

THE INFLUENCING FACTORS OF CONSUMERS' PURCHASE INTENTION ON THE TIAN MALL INTERNATIONAL CROSS-BORDER E-COMMERCE PLATFORM

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Abstract: Tian Mall international cross-border e-commerce platform, a leading e-commerce platform in China, is grappling with customer retention challenges due to the shift from traditional offline stores to online sales. The company needs to improve consumer purchase intention and promote products and services. The objectives of the study were: 1) To explore whether perceived usefulness affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform; 2) To explore whether perceived ease of use affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform; 3) To explore whether perceived safety affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform. This study adopted the quantitative research method. In this study, a total of 440 questionnaires were distributed, with 408 valid questionnaires and the validity rate was 92.9%. The population was the consumers of Tian Mall International's cross-border e-commerce platform. Based on the technology acceptance model, and the perceived risk theory, this paper found that: 1) Perceived usefulness has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform; 2) Perceived ease of use has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform; 3) Perceived safety has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform. For recommendations, Tian Mall international cross-border e-commerce platform should focus on the following aspects: 1) Optimizing perceived usefulness; 2) Improving perceived ease of use; 3) Enhancing perceived safety.

Keywords: Consumers' Purchase Intention, Tian Mall, International Cross-Border, E-Commerce Platform

Introduction

With e-commerce booming in China, companies' competition for customer resources is no longer limited to offline. In recent years, there has been a shift in customers' consumption habits. Consumers used to learn about products from advertisements and brochures, but now the Internet has



become the main channel for collecting information. Consumers used to pay for their purchases in offline stores, but online sales are increasingly eating into traditional sales (Qian, 2021). As a result, more and more companies are getting involved in e-commerce and opening their e-commerce websites, hoping to capitalize on the e-commerce trend, provide products and services to customers through the combination of e-commerce and offline entities, and enhance the core competitiveness of enterprises. However, looking at the current successful e-commerce companies, from foreign Amazon and eBay to China's Tao Bao and Jing Dong, they are from scratch from the newly created technology companies, the transformation of traditional enterprises into e-commerce, but there are few leading benchmarks. E-commerce has gradually become the contact channel for customers, even more important than offline services (Balassa, 2020).

However, in the rapid development of cross-border e-commerce, it also faces problems. The traffic of cross-border e-commerce has declined, with the traffic of mainstream cross-border e-commerce platforms declining by 23.47% year-on-year in the first half of 2022, while the rate of customer complaints about cross-border e-commerce goods rose by 27.65% year-on-year (Jin, 2022). Meanwhile, due to intensified competition in the industry and further homogenization of products and services, the customer retention rate of cross-border e-commerce platforms declined by 19.78% year-on-year in 2021 (Jin, 2022). The rise in the customer complaint rate and the decline in the retention rate of cross-border e-commerce platforms directly affect the development of cross-border e-commerce platforms and are affected by the policy environment, such as by the impact of Amazon's "blocking incident," resulting in the loss of nearly 100 billion yuan of the transaction scale of the cross-border e-commerce platforms, which has brought enormous pressure on the cross-border e-commerce platforms.

On a small international cross-border e-commerce platform, there is a rise in customer complaints and a decline in customer retention. Small international cross-border e-commerce platforms need to pay further attention to consumers' purchase intentions and take effective measures to enhance consumers' purchase intentions to maintain development in the fierce market competition. To this end, the study examines the factors affecting consumers' intention to buy on Tian Mall International's cross-border e-commerce platform and puts forward relevant suggestions to improve the development of cross-border e-commerce platforms and to promote the improvement of cross-border e-commerce platforms to provide reference for their products and services.

This study not only has theoretical significance but also has practical significance for the development of cross-border e-commerce. This study can help Tian Mall International's cross-border e-commerce platform to implement targeted marketing strategies and contribute to the development of the cross-border e-commerce industry. Cross-border e-commerce platform consumer acceptance and intention to use by what factors is the most urgent business wants to explore. Cross-border e-commerce



enterprises are blossoming, the competition is extremely fierce, and enterprises are grabbing market share, on the premise of retaining existing consumers, and constantly attracting new consumers (Harper et al., 2020). Therefore, understanding the influencing factors of cross-border e-commerce consumers' intention to buy is important for companies to implement their business strategies. Cross-border e-commerce consumer-level research can help companies better understand consumer psychology. China's cross-border e-commerce industry has developed rapidly in recent years, but it is still a new industry, and most consumers do not have a high level of acceptance of cross-border e-commerce platforms, which leads to the fact that cross-border e-commerce consumer-level research is still in its infancy.

