UNDERSTANDING CONSUMERS’ TRUST IN INTERNET FINANCIAL SALES PLATFORM: EVIDENCE FROM “YUEBAO”

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Abstract

Obtaining consumers’ trust is one of the crucial objectives of online transaction success. In the context of Internet finance, trust becomes the focus of scholars’ research in different fields. In previous studies, trust has been investigated in psychology, sociology, economics and many other disciplines. Since the Internet emerge in human’s daily life, a steam of literature shed light on consumers’ trust based on Internet. Now, Internet finance has become popular in ordinary people’s lives. So, it’s essential to understand consumers’ trust in Internet financial sales platforms. In this paper, we investigate consumers’ trust with the data collected from “Yuebao” users in China, and adopt six factors after reviewing prior related studies. The factors are clustered in two resources. Resource theory is employed to generate the proposed research model. Finally, we find that perceived ease of use, perceived benefit, perceived security control and third-party guarantees have significant effects on consumers’ trust, while perceived credibility and network size are not significant related to trust. The results of this study provide directions for system administrators and service providers to achieve higher levels of micro-blogs usage by developing multi-faceted strategies to enhance users’ perceived trust toward the platforms.

Keywords: trust, internet financial sales platform, resource theory
1 INTRODUCTION

Since the birth of Internet, it has grown with a sustained rate. The Internet has become an essential business platform for trading, distributing and selling products between organizations, among organizations and consumers, and even between consumers (Brian et al. 2003). With the development of Internet, Internet sales platform are built for online transaction because of technology progress and online transactions requirement. In recent years, a lot of financial products emerged on Internet, such as “Yuebao”, “Baifa” or “Xianjinbao” in China. However, when compare to whole number of Internet user, the number of users in Internet financial sales platform is rather small. Most users believe online transaction exist potential risk and can not trust the security of the internet financial sales platform. Therefore, trust is growing in importance as a topic of study and its influence on Internet financial sales platform is increasing.

Trust is considered essential in exchange relations because it is a key element of social capital (Mayer et al. 1995). An increasing number of scholars are of considerable interest in trust in various academic disciplines, such as psychology, sociology, economics, marketing, organization behavior, as well as information systems (Kassim et al. 2012). In the IS field, the studies on trust focused on web vendor or virtual team members (Kassim et al. 2012). Recently, the focus has shifted to evaluating trust in the field of Internet finance. Trust is crucial in many transactional relationships, especially those containing an element of risk, such as online transactions (Reichheld and Schefter 2000, Moorman et al. 1993, Morgan and Hunt 1994). Commerce Net’s report suggests that trust is the third of 10 top barriers and inhibitors to e-commerce (Brian et al. 2003). If Internet financial sales platform can’t build trust with consumers, their marketing activities on the web won’t be carried out smoothly (Changsu et al. 2010; Sirkka et al. 2000; Hee-Woong et al. 2012). In addition, perceived trust can also lower the non-monetary transaction price, such as the time and effort needed by customers to choose Internet vendors (Hee-Woong et al. 2012; Todd and Jone 1996). Thus, consumers’ trust is important to the survival and development of Internet financial sales platform, and understanding consumers’ in Internet financial sales platform is essential.

In academia, a lot of scholars attempted to delineate the antecedents of trust. A majority of scholars studied trust in Internet context from three clusters of antecedents: customer/client-based, website-based, and company/organization-based antecedents (Ardion et al. 2010). Lee and Turban (2001) posited that four main antecedents influenced consumer trust in Internet shopping, and they are trustworthiness of the Internet merchant, trustworthiness of the Internet as a shopping medium, infrastructural (contextual) factors (e.g., third-party certification), and other factors (e.g., company size) (Matthew and Efaim 2001). Meanwhile, trust has been conceptualized by previous research in a variety of ways, both theoretically and operationally (David el al. 2003). Drawing from several theoretical streams, research on trust has identified a number of trust antecedents: knowledge-based trust, institution-based trust (specifically, structural assurance beliefs and situational normality beliefs), calculative-based trust, cognition-based trust (specifically, categorization processes and illusion of control processes), and personality-based trust (specifically, faith in humanity and a trusting stance) (David el al. 2003). However, few scholars study factors influencing trust based on resource theory and almost all scholars studied trust in e-commerce context, less conduct research based on Internet financial sales platform. In order to fill this void, we attempt to adopt resource theory to explain consumers’ trust in Internet financial sales platforms.
In this paper, we empirically verified our proposed trust model using data collected from “Yuebao”. The rest of the paper is organized as follows. Section 2 discusses theories used in the paper. The research model and hypotheses are explained in Section 3. The results and summary of hypotheses testing follow in section 4, and section 5 provides the conclusions from the research findings.

2 THEORETICAL BACKGROUND

2.1 Internet Financial Sales Platforms

Internet is well on its way to become a full-fledged delivery and distribution channel and among the consumer-oriented applications riding at the forefront of this evolution are electronic financial products and services (Margaret and Thompson 2000). The generation of these electronic financial products and services stem from the combination of Internet and traditional finance, it becomes the Internet finance. With the development of Internet finance, Internet financial sales platform emerged with the purpose for facilitating the consumer’s online transaction. Internet financial sales platform is different from traditional financial sales platform in that consumer cannot contact with the agent face-to-face. So trust becomes the greatest barrier preventing consumers from Internet financial sales platform. Though merchants engaged in online business claim that internet financial sales platform is a safe platform, many consumers still worry about its safety. Merchants and third parties mainly consider security of Internet financial sales platform from a single dimension. The factors influence consumers’ trust would be multi-faced. In this paper, we will study consumers’ trust in Internet financial sales platform from both of technical and network dimensions.

