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Understanding College Student' Acceptance Of Online Credit Offering Services In China

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ABSTRACT

With the rapid economic growth in China, peoples' consumption behavior is constantly changing. The online credit offering service is playing a more and more important role in China. In this paper, we aim to understand college students' acceptance of online credit offering services in China. A research model based on technology acceptance model (TAM) with six research hypotheses is proposed. And an empirical study with 239 subjects was conducted to test this model. According to the results, 4 of 6 hypotheses were supported. The results indicated that both perceived usefulness and subjective norm directly affected college students' behavior intention to use online credit offering services significantly.

Keywords: Online credit offering service, TAM, Perceived risk, Subjective norms.

INTRODUCTION

Today, purchasing goods by online consumer credit offering services is getting more and more popular in China. According to the annual report 2016 from Alibaba, more than 60 million payments for purchases on Alibaba's November 11 Shopping Day in 2016 were made through the online personal line of credit (Ant Huabei) available on Alibaba's Alipay, representing 8.5 percent of the total payments Alipay processed on the day. Peoples' attitude towards money is changed by credit card usage that is becoming increasingly widespread in many countries [7] [16]. When it comes to buying a property, people often want to choose mortgage payment by installments. The advance in Internet technology is of help to increase the usage of online credit offering services as the Internet provides users with a convenient channel to shop for goods. Internet financial agencies (e.g., Alipay, Wepay [11] in China) offer users short-term loans to help them cover urgent cash needs for online shopping. This is a typical example of online consumer credit offering services. It is becoming a common consumption way in peoples' daily life in China [3]. Along with the growing credit market in China, users are able to consume first and pay later by taking advantage of online loan services provided by Internet financial agencies. Palan, Morrow, Trapp, and Blackburn [19] also indicated online consumer credit offering services could help consumers solve the problem of urgent online consumption.

With the development of market economy and the improvement of social consumption level in China, college students have a different consumption psychology and consumption behavior with other social groups. Their consumption patterns are largely affected by the market economy, which prevents them from setting up correct outlook on life and the world outlook to a certain extent. College students as a special social group, their consumption situation is getting more and more widely attention. More and more post-1990 college students are dressed in Nike, using iPhones and eating KFC [17]. Such bold theme of high consumption has become more and more popular among college students. The consumption pattern reflects their life attitude and value orientation, which in turn affects college students' ideological and moral construction and education of the school management. Therefore, we would like to investigate college students' acceptance of online consumer credit offering services in China.

This paper aims to study potential factors' that affect college students' acceptance of online consumer credit offering services in China. To address this, a research with six research hypotheses is proposed. And the research model was empirically tested with 234 college students in China. The remainder of this paper is organized as follows. Section 2 reviews the related literature. The research model and hypotheses are presented in Section 3. The empirical study is presented in Section 4. Section 5 discusses the findings of this research. We conclude this research in Section 6.

LITERATURE REVIEW

The related literature is discussed in this section.

Extended Technology Acceptance Model

TAM is widely acknowledged as one of the most robust and influential models for explaining user acceptance behaviour. It has been revised to incorporate additional variables in specific contexts, such as the Internet [23], WWW [18], and so on. Numerous extended variables with specific contexts have been added to TAM (e.g., perceived enjoyment [24] in using the Internet, trust [13] in using mobile information services). These studies with extended beliefs were proposed to improve the understanding of user acceptance behaviour for specific contexts, and better explanations were enabled as a result.

Perceived Usefulness and Perceived Ease of Use

Davis defines the perceived usefulness as the degree to which work performance can be improved by using a specific system [5]. In the context of this research on college students' acceptance of online credit consumption service, perceived usefulness is defined as the degree to which the college students believe that the online credit consumption service would enhance his/her performance of the online consumption activities. The perceived ease of use is defined as the degree to which an individual

believes that using a specific system would be free of effort [6]. In our research context, the perceived ease of use refers to the degree to which consumers believe that online credit offering services would be free of effort.