This study refines the research on consumer purchase intention of cross-border e-commerce enterprises. There are differences between traditional e-commerce, cross-border e-commerce facing e-commerce platforms as well as offshore platforms, between the domestic and offshore in terms of purchase and payment, logistics and distribution are more complex than the e-commerce business platforms within China, and the factors affecting the consumers' intention to buy are also different. In existing research, it is more common to apply relevant theories to traditional e-commerce models, but the use of theoretical models to study the cross-border e-commerce consumer domain is rare, and even less literature on specific cross-border e-commerce websites. This study also has some references to the applied research of consumer behavior research) as well.

Research Objectives

- (1) To explore whether perceived usefulness affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.
- (2) To explore whether perceived ease of use affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.
- (3) To explore whether perceived safety affects consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.

Research Hypotheses

The perceived safety consists of three questions.

- H1: Perceived usefulness has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.
- H2: Perceived ease of use has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.
- H3: Perceived safety has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform.



Literatures Review

Perceived Usefulness

In the Technology Acceptance Model (TAM), perceived usefulness refers to a person's subjective assessment of the expected benefits of using a particular technology or system. This concept was developed by scholars in the field of information systems research to explain an individual's attitude and behavior toward the adoption of a particular technology. Whether the technology or system will meet the specific needs of the user, solve the user's problem, or provide the desired functionality. Whether the use of the technology or system leads to positive changes or improvements that enhance work efficiency or quality of life (Saadé, 2007). Perceived usefulness is often considered an important influence in TAM and plays an important role in predicting an individual's intention to accept new technology. In practice, researchers and practitioners use questionnaires and user interviews to assess users' perceptions of the usefulness of technologies and optimize product design and promotion strategies accordingly.

When it comes to cross-border e-commerce consumers' intention to buy, perceived usefulness plays a crucial role in their purchase decisions. Cross-border e-commerce platforms typically offer more variety and a wider range of choices, and consumers evaluate the quality, features, and usability of cross-border products to determine whether they are worth purchasing. Perceived usefulness is influenced by product quality and variety, and consumers are more likely to be willing to purchase a cross-border product if they perceive it to be of higher quality or greater variety (Denaputri & Usman, 2019). Consumers will consider the price of the cross-border product as well as the cost of currency conversion. They will be more inclined to purchase if they perceive that cross-border purchases can result in better prices or more favorable currency exchange rates.

Consumers will assess the logistics efficiency and delivery reliability of cross-border e-commerce platforms to determine the convenience and practicality of the purchase. Consumers are more confident in making purchases if they perceive that the cross-border e-commerce platform provides fast and reliable logistics and delivery services. Cross-border shopping involves merchants and payment systems in different countries and regions, and consumers will be concerned about trust and security. Perceived usefulness is affected by the reputation and security measures of the cross-border e-commerce platform if consumers perceive that the platform has a good reputation and security measures (Elango & Kulcharatyothin, 2018). Cross-border e-commerce consumers' purchase intention is influenced by perceived usefulness. Therefore, cross-border e-commerce platforms need to focus on product quality, price competitiveness, logistics and distribution, trust, and security to enhance consumers' perceived usefulness, thereby promoting the development of cross-border e-commerce and increasing purchase intentions (Elango & Kulcharatyothin, 2018).



Perceived Ease of Use

In the Technology Acceptance Model (TAM), perceived ease of use refers to an individual's suof assessment of how easy it is to learn and understand the interface and operation of using a particular technology or system. Perceived ease of use relates to the user's perception that the technology or system is easy to learn, use, and operate. A technology or system is perceived as easy to use when users can master its operation without excessive training or learning. Perceived ease of use is also critical to cross-border e-commerce consumers' purchasing decisions. The interface design of a cross-border e-commerce platform is critical to the user experience. If the interface design is simple and easy to navigate, consumers will find it easier to find the products they want, and the browsing and shopping process will be more enjoyable and smoother. On the contrary, if the interface design is complex and confusing, consumers will feel confused and dissatisfied, thus reducing their intention to buy. The more intuitive the shopping process on a cross-border e-commerce platform, the easier it is for consumers to complete their purchases. If the shopping process is cumbersome and complex, requiring filling out a lot of information or going through multiple steps, consumers may feel impatient or give up the purchase. Therefore, perceived ease of use affects consumers' satisfaction and intention to purchase.

