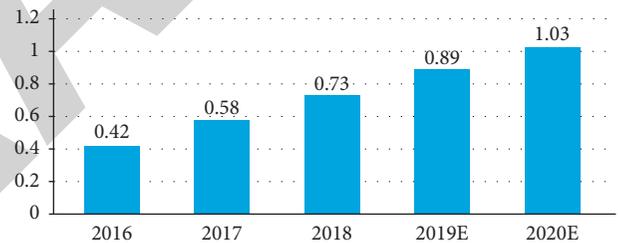


FIGURE 4: Forecast chart of cross-border e-commerce consumer scale from 2016 to 2018 and from 2019 to 2020.

The growth forecast of cross-border e-commerce consumers is 2017-2018 and 2019-2020

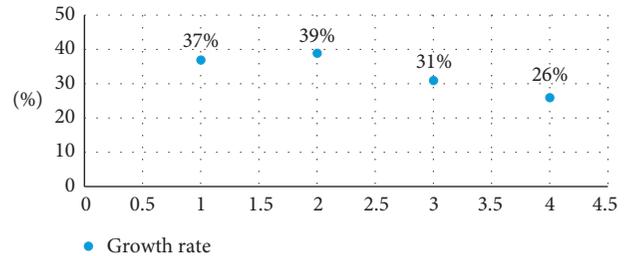


FIGURE 5: Growth forecast chart of cross-border e-commerce consumers in 2017–2018 and 2019–2020.

5. Conclusion

In this article, on the basis of fully absorbing predecessors' research results, through scientific and rational methods of literature research, with the help of wireless network and machine learning method, the questionnaire survey system is used to investigate the consumer's purchase intention in

e-commerce; the influence factors in the establishment of a research model were adopted in the TAM of perceived usefulness and perceived ease of use, two factors as the main axis, and creative individual consumer characteristics and affecting factors of e-commerce consumption and e-commerce-related business platform for the influence factors of consumers' willingness to purchase were studied.

The innovation of the article is to apply the means of literature research and questionnaire survey to the influence factors of e-commerce on consumers' purchase intention. In the process of investigation, machine learning algorithms are fully utilized; the influencing factors of consumers' consumption are fully explored in line with the actual situation. In the link of questionnaire survey, the selection of respondents strictly follows the efficient, practical, and accurate sample screening conditions.

The research in this article also has some shortcomings, which are mainly reflected in the small total sample size, which is affected by time and cost, and the sample cannot be expanded. In the questionnaire distribution process, because random sampling is more difficult and limited, the proportion of students in the survey object is relatively high; the sample selection is not a random sampling, so the representativeness may have a certain error.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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