Perceived Risk and Subjective Norms

Perceived risk is commonly thought of as felt uncertainty regarding possible negative consequences of using a product or service [8]. Since consumers prefer to avoid a loss in the process of purchasing rather than purely pursue the benefit maximization, perceived risk showed very strong explanatory power to consumer behaviour and showed strong applicability in the various research fields. Subjective norm refers to the individual feeling to the pressure of social conventions and outside groups as to whether to perform a particular behaviour [9]. Ajzen and Fishbein [1] found that subjective norm had a positive effect on customers' attitude towards use new technology.

RESEARCH MODEL AND HYPOTHESES

Research Model

On the basis of the previous studies, we proposed a research model as illustrated in Fig. 1. The research model shows that there are five factors which affect users' attitude to use online credit offering services. In addition to perceived usefulness and perceived ease of use from TAM, the model includes influence related elements as additional factors to study consumers' acceptance of online credit offering services.

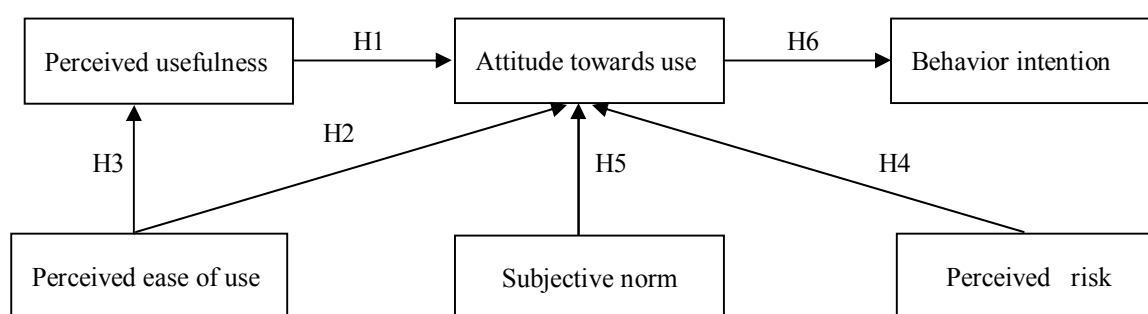


Figure 1: The research model

Research Hypotheses

TAM has been widely used in the technologies diffusion research. In this study, perceived usefulness is defined as the degree to which college students believe that online credit offering services would enhance his/her quality of life, and perceived ease of use refers to the degree to which college students believe that choosing online credit offering services would be free of effort. The TAM posits that perceived ease of use and perceived usefulness have a direct effect on the attitude toward the use of a technology, and perceived ease of use has a positive effect on perceived usefulness[8][12]. Therefore, the following three hypotheses are proposed.

H1: Perceived usefulness of online credit offering services has a positive effect on college students' attitude towards using online credit offering services.

H2: Perceived ease of use of online credit offering services has a positive effect on attitude towards using online credit offering services.

H3: Perceived ease of use of online credit offering services has a positive effect on perceived usefulness of online credit offering services.

On the basis of previous literature [20] [21], we believe perceived risk is a significant determinant of attitude towards using online credit offering services. Featherman and Pavlou[8] defined perceived risk as a key driver of long-term relationship between consumers and suppliers. In recent years, domestic credit card fraud occurred frequently, consumers tend to possess the hesitation attitude of choosing credit card for the reasons of financial risk. On the other hand, choosing online credit offering services is often associated with a relatively high loss potential which related to privacy, such as the personal data, the transaction itself and so on. Thus, we proposed the following hypothesis:

H4: Perceived risk has a negative effect on attitude towards using online credit offering services.