Consumers will pay attention to whether the payment methods and settlement processes provided by cross-border e-commerce platforms are convenient, fast, safe, and reliable. If the payment process is straightforward, supports multiple payment methods, and provides a secure payment environment, consumers will be more willing to purchase on the platform. With the popularization of mobile devices, more and more consumers use cell phones or tablets for cross-border shopping. Therefore, the mobile experience of a cross-border e-commerce platform is also crucial to consumers' intention to buy. If the interface design of the mobile application or website is well adapted and operates smoothly, consumers will be more willing to complete their purchases on mobile. Perceived ease of use has an impact on cross-border e-commerce consumers' purchase intentions. Therefore, cross-border e-commerce platforms need to focus on interface design, payment methods, and settlement processes to enhance consumers' perceived ease of use, increasing their intention to buy and improving the user experience.

Perceived Safety

In perceived risk theory, perceived safety refers to an individual's subjective assessment of the potential risk of participating in an activity or adopting a technology. Perceived security involves the degree to which an individual perceives whether he or she is at risk from an action. In the context of cross-border e-commerce consumers' intention to buy, perceived security refers to consumers' perceptions and assessments of the risks that may be involved in purchasing products on cross-border e-commerce platforms (Falode, 2018; Jeong, 2016).

Cross-border e-commerce involves cross-border transactions and currency conversions, and

consumers will be concerned about the security of the payment process. Perceived security can be influenced by the credibility of the payment platform and the security assurance of the payment system. If consumers perceive that the cross-border e-commerce platform provides a safe and secure payment system and payment environment, they are more confident in making a purchase. In the cross-border shopping process, consumers need to provide personal information such as their name, address, and credit card information (Gillen et al., 2002). Perceived security is affected by the platform's measures and privacy policies for personal information protection. Consumers are more likely to make purchases on a cross-border e-commerce platform if they believe that the platform can protect their personal information from disclosure or misuse. Consumers may be concerned about the quality, authenticity, and after-sales service of goods purchased across borders, and perceived security will be affected by the platform's quality control and authenticity verification of goods. If consumers perceive that the cross-border e-commerce platform provides authentic and trustworthy commodity information, quality assurance, and sound after-sales service, they are more confident to make purchases (Patwardhan et al., 2020).

Therefore, perceived security has an important impact on the purchase intentions of cross-border e-commerce consumers. To enhance consumers' perceived security, cross-border e-commerce platforms need to strengthen payment security, protect the security of personal information, provide truthful and trustworthy product information and advertisement content, and effectively regulate merchant behavior, to enhance consumers' confidence, promote the development of cross-border e-commerce, and increase the intention to purchase (Zhang et al., 2017).

Methodology

Quantitative research method was used in this study. Each variable's reliability and validity were assessed, and correlation analysis can only be performed if both tests pass. The study draws on technology acceptance model, perceived risk theory. The first section provides basic information regarding consumers of the Tian Mall international cross-border e-commerce platform, such as gender, age, and employment position. The second section focuses on the measurement question items for each variable. The test used a five-point Likert scale, with results ranging from 5 to 1, representing strongly agree, agree, neutral, disagree, and strongly disagree. This study adopted the quantitative research method. According to technology acceptance model and perceived risk theory, the study focused on consumers' purchase intention on the Tian Mall international cross-border e-commerce platform, with a total of 12 questions in the questionnaire, which is based on a scale. The consumers' purchase intention consists of three questions. The perceived usefulness consists of three questions. The perceived ease of use consists of three questions.

Results

1). Reliability analysis

The questionnaire used in this study is an adaptation of a mature questionnaire that was slightly adjusted and integrated into the study, as well as tested for reliability and validity. The dependability was determined using SPSS reliability analysis, with a focus on the Cronbach's Alpha reliability coefficient. If the difference between Cronbach's Alpha reliability coefficient and 1 is minimal, the data's reliability is high; otherwise, the reliability is low. The Cronbach's Alpha for the test in this study is 0.8 or higher, indicating that the questionnaire meets the inherent reliability criteria. As shown in Table 1.

