Research on the Influencing Factors of Consumers’ Willingness to buy in the Internet Financial Situation

Qiang Yang¹,a, Xiaomin Wang²,b

¹Institute of Management, Tianjin University of Technology, Tianjin, 300384, China
²Institute of Management, Tianjin University of Technology, Tianjin, 300384, China

aemail: yiang104@126.com, bemail: wxm92816@163.com

Keywords: Internet Finance; Consumer Perceived Risk; Willingness to Buy

Abstract: with the rapid development of the Internet, various forms of Internet financial products emerge in endlessly, and affect individuals’ consumption patterns. However, the individual’s cognition of the concept of Internet finance is not comprehensive, and there will be a certain perceived risk in the process of making purchase decisions, which will affect their willingness to buy. Therefore, this paper introduces the theory of perceived risk to explore the impact of perceived risk on consumers’ willingness to buy in the context of Internet finance. The results show that security risk, privacy risk and psychological risk have negative effects on consumers’ purchase intention, while time risk does not have a significant influence on consumer’s willingness to buy.

Introduction

The Internet has become a necessity for human life. Varieties of information technology catches the high ways of Internet, beginning to serve all walks of life. The financial products such as: the balance of treasure, BaiduEnerd, NetEase financial management, Tencent financial management appeared from the Internet like mushrooming and affected the individual’s learning, work and lifestyle. However, the individual’s perception of Internet financial products is more focused on the balance of treasure but for other financial products is relatively unfamiliar. There is a certain perceived risk and selectivity is low, so the development of other Internet financial products market is a huge challenge enterprises facing.

The Harvard University professor Bauer proposed the concept of perceived risk firstly and extended it from the psychological research to the field of marketing[1]. Cox argued that it is difficult to determine whether the effect of the product or service satisfies consumers’ desired psychological requirement because the individual does not accurately predict the result of his purchase behavior[2]. So consumers make a decision in the purchasing will have a certain psychological risk that is called perceived risk. Nena Lim considered that if consumers feel this risk psychologically, they will form more negative mood and then generate different psychological hints: to promote their own facing the risk to continue to complete the purchase, or to eliminate the idea of buying and then reduce the risk to achieve inner balance[3].

In view of this, this paper introduces the theory of perceived risk to explore the impact of perceived risk on consumers’ willingness to buy in the context of Internet finance.

The Effect of Perceived Risk on Consumers’ Willingness to Buy

Bauer argued that perceived risk is a concern of consumers about the ignorance of their own purchase process results[1]. Jacoby and Kaplan considered that perceived risk has five dimensions of economic, functional, physical, psychological and social[4]. Stone and Gronhaug proposed the sixth dimension on the basis of Jacoby and Kaplan theory: time risk, that is, the time and energy uncertainty that could occur during the whole process of purchasing and a product would also lead to loss of purchase[5]. The Bhatnagar thought that in the online shopping scenario, economic risk,
product risk, and information risk are the most prominent [6]. This paper combined perceived risk into safety risk, psychological risk and time risk. Miao Jing argued that perceived risk has a negative effect on the adoption of consumer product innovation[7], and Wang Yu considered that individual use of mobile payment is subject to individual perceived risk[8].

As a result of work and life stress, consumers do not have enough time and energy to understand the Internet financial products, so the uncertainty in time and energy will give consumers a certain loss of purchase. Based on the above analysis, we propose a hypothesis:

H1: Time risk has a negative effect on consumers’ willingness to buy

Consumers are Internet financial products buyers and users, such as consumers want to use the balance of the treasure, the premise must be Alipay users. It involves that the users must submit their own identity information, bank card information and other important privacy, to complete the Alipay verification, so to use the balance of treasure. Alipay plays the role of intermediary in this process although, but the users’ information has been stored in the Alipay platform server. Once the Alipay system is hacked or due to the hardware and software defects, it will lead to personal disclosure of personal information, or by others malicious use or resale. Based on the above analysis, we propose a hypotheses:

H2: Security risk has a negative effect on consumers' willingness to buy
H3: Privacy risk has a negative effect on consumers' willingness to buy

Consumers buy financial products in a virtual Internet environment and do not come into contact with actual products after the purchasing, and even it may not match the consumer's expectations, so there is a possibility of risk. Based on the above analysis we make a hypothesis:

H4: Psychological risk has a negative effect on consumers' willingness to buy

Research methods

Selection and data collection

In this study, 340 Internet questionnaires and paper questionnaires were distributed to Beijing, Tianjin, Inner Mongolia and Liaoning, and 330 questionnaires have been collected. Excluding regular filling and shortage filling questionnaires, there are 325 remaining valid questionnaires. The effective recovery rate was 95.6%, and the effective questionnaires have been described in detail. Among them, the classification criteria are gender (male account for 46.6%, women account for 53.4%), disposable income (less than 1,000 Rmb account for 29.2%, 1000-1500 Rmb account for 42.5%, 1500-2000 Rmb account for 18.6%, 2,000 Rmb or more account for 9.7%), The time on Internet (1-3 hours account for 18.6%, 3-5 hours account for 40.8%, 5-7 hours account for 30.2%, 7 hours or more account for 10.4%), the use of balance of treasure (used account for 70.6%, unused account for 19.3%, intended to use account for 10.1% )