With the rapid development of social economy, some special consumption phenomena strengthen college students' consumption desires. College students may choose to use online credit offering services actively or passively under social influence from others. The effect of social factors influence cannot be ignored. According to theory of reasoned action [9], the specific behaviour of the individual depends on behaviour intention which under the influence of individual behavioural attitude and subjective norms. Moreover, Venkatesh, Morris and Davis[25] found that subjective norms affect the use of information technology significantly. Therefore, we proposed the following hypothesis:

H5: Subjective norm has a positive effect on college students' attitude towards using online credit offering services.

Based on the previous literature, behaviour intention is another main dependent variable in technology diffusion research [6], which defined as an individual willingness to use a technology. According to the TAM, the key mediator of the influence of other variables on behaviour intention is a person's attitude towards using a technology [5]. It is defined as the degree to which users believe a technology is positively or negatively valued by an individual. In our research, we want to further confirm the influence of users' attitudes on users' behaviour intention in the context of online credit consumption service with college students. Therefore, the following hypothesis is proposed:

H6: The attitude towards online credit offering services has a positive effect on the behaviour intention to online credit offering services.

AN EMPIRICAL STUDY

Empirical data was collected by conducting a survey. The survey was distributed in term of questionnaire individually from March 10 2016 to June 5 2016, all the samples were randomly selected from the surrounding universities in the biggest city in the central China. To ensure that the measured beliefs were based on direct behavioural experience with the object, only responses from those who had previously used the online credit consumption service were included in our analysis, we chose the object mainly concentrated in some of the students who seem to live a good life, such as well dressed, or with a brand-name mobile phone. As a result, 256 completed questionnaires were collected from the college students, the questionnaire is mainly collected by means of giving away randomly offline and smaller part of electronic questionnaires, among which 239 responses (93.36%) were valid questionnaires. The first part of the questionnaire was about the demographic questions. Among all the participants, 52.3% of them are female and 47.7% of them are male. They are relatively young and 97.1% of them have bachelor degrees at least. Most of them (88.2%) thought they were aware of online credit offering services, 57.2% of them were familiar with online credit offering services.

The second part of the questionnaire was set to test the hypotheses proposed above. The validated instrument measure in previous research was used as the foundation to create the instrument for this study. As a result, 17 measurement items (see Appendix 1) were included in this part of the questionnaire. A five point Likert scale, with 1 being the negative end of the scale (strongly disagree) and 5 being the positive end of the scale (strongly agree), was used to examine participants' responses to all items in this part. For the purposes of testing the research hypotheses, data were analysed using the structural equation model (SEM) [2].

Measurement Model

In this study, we examined goodness-of-fit of the measurement model by using six widely-used fit indexes: the chi-square/degrees of freedom (χ^2/df), the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the comparative fit index (CFI), the norm fit index (NFI), and the root mean square error of approximation (RMSEA). The fitness measures are shown in Table 1. Table 1 shows that all the fitness measures are within acceptable range except for the GFI and RMSEA. In practice, GFI values above 0.8 are considered to indicate a good fit. Meanwhile, RMSEA is also acceptable when it is less than 0.08 [14]. Consequently, all the fitness measures are within acceptable range. Therefore, we consider the measurement model is acceptable, and the measures indicate that the model fit the data.

Table 1: Fit indices for the measurement model

| Measures | Recommended criteria | Measurement model |
|----------------|----------------------|-------------------|
| Chi-square/df. | < 3.0 | 2.014 |
| GFI | > 0.9 | 0.891 |
| AGFI | > 0.8 | 0.856 |
| NFI | > 0.9 | 0.915 |
| CFI | > 0.9 | 0.955 |
| RMSEA | < 0.05 | 0.065 |

Table 2 shows the composite reliability and average variance extracted. All the reliabilities exceed the threshold value of 0.7. Meanwhile, the average variances extracted for all constructs exceed the benchmark of 0.5. As the four values of reliability are above the recommended values, the scales for measuring these constructs are deemed to exhibit satisfactory convergence reliability.