Table 1: Reliability test

Variable	Cronbach's Alpha	N of Items
Brand Internationalization Strategy	0.851	3
Diversification Strategy	0.870	3
Marketing Mix Strategy	0.897	3
Corporate Management Strategy	0.860	3

2). Validity analysis

The questionnaire's validity was tested using the KMO and Bartlett's Test of Sphericity. A KMO value of less than 0.5, which is the test standard, indicates poor questionnaire validity. When the KMO value approaches one, it implies that the questionnaire items share more factors, making each element easier to examine and evaluate. The results of the validity of this questionnaire are shown in Table 3.4; the overall KMO value of the questionnaire reaches 0.916, and Bartlett's Test of Sphericity earns a significance value of 0.000, therefore this questionnaire has good validity. The influencing factors of consumers' purchase intention on the Tian Mall international cross-border e-commerce platform were explored using principal component analysis to determine the rationality of the scale dimension setting. The investigation identified components with Eigen roots bigger than one, which accounted for 77.729% of the total variance.

3). Correlation Analysis

Correlation analysis tests the linear relationship between two or more variables. The range of Pearson's correlation coefficient lies between -1 and 1. The correlation coefficient demonstrates directionality. If the correlation coefficient is close to 1, it indicates a high positive correlation between the two variables. If the correlation coefficient is close to -1, there is a highly negative correlation between the two variables. If the correlation coefficient is close to 0, the two variables are independent of each other, and there is no correlation between them. The result of Pearson's correlation consists of two values, the correlation coefficient and the p-value. In correlation analysis, the p-value represents whether two variables are significantly correlated or not. Correlation analysis of the data gives an idea

of the strength of the correlation, which ranges from -1 to 1. The closer the r value is to 1 or -1, the stronger the correlation, and the closer it is to 0, the weaker the correlation. According to Table 3, the correlation coefficient, r, ranges from 0 to 1 and is significantly correlated at the 0.01 level and there is a significant correlation between the two variables (P<0.01).

 Table 2: Correlation between Variables (Pearson Correlation Matrix)

Variable	Perceived	Perceived Ease of	Perceived	Consumers' Purchase
	Usefulness	Use	Safety	Intention
Perceived Usefulness	1	.630**	.604**	.596**
		0.000	0.000	0.000
	408	408	408	408
Perceived Ease of	.630**	1	.663**	.656**
Use	0.000		0.000	0.000
	408	408	408	408
Perceived Safety	.604**	.663**	1	.600**
	0.000	0.000		0.000
	408	408	408	408
Consumers' Purchase	.596**	.656**	.600**	1
Intention	0.000	0.000	0.000	
	408	408	408	408

NOTE: * Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficient between perceived usefulness and consumers' purchase intention is 0.596, and P<0.01, indicating that there is a correlation between perceived usefulness and consumers' purchase intention, and it is a general correlation.

The Pearson correlation coefficient between perceived ease of use and consumers' purchase intention is 0.656, and P<0.01, indicating that there is a correlation between perceived ease of use and consumers' purchase intention, and it is a general correlation.

The Pearson correlation coefficient between perceived safety and consumers' purchase intention is 0.600, and P<0.01, indicating that there is a correlation between perceived safety and consumers' purchase intention, and it is a general correlation.

Discussion

1) Optimizing Perceived Usefulness

The Tian Mall International cross-border e-commerce platform can effectively enhance users' perception of and satisfaction with its perceived usefulness, thereby promoting the development and growth of the platform. The user experience is improved by optimizing the interface design of the website, increasing the page loading speed, and streamlining the shopping process to make it easier for users to browse products and complete purchases. Tian Mall International's cross-border e-commerce



