Analysis and Research on Internet Economy and Online Shopping Cognition and Use Intention

Hongjia Liu[1*]

[1]Menaul school,Qingdao City,266237,China

*Corresponding *author. Email:3414203053@qq.com*

Abstract. With the development of the Internet, financial and economic-related industries have gradually shifted to online. Although the development of the Internet economy has played a greater role in the progress and development of society, it has also exposed many problems. This paper mainly talks about people's cognition and understanding of Internet shopping and the online economy in the current environment. It mainly analysis the advantages of Internet shopping and online economy, such as convenience, low cost and rapidity, to understand people's feelings and evaluation of the online economy. Although they have many advantages with the development of the online economy and Internet shopping, we also found some shortcomings about people's online shopping and online economy, such as network fraud and network security in the surveys. In this study, the questionnaire Likert five scale was used to investigate the demographic variables and the basic situation of Internet finance, and the scale was used to investigate the security problems, payment problems, investment situation and willingness to use. The results show that online financial management and security issues have a greater impact on consumers' willingness to use the Internet economy, while the benefits of online shopping have a negative impact on the willingness to use.

Keywords: Internet Economy, Online Shopping, Online Financial Management, Security Issues, Willingness to Use

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1 Introduction

In the whole year of 2023, the number of online shoppers reached a staggering 918 million people, creating 15.42 trillion sales, an increase of 11.9 percent year-on-year. With the development of science and technology, the human economy is rapidly entering a new era of "online economy", which has changed the traditional business model and consumption habits through digital technology and network platforms, bringing many benefits to users and enterprises.

Compared with the traditional economy, the online economy has many advantages. The online economy is more convenient and convenient, such as shopping convenience: consumers can purchase goods and services at any time through e-commerce. Online shopping also has many choices, convenient price quality, enjoy home delivery. The first is the efficiency and convenience of online payment: the Internet economy holds online payments, such as cards, electronic wallets, inconvenience of reducing cash. Secondly, the diversity of online economic information acquisition: the Internet provides a large amount of commodity information, users can also search for commodity information, compare product quality and user evaluation to obtain the required information. Not only has the above advantages, but the online economy can also help the development of remote areas. The e-commerce platform helps individuals to promote characteristic products, such as handicrafts, agricultural products, local cuisine, breaking geographical restrictions and driving development. Finally, the online economy promotes financial services: such as investment and financial management, online banking, insurance, which promotes the financial management and investment of residents in remote areas, and promotes the spread of the online economy.

However, the era of the online economy is always accompanied by some deadly problems and risks, such as network security, the online economy is vulnerable to cyber-attacks, data breaches, identity theft and other threats, consumer and business sensitive information or illegal access.

2 Literature Review

2.1 Domestic Literature Review

There are many people who have spoken out about Internet payments today. The impact of post-disaster reconstruction on the government economy, on the other hand, could lead to inflation. In an article two years ago, Chen Zhiwu reflected on whether the 2008 financial crisis would be repeated. It reported that before the outbreak of the sub-prime crisis, a company called Citi had a market capitalization of about US$300 billion and was the number one bank in the world, but after the sub-prime crisis, Citi's market capitalization fell to less than US$2.5 billion in early 2009[1]. Hu Zuquan compared to traditional money for comparison, found that Internet financial payments have the core features of information recording and information processing, which can significantly reduce transaction costs and improve the efficiency of capital allocation. In terms of payments, internet payments are mobile-based, and payments are completed by paying off debts in real-time through wireless communication technology. The advantage of Internet payments in terms of the process then lies in the fact that it is through big data that payments are completed, which helps to improve the asymmetry of information in the market [2]. Later, Sun Tianqi and Liu Qin combined actual cases during the 2008 international financial crisis to investigate the risk characteristics of international commercial banks that rely on wholesale financing. They find that reliance on wholesale financing increases the leverage level and operational complexity of commercial banks, and in case of risk, institutional investors will run out before depositors, which will accelerate the erosion of net assets [3]. In the article, Fu Yazin states that as of December 2017, the number of consumers buying personal finance products online reached 129 million, which is 16.7% of the usage rate of internet users [4]. In addition to this Wang Li-xuan tells us that nowadays countries around the world are becoming more and more closely connected, and the allocation of resources and the sale of products in business operations are showing a nationalized development trend, having entered the development of the internet society [5]. Zang Aimin also suggests in his article that with global economicisation, corporate property management needs to adapt to the new environment of Internet+ to ensure healthy and stable development and progress of enterprises [6].