Table 2: Construct reliability

| Construct | Factor Loading | Composite Reliability | AVE |
|-----------|----------------|-----------------------|------|
| PU | 0.74-0.83 | 0.84 | 0.64 |
| PEOU | 0.77-0.89 | 0.91 | 0.71 |
| ATT | 0.84-0.93 | 0.90 | 0.76 |
| BI | 0.78-0.85 | 0.86 | 0.67 |
| PR | 0.86-0.91 | 0.91 | 0.78 |

| | | | |
|----|-----------|------|------|
| SN | 0.70-0.90 | 0.85 | 0.65 |
|----|-----------|------|------|

Furthermore, the variances extracted by the constructs are more than the squared correlations among variables. The fact reveals that constructs are empirically distinct. As the convergent and discriminant validity measures are quite well, the test of the measurement model is satisfactory.

Test of Structural Model

The structural model was tested using Amos 21.0. The results of the structural model are shown in Fig. 2.

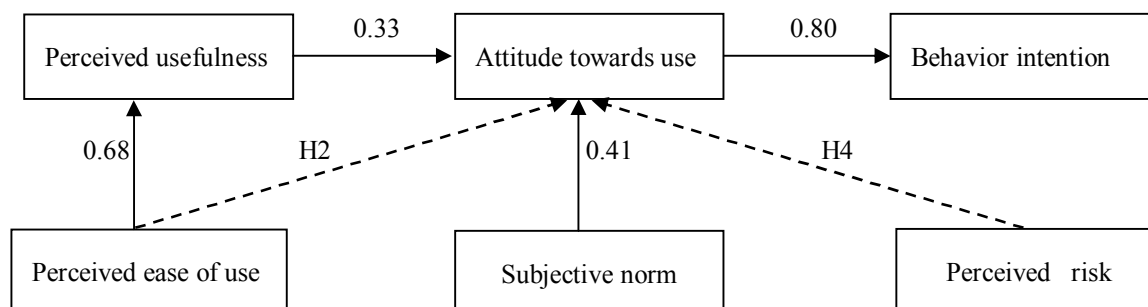


Figure 2: Results of structural modeling analysis

And Table 3 shows regression weights. It provides a measure of how well future outcomes are likely to be predicted by the model, the amount of variability of a given construct. In our analysis, the path coefficient from attitude towards to behaviour intention is statistically significant, and the positive effect is relatively strong, as shown by the path coefficient of 0.80 ($P < 0.001$). Besides, perceived usefulness affects perceived ease of use and attitude towards use strongly, and the path coefficient is respectively as 0.68 ($P < 0.001$) and 0.33 ($P < 0.001$). In addition, path coefficient from subjective norm to attitude towards is statistically significant, and the path coefficients are 0.41 ($P < 0.001$). Meanwhile, perceived risk has a negative influence on attitude towards and perceived ease of use has a positive influence on attitude towards, both of which are not significant (shown as dotted lines in Fig 2). Thus, H1, H3, H5 and H6 were supported. Hypotheses H2 and H4 were not supported.

Table 3: Regression Weights

| | Estimate | S.E | C.R | P |
|---------------|----------|-------|--------|-------|
| EOU ← -- -PU | 0.682 | 0.071 | 9.081 | *** |
| ATT ← -- -PU | 0.332 | 0.099 | 5.232 | *** |
| ATT ← -- -EOU | 0.139 | 0.086 | -0.295 | 0.768 |
| ATT ← -- -SN | 0.412 | 0.100 | 3.507 | *** |
| ATT ← -- -PR | -0.017 | 0.053 | 1.789 | 0.074 |
| ←BIATT | 0.802 | 0.072 | 10.630 | *** |