platform adds product information and reviews. Provide rich product information, including detailed product descriptions, pictures, specification parameters, etc., and user ratings, to help consumers understand the products more comprehensively and enhance their perceived usefulness. Tian Mall International's cross-border e-commerce platform provides personalized recommendations. Based on the user's browsing history, purchasing behavior, and preferences, personalized products are recommended to the user to enhance the user's perceived usefulness of the platform and purchase intention. Tian Mall International's cross-border e-commerce platform strengthens after-sales service. Provide fast and efficient after-sales service, including return and exchange policies, customer service support, etc., to help consumers feel at ease and satisfied after purchase and enhance their trust and recognition of the platform. Cooperate with well-known brands and introduce high-quality goods to increase the credibility and reputation of the platform so that consumers are more willing to shop on it and increase their perceived usefulness. Organize various promotional activities regularly, such as limited-time discounts and full-price offers, to attract consumers' attention and participation and increase their awareness of the platform and purchase intention. Provide convenient and reliable cross-border logistics services to shorten the delivery time of goods, and safe and diversified payment methods to enhance consumers' confidence and convenience in cross-border shopping.

2) Improving Perceived Ease of Use

The main strategies to improve the perceived ease of use of Tian Mall International's cross-border e-commerce platform. Simplify the user interface. Optimize the user interface design of the website or mobile application and simplify the page structure, navigation bar, and button layout so that users can find the information and functions they need more quickly and intuitively. Provide a clear and concise display of product information, including product name, price, inventory status, etc.; multiple high-definition pictures; and video displays to help users fully understand product features. Simplify the shopping process, reduce the number of user operation steps and fill-out forms, and adopt one-click ordering and quick payment functions to improve users' shopping efficiency and experience. Ensure that the website or mobile application has a responsive design that can adapt to different devices (e.g., PC, tablet, cell phone) and screen sizes to ensure users can use the platform smoothly on any device. Provide user guidance and help functions, such as shopping guides, FAQs, online customer service, etc., to help users quickly solve problems, get help, and increase their satisfaction with the platform. Provide personalized product recommendations and search results based on user's preferences and historical behaviors, making it easier for users to find products that meet their needs and improving shopping efficiency. Provide a variety of payment methods and delivery options, including Alipay, credit cards, PayPal, etc., as well as different delivery speeds and methods to meet different needs and preferences. Through the comprehensive implementation of the above strategies, the Tian Mall International cross-border e-commerce platform can effectively enhance users' perception and

satisfaction of its perceived ease of use, improve users' shopping experience and loyalty, and promote the platform's sustainable development.

3) Enhancing Perceived Safety

The research findings show that perceived safety positively affects purchase intention and is the most influential factor. Risk is a reason for consumers to abandon their purchase behavior, only to improve the consumer's sense of safety and their intention to buy. Strictly control the quality of products. The quality of the product itself is the most critical factor for consumers to choose cross-border online shopping, and it is also the fundamental guarantee for the long-term development of the platform. Although many well-known big-brand stores are stationed on the Tian Mall International cross-border e-commerce platform, the quality of products can be guaranteed, but there are still many countries with small brands and small stores to join, and the supervision of such stores is the platform manager's difficult task. The platform should cooperate with reliable stores to ensure that the source of the product is accurate and do a good job of store credit rating assessment. Sold fake products should immediately shut down and reorganized.

In addition, the platform should also do a good job of product auditing, testing, and other aspects of quality control to assist stores in doing a good job of perfecting their after-sales service systems, not only for the store's regulator but also for the consumer rights and interests of the protector to increase the supervision of logistics and transportation links. Cross-border logistics due to the distribution of long distances, and most of the way through the cruise ship shipping, which is more demanding on the packaging of the courier, the sea for a long time will inevitably lead to the courier's moisture being serious. At present, most courier companies have been exposed to violent sorting behavior, seriously harming the rights and interests of consumers.

Conclusions

Through the analysis, it can be understood that the correlation coefficient between each variable is between 0.5 and 0.7. There is no coefficient of more than 0.8 or less than 0.5, indicating no linear correlation between the variables in the research model. At the same time, a suitable correlation aligns with the requirements. The correlation between the variables indicates that each variable plays a specific role in the model, reflecting the rationality of the model construction. Therefore, according to the results of the data analysis, perceived usefulness has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform. Hypothesis H1 holds. Perceived ease of use has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform. Hypothesis H2 holds. Perceived safety has a significant positive effect on consumers' purchase intentions on the Tian Mall international cross-border e-commerce platform. Hypothesis H3 holds.