2.2 Foreign Literature Review

This article believes that Internet money is difficult to understand, but will find it very convenient to use, and that the concept of Internet money payments, etc. is new, it has a strong liquidity and is not only controlled by the central bank[7]. Not long ago Vijay Kumamoto Sarabu suggested that anything used as a medium of exchange, a unit of account and used as a shop value can be called a currency and that internet payments are even more durable, portable, divisible, acceptable and identifiable[8]. The type of money, like cheques and bank transfers, is also known as bank money, and Viral V. Acharya & Sascha Steffen's data on the daily credit lines of US companies during the COVID-19 period revealed many shortcomings and brought about a liquidity crisis [9]. In addition to this, Ahto Buldas, M. Saarepera D. Draheim states that different currencies apply different numerical measures to describe the amount of money, and also cites model building to illustrate how future monetary systems may be improved and made simpler and faster. Ahto Buldas, M. Saarepera D. Draheim (2021) [10]. Moreover, NIck Couldy, Clemencia Rodriguez, Gorman Bolin etal propose media as the main support for internet finance in a paper that focuses on the development of digital technology that has expanded the ability of humans to communicate across time and space, and the internet and media as a facilitator of internet finance technological developments in infrastructure [11].

3 Analysis of the Current Situation of Internet Finance

3.1 Internet Finance

Convenience. Compared with traditional finance, Internet finance has many advantages and specialties, which can improve the efficiency and convenience of work.

First of all, the Internet can be operated anywhere at any time. Internet finance has broken the limitations of traditional financial services in time and space. For example, in the traditional offline bank, users want to handle the transfer of funds and other business, users need to go to the offline bank store to deal with the business hours of the bank, waiting for the line. However, in the environment where finance is gradually shifting to online, users only need to use mobile banking apps or third-party payment platforms, and users can easily complete transfer and remittance operations at anytime and anyplace. Users who handle money transfer business only need to open the mobile financial app, enter the transfer amount, collection account number and other information, and complete the transfer in a few seconds. There is no need to be limited by the business time and geographical location of the outlets. In addition, Internet finance has simplified business processes. Compared with traditional offline financial institutions, the business handling process of many Internet financial products has been simplified and optimized. Taking online loans as an example, some formal and legal online lending platforms, when borrowers apply for loans, people only need to fill in basic personal information on the platform, and then upload the necessary loan information (such as identity card photos, flow certificates, etc.). The online platform uses big data for rapid review and approval. Compared with traditional offline bank loans, it needs to provide a large amount of paper materials and needs manual review. In the case of a long cycle, online loans do not need to carry out the entire process, and are more accurate and fast.

Low Cost. The operating costs of Internet financial businesses are low, because Internet financial institutions do not need to establish as many physical offline points as traditional banks, so they save a lot of venue rental costs, related equipment acquisition costs, and personnel training costs, and other operating costs. For example, Ant Financial, as a pure Internet bank, has no offline outlets, and its main operating costs are concentrated in network technology maintenance and update, as well as the purchase of servers. This allows it to provide financial services at lower operating costs, and it can also turn some of the saved funds into more favorable interest rates, lower fee activity volumes and other forms of feedback to users.

Network Security Issues. Risk of Data Leakage. Internet financial enterprises hold a large number of sensitive information about users, such as user identity information, bank account information, transaction records and so on. Once the Internet financial companies suffer from network attacks, these data have a great risk of leakage. In 2017, Equifax Company in the United States was hacked. The company is one of the three major credit reporting agencies in the United States. The company stores a large amount of credit information of American consumers. During the cyber-attack, hackers illegally stole the personal information of about 143 million consumers, including names, social security numbers, dates of birth, assets in their personal name, bank card numbers and other super sensitive information. In the field of Internet finance, if there are similar data breaches, users' fund security and personal privacy will face serious threats, which may lead to accounts stealing, illegal money transferred and so on.