DISCUSSION

According to the results, two hypotheses were not supported. Firstly, perceived ease of use does not positively affect student's attitude towards use online credit offering services. In the previous studies [10], perceived ease of use was found to have a positive impact on customer's attitude. The possible explanation might be that some of the college students thought that it was interesting to consume first and pay later. In this case, they can quickly and easily learn how to use this new information service. On the other hand, most online credit offering service vendors have made the interfaces of the services very easy to use. Thus the significant effect of perceived ease of use to behaviour intention to use online credit offering services might decrease. Previous studies found that perceived risk affected customer attitude significantly [15][22]. However, this hypothesis was not supported in our study. A possible explanation is that many college students have a strong desire for consumption and a high degree of sensitivity to consume trends and fashion trends, among of which some students may temporarily ignore the potential risk of online credit offering services so as to satisfy their high quality life. In addition, the number of students that use online credit offering services is less than those that are inclined to small loans credit consumption. This may indicate that, the ability and willingness of these students to bear the risk is weak. Therefore, perceived risk may not have a significant impact on college students' attitude towards online credit offering services. Furthermore, the behaviour intention of using online credit offering services was positively and significantly impacted by perceived usefulness and subjective norm. Most respondents thought that online credit offering services were useful in their daily life. What's more, attitude towards online credit offering services directly affect the behaviour intention to use online credit offering services. And users' attitude to online credit offering services indicates users' likeness to use online credit offering services. This finding confirmed the previous findings [4] that attitude is the main factor for people to accept a new technology.

CONCLUSION

With the rapid economic growth in China, private consumption expenditure has increased rapidly in the past few years. It is believed that online credit offering services are becoming popular among Chinese college students. Thus, the reasons why college

students choose online credit offering services should be considered by the practitioners. This study explored potential factors which affect college student's behaviour intention to use online credit offering services. Six research hypotheses were proposed in the study. Four research hypotheses were positively significant supported, while two research hypotheses were rejected in this study. The result indicated that both perceived usefulness and subjective norm have positive effects on college student's attitude to use online credit offering services. And the effect of perceived usefulness is stronger than that of subjective norms. Besides, attitude towards the process of choosing online credit offering services has a strong effect on customers' behaviour intention.

This study has some limitations. Firstly, the participants of our study are mainly students in one province in China, they can represent customers of online credit offering services to some extent, and they cannot reflect the whole population of college students in China. Furthermore, in addition to the factors in our structural model, there may be some other factors affecting college student's behaviour intention to use online credit offering services, such as personal characteristics, perceived playfulness. Thus, future studies can further investigate how behaviour of using online credit offering services is influenced by these factors. In addition, some mediating factors (e.g., gender and age) may provide fresh insights and offer new directions for future research.

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APPENDIX

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| <p>Behaviour Intention(Fred D. Davis, 1989)(Park, 2009) I am likely to use online credit offering services in my daily life. I am willing to use online credit offering services in the near future. I am likely to recommend use online credit offering services to my friends and family</p> |
| <p>Attitude towards(Fred D. Davis, 1989)(Park, 2009) Using online credit offering services is interesting. Using online credit offering services is wise. I am support of using online credit offering services.</p> |
| <p>Perceived Usefulness (Fred D. Davis, 1989)(Park, 2009) Using online credit offering services can enjoy the service of consume first and pay later. Using online credit offering services can enjoy a variety of preferential activities. Using online credit offering services can improve the performance of consumption activities</p> |
| <p>Perceived ease of use(Fred D. Davis, 1989)(Park, 2009) It is easy for me to learn how to use online credit offering services. Using online credit offering service won't cost me a lot of energy. The step of using online credit offering services is simple for me In general, online credit offering services is convenient.</p> |
| <p>Perceived risk (Jan et al., 2012; H.-H. Teo et al., 2003) Worrying about personal information will be leak or sold. Worrying about unnecessary losses due to improper use. Worrying about the transaction data will be leak or sold.</p> |
| <p>Subjective norm (Fred D Davis, 1989; Jan et al., 2012; Park, 2009) People who have a great influence on me (such as the teacher, boss and so on) would recommend using online credit offering services. People who are important to me (such as family, boy/girlfriend and so on) would agree with me to use online credit offering services. The group where I lived would think online credit offering services is a good idea.</p> |