References

- Alfnes, F., Guttormsen, A. G., Steine, G., & Kolstad, K. (2006). Consumers' intention to pay for the color of salmon: A choice experiment with real economic incentives. *American Journal of Agricultural Economics*, 88(4), 1050–1061.
- Anson, J., Boffa, M., & Helble, M. (2018). Consumer arbitrage in cross-border e-commerce. *SSRN Electronic Journal*, 34(33).
- Baker, S. R., Bloom, N., Davis, S. J., Kost, K., Sammon, M., & Viratyosin, T. (2020). The unprecedented stock market reaction to COVID-19. *The Review of Asset Pricing Studies*, 10(4), 742–758.
- Balassa, B. (2020). The purchasing-power parity doctrine: A reappraisal. *Journal of Political Economy*, 72(6), 584–596. https://doi.org/10.1086/258965
- Bouckaert, G., Galli, D., Kuhlmann, S., Reiter, R., & Van Hecke, S. (2020). European coronationalism? A hot spot governing a pandemic crisis. *Public Administration Review*, 80(5), 765–773.
- Denaputri, A., & Usman, O. (2019). Effect of perceived trust, perceived security, perceived usefulness and perceived ease of use on customers' intention to use mobile payment. *SSRN Electronic Journal*, 23(22).
- Elango, D., & Kulcharatyothin, C. (2018). A study on perception of perceived ease of use towards perceived usefulness on SMART education. *SSRN Electronic Journal*, *56*(66).
- Hong, A., Sallis, J. F., King, A. C., Conway, T. L., Saelens, B., Cain, K. L., Fox, E. H., & Frank, L.
 D. (2018). Linking green space to neighborhood social capital in older adults: The role of perceived safety. Social Science & Medicine, 207(45), 38–45.
- Ismail, H. A. (2016). Intention to use smartphone through perceived compatibility, perceived usefulness, and perceived ease of use. *Jurnal Dinamika Manajemen*, 7(1), 1.
- Jeong, B. (2016). Effects of perceived usefulness, perceived ease of use and perceived enjoyment on intention to use tourism application: Moderating effects of demographic characteristics. *International Journal of Tourism and Hospitality Research*, 30(1), 101.
- Jin, D. Y. (2022). E-Tax or e-commerce: The debate on taxing electronic commerce transactions. *Journal of Internet Commerce*, 2(1), 65–87.
- Kim, C.-H. (2018). A study on the laws and regulations related to B2C cross-border e-Commerce. Journal of Korea Research Association of International Commerce, 18(4), 17–36.
- Leppaniemi, M., & Karjaluoto, H. (2005). Factors influencing consumers' intention to accept mobile advertising: A conceptual model. *International Journal of Mobile Communications*, 3(3), 197.
- Qian, L. (2021). Experiencing develops mentalism: The state(s), grassroots traders and the e-commerce boom in a Chinese city. *China: An International Journal*, 19(1), 68–89.



- Roberts, P., & Henderson, R. (2000). Information technology acceptance in a sample of government employees: A test of the technology acceptance model. *Interacting with Computers*, 12(5), 427–443.
- Saadé, R. G. (2007). Dimensions of perceived usefulness: Toward enhanced assessment. *Decision Sciences Journal of Innovative Education*, 5(2), 289–310.
- Taherdoost, H. (2018). Development of an adoption model to assess user acceptance of e-service technology: E-Service technology acceptance model. *Behaviour & Information Technology*, 37(2), 173–197.
- Tarhini, A., Elyas, T., Akour, M. A., & Al-Salti, Z. (2016). Technology, demographic characteristics and e-learning acceptance: A conceptual model based on extended technology acceptance model. *Higher Education Studies*, 6(3), 72.
- Wertenbroch, K., & Skiera, B. (2002). Measuring consumers' intention to pay at the point of purchase. *Journal of Marketing Research*, 39(2), 228–241.
- Zhang, L., Wu, X., Zhu, H., & AbouRizk, S. M. (2017). Perceiving safety risk of buildings adjacent to tunneling excavation: An information fusion approach. *Automation in Construction*, 73(33), 88–101.
- Zhen, L. (2018). The significance of Chongqing cross-border e-commerce in promoting regional economic development. *Science Innovation*, *6*(4), 240.