3.2 Innovation of Internet shopping

Payment Method Innovation. Internet Payment. Internet payment is a major innovation in the payment of Internet shopping. Taking Alipay and WeChat payment as an example, when consumers shop on the Internet, they only need to enter the bank card number and password in the window that pops up when ordering to complete the payment in less than 2 steps. This novel payment method is convenient and quick, and it also improves the security of payment and reduces the risk of cash transactions.

Big Data Push. The Internet shopping platform uses big data, artificial intelligence algorithms, AI and other technologies to actively make personalized recommendations based on the user's browsing history, purchase records, and other data. For example, Amazon's recommendation system will actively analyze information such as the type of goods purchased by the user before and the page of the goods viewed. If users often buy science fiction novels, the platform will recommend other science fiction novels of the same type to users, or related science fiction movies, games and other commodities, which improves the probability of users finding their favorite commodities.

Advantages of Internet Shopping. Faster and More Convenient. First of all, consumers no longer need to be limited by the operating hours of physical stores. Whether it is in the late evening or early morning, you only need to have a network connection, you can log on to the shopping website for shopping. Secondly, it is not limited by geographical location, although in remote areas, it can also buy goods from all over the world.

Easy to Compare Goods. Consumers can easily compare the price, quality, features, etc. of the same type of goods between different merchants and brands.

Commodity Prices are Generally Low. E-commerce platforms do not reduce the high rent of physical stores, but also reduce sales personnel and other operating costs, which account for a large part of the total cost. These cost savings, as well as money, can show up in commodity prices, making goods often cheaper than in brick-and-mortar stores.

4 Questionnaire Design

In this paper, the use of Internet finance and satisfaction, the questionnaire designed in this paper contains three parts.

First, the first part is the survey of demographic variables. Demographic variables were sex, age, number of cities they lived in and whether they were married or unmarried. This part is designed to investigate the basic information and preferences of the people who write the questionnaire.

Secondly, the second part is the basic information about Internet finance, respectively, how much money they spend on Internet shopping and the online economy each month, and which software and platforms they have used. This section is designed to investigate people's consumption levels and the probability of using different platforms.

Finally, the third part is the application of Likert five scales in the questionnaire. It mainly includes four dimensions: the benefits of Internet shopping, the benefits of online economy, the willingness to use, and the disadvantages of online economy and Internet shopping. The purpose of this part of the design is mainly to investigate the benefits of online economy, the benefits of Internet shopping and the impact of their shortcomings on the willingness to use. The second is to investigate the specific advantages that people think of the online economy and Internet shopping, as well as the degree of recognition, and the disadvantages are the same.

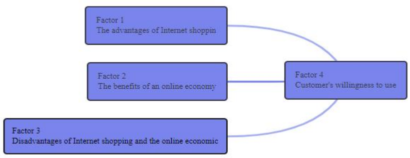

Fig. 1. "Influencing Factor Model Construction Diagram."

5 Sample Collection and Analysis

Through the analysis of the questionnaire, it is not difficult to find that 30.15 % of the people surveyed have conducted Internet shopping, 37.19 % have purchased online financial management, and 32.66 % have conducted online shopping and purchased online financial management. The design of my questionnaire is step-by-step, and the specific point is that it will push different questions according to your different answers to a certain question. For example, if you choose to conduct online shopping, you will push questions about online shopping. Differentiation is performed according to the individual testers to obtain more accurate results, wo can also get many information by studying the feedbacks. First of all, this part belongs to the first dimension. People who have conducted Internet shopping among 199 survey users have used those Internet shopping platforms. The results show that 45 people have used Taobao, 42 people have used Jingdong, 41 people have used TikTok, 39 people have used Pinduoduo, 41 people have used Tmall, and 42 people have used Dewu. The design of this question is to better understand the platform of consumers' willingness to shop, as well as the number and proportion of people used.