Variables and measurement

In this research, the time risk and psychological risk were measured by the scale of Stone and Gronhauug[5], which included three items respectively, and the security risk measurement used the item of Nena and Lim (2003) who developed it, including three questions[3]. The privacy risk measured by the scale of Featherman’s and Pavlou’s(2003), including three items[9]. The willingness to buy measurement used the Dodds’scale to measure including three items. Above the scale of the measurement items were carried out by the Kirkite 1-7 quantification[10].

Data analysis

Reliability and validity analysis

In order to test the discriminant validity and aggregation validity among variables, this study used Amos17.0 to validate the five variables (time risk, security risk, privacy risk, psychological risk, willingness to buy) in the theoretical model. The discriminant validity between the variables is tested by comparing hypothetical model (five factors) and the competitive model (four factors, three factors, two factors and single factor). From the results in Table 1, it can be concluded that the fitting index of the five-factor model ($\chi^2 = 481.254$, df = 292, TLI = 0.979, CFI = 0.981, RMSEA = 0.082).
0.023) is better than other competitive models significantly. In addition, each of the observed variables has a factor load of more than 0.5, each variable CR is greater than 0.7 and AXE is greater than 0.5. In summary, the five-factor model can represent the structure of the measurement factors, and the variables have better discriminant validity and aggregation efficiency.

Table 1 The results of confirmatory factor analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \Delta \chi^2 )</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSR A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five-factor model</td>
<td>481.254</td>
<td>292</td>
<td>——</td>
<td>.979</td>
<td>.981</td>
<td>.023</td>
</tr>
<tr>
<td>(Hypothetical model)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-factor model</td>
<td>812.453</td>
<td>285</td>
<td>715.64**</td>
<td>.810</td>
<td>.816</td>
<td>.056</td>
</tr>
<tr>
<td>Three-factor model</td>
<td>1449.587</td>
<td>296</td>
<td>1124.45**</td>
<td>.649</td>
<td>.711</td>
<td>.085</td>
</tr>
<tr>
<td>Two-factor model</td>
<td>1819.223</td>
<td>298</td>
<td>1636.44**</td>
<td>.586</td>
<td>.602</td>
<td>.114</td>
</tr>
<tr>
<td>Single factor model</td>
<td>2614.124</td>
<td>299</td>
<td>2239.86**</td>
<td>.473</td>
<td>.512</td>
<td>.127</td>
</tr>
</tbody>
</table>

Note: the four-factor model: time risk and security risk merged into one factor. The three-factor model: time risk, security risk and privacy risk merged into one factor. The two-factor model: time risk, security risk, privacy risk, psychological risk merged into one factor. The two factor model: time risk, security risk, privacy risk, psychological risk, purchase intention merged into one factor. Single factor model: all variables are combined into one factor.

Result

This paper used Amos 17.0 to test the hypotheses by structural equation model, and first through chi square/degree of freedom \( \chi^2/df=1.49 \), goodness of fit index GFI=0.83, adjusted goodness of fit index AGFI=0.907, standard goodness of fit index NFI=0.95, non normal fit index TLI=0.987, comparative fit index CFI=0.979, the root mean square error of approximation RMSEA=0.024. The indicators test the fitting of the model and the sample fitting index \( \chi^2/df \) between 1-3, GFI, AGFI, NFI, TLI and CFI were bigger than 0.85, RMSEA less than 0.08, the results show that the model has a better fitting. For hypothesis testing, the results of standardized path coefficients are shown in figure 1.

![Fig. 1 path model of structural equation of perceived risk](image)

From Figure 1, the effect of time risk on consumer purchase intention is not significantly (\( \beta=-0.059, p>0.05 \)). Security risk has a negative effect on consumer purchase intention (\( \beta=-0.301, p<0.01 \)). Privacy risk also has a passive impact on consumers' willingness to buy (\( \beta=-0.252, p<0.01 \)). Similarly, psychological risk has an inactive influence on consumers' purchase intention (\( \beta=-0.246, p<0.01 \)). Therefore, the hypotheses of H1, H2, and H4 are validated, but H3 is invalid.

Conclusion

The results show that consumers' purchase intention is not affected by time risk, that is, most consumers do not influence their purchase intention on Internet financial products because of time and energy constraints. However, security risk and privacy risk have a significant negative impact on consumer willingness to buy, and the stronger of the security risk and privacy risk, the weaker of the consumer's purchase intention. Similarly, the consumer's psychological risk negatively
influences their purchase intention.

Acknowledgement

In this paper, the research was sponsored by the National Social Science Foundation Project (16BGL086).

References