The four dimensions of the questionnaire in this paper: benefits of Internet finance, benefits of online finance, security issues and willingness to use sample data meet the statistical requirements in reliability analysis and validity analysis.

Table 1. Reliability analysis results.

Reliability analysis	
dimension	**Cronbach α coefficient**
The Benefits of Internet Shopping	0.739
The Benefits of Online Finance	0.749
Security issues	0.782
Willingness to use	0.753

The setting of the questionnaire topic and the collection of samples in this paper are effective, and meet the reliability analysis and validity analysis. On this basis, in order to further study the benefits of Internet finance, the benefits of online financial management, and the impact of security issues on consumers' willingness to use, this paper conducts structural equation analysis. The specific results are as follows:

Table 2. Results of Structural Equation Analysis.

Dimension	Cronbach a coefficient
Factor1	-0.583
Factor2	0.885
Factor3	0.830

The results of the data analysis reveal several key factors that influence consumers' willingness to participate in the Internet economy. Notably, online financial management and security issues have a significant positive impact on consumers' willingness to use Internet-based economic activities, with coefficients of 0.885 and 0.830, respectively. This shows that consumers are very concerned about managing their finances online and view security as a key factor in determining their trust and adoption of Internet-based services.

On the contrary, the benefits associated with online shopping have a negative impact on consumers' willingness to use, with a coefficient of − 0.583. This negative correlation may be attributed to several potential reasons. First one is that consumers may think that benefits such as the convenience of online shopping and access to a wider range of products are offset by other factors, such as concerns about product quality, delivery issues or lack of tangible shopping experience. In addition, the negative experience of online shopping in the past or the high price perception relative to offline choices may also lead to this negative impact.

These findings highlight the complex interplay of factors that influence consumers' adoption of Internet-based economic activities. Although online financial management and security are important positive drivers, the perceived benefits of online shopping need to be carefully managed and communicated to ensure that they have a positive impact on consumers' willingness to participate in the Internet economy.

6 Conclusion

Using questionnaires, this study deeply discusses people's views on Internet finance/financial management, and analyzes the impact of online finance, Internet shopping and their respective problems on consumers' willingness to use. The research results show that online wealth management and Internet shopping have been widely recognized in terms of advantages, such as the convenience of online wealth management, product diversity, and the price advantage and shopping convenience of Internet shopping. However, at the same time, consumers are also generally concerned about the risks of the network economy and Internet shopping, such as personal data leakage, network attacks and other security issues.

Among the dimensions that affect consumers' willingness to use, the advantage of the online economy (Factor 2) has the most significant impact on consumers' willingness to use, with a coefficient of 0.885. This shows that consumers value convenience and variety when choosing whether to use Internet financial/wealth management services. Moreover, the disadvantages of the Internet economy and Internet shopping (Factor 3) also have a large impact on usage intention, with a coefficient of 0.830, which further emphasizes the importance of security issues in consumer decision-making. In contrast, the benefits of online shopping (Factor 1) have the least impact on the willingness to use, and the coefficient is − 0.583, which may be related to the fact that the current Internet shopping market has been relatively mature and consumers' expectations for online shopping have stabilized.

With the continuous progress of technology and the increasing perfection of regulatory policies, the Internet finance/wealth management industry will usher in more development opportunities. On the one hand, enterprises need to continue to strengthen technological innovation and product research and development, improve the user experience of online financial management and Internet shopping, and meet the increasingly diversified needs of consumers. On the other hand, the government and relevant agencies also need to strengthen supervision, establish a sound security protection system, and protect the legitimate rights and interests of consumers and personal information security. This study also found some problems worthy of further discussion. For example, although the advantages of the online economy have the greatest impact on consumers' willingness to use, how to balance convenience and security, and how to strengthen risk control while ensuring user experience are still important directions for future research. In addition, for consumer groups with different ages, gender, income and other characteristics, whether there are significant differences in their views and willingness to use Internet finance/wealth management is also worthy of further study.

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