2.2 Trust

The definition of trust is not united in academia, and trust has been studied in different disciplines. Some scholars view trust as an individual feature, some argue that trust is an expectation, and others define trust from a sociological perspective. In the field of social psychology, trust has been defined as a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviors of another (Rousseau et al., 1998). Lewis and Weigert (1985) contend that trust, from a sociological perspective, should be viewed as a property of collective units (dyads, groups, and collectivities), and not of isolated individuals (Ardion et al. 2010, Roger and James 1995; Blanca 2011, Luhmann 1979, Vishal 2012). In the context of consumer trust in e-commerce, McKnight et al. (2002) defined trust as “one believes in, and is willing to depend on, another party (Chechen et al. 2011). An important aspect of this definition is the notion of trust as a belief, a sentiment, or an expectation about an exchange partner (Shankar 1994).

There are still many definitions of trust from some different angle. Trust can reduce people’s uncertainty towards others or environment that they aren’t familiar with. Lack of trust in the organization as the other party in a transaction is often blamed for people’s disinclination to engage in an online transaction (Donna and Thomas 1999). Similarly, if consumers can’t trust the Internet financial sales platform completely, they won’t use their financial products.

In traditional research, trust is crucial in people’s communication. Many researchers studied the importance of trust in traditional transaction and people’s interaction. Nowadays, with the popularity of internet, scholars study trust in the context of internet. Therefore, an increasing number of scholars
have made research on online trust, and many of them have proved the significant of trust in the field of finance, market, technology acceptance, and so on. For instance, Kim studied trust in electronic commerce. David made research of trust in online shopping, and Doney researched trust in buyer-seller relationship. From these research about trust in different field, we can conclude the importance of trust in human communication and transaction.

2.3 Factors Influencing Trust of Internet Finance

With the popularity of internet finance, both the academe and the business sector have shown a heightened interest in trust within the context of the digital environment (Ardion et al. 2010). The topic of online trust has been studied in the literature from a variety of angles such as transaction, institution, technology, product, and information content (Srinivasan 2004). In the past few years, a number of research have been conducted to determine the factors that influence customers’ trust in online businesses (Irina et al. 2001). Based on the review of literature, we find that scholars studied trust in online business mainly based on technological resource, network resource and individual characters in the environment of internet finance. In our study we consider technological resource and network resource to understanding consumers’ trust in Internet financial sales platform.

In prior research, some scholars studied the effect of technological resource to trust in internet context mostly focus on the following factors: perceived ease of use, perceived usefulness, perceived privacy and security control and perceived benefit. Koufaris and Hampton-Sosa (2004) verified that perceived web site usefulness, ease of use, and security control are significant antecedents of initial trust. Pavlou (2003) found that trust has an ability to influence perceived risk, perceived usefulness and perceived ease of use when the user goes through the various stages in an online transaction (Marios and William 2007). So, we can draw a preliminary conclusion that perceived usefulness, perceived ease of use and security control are important factors influencing consumers’ trust in internet context.

Further, people realized the importance of network resource in studying online trust. Some literature discuss the influence of network resource from third-party guarantees, network size. Hoffman et al. argued that the effectiveness of third-party trust-certification bodies and the public key encryption infrastructure for ensuring transactional security (including privacy protection) are central success factors for building consumer trust in Internet shopping (Matthew and Efraim 2001; Donna et al. 1999; Huanqing et al. 1998).

3 RESEARCH MODEL AND HYPOTHESES

3.1 Theoretical Research Model

Our proposed research model with the directions of relationship are shown in figure 1.
3.2 Hypotheses

3.2.1 Perceived ease of use

In previous research, scholars proposed many definitions of perceived ease of use. In the context of mobile banking, perceived ease of use is the degree to which mobile banking is perceived as easy to understand and operate (Hsiu-Fen 2011). Davis interpreted perceived ease of use as the degree to which a person believes that using a particular system would be free of effort (Fred 1989). According to this definition, perceived ease of use means consumers can use these new products or new technology easily.

Perceived ease of use is proposed in the technology acceptance model (TAM) (Fred 1989). This model proved that perceived ease of use influences consumers’ attitude toward computer technology using, an in turn effect consumers’ behavioural intention to use. Extensive research over the past decade provides evidence of the significant effect perceived ease of use has on usage intention (Pin and Luarn 2005). Afterwards, some scholar verified perceived ease of use have significant effect on online trust. For example, David proved perceived ease of use positively affect trust in an vendor in the context of online shopping. Jari proposed that perceived ease of use influencing consumers’ trusting beliefs to information system. Based on previous research, we propose the following hypothesis:

**H1:** Perceived ease of use is positively related to consumers’ trust.

3.2.2 Perceived Security Control

Security is always a critical issue with which consumers are concerned (Ivan 2011). perceived security may be defined as the subjective probability in the customer’s eyes that his or her personal or financial information will not be shown, saved, and/or stolen during e-commerce and storage by outside parties (Myung-Ja 2011). Perceived Security Protection refers to a consumer’s perception that the Internet vendor will fulfill security requirements such as authentication, integrity, encryption, and non-repudiation (Dan et al. 2008).

Most scholars who study the factors influencing consumer’s trust about security mainly focus on system design security, and do not consider third-party’s ability to make efforts to prevent insecurity phenomenon. This paper discusses perceived security control from security and privacy protection. Security refers to the protection of information or systems from unsanctioned intrusions or outflows.
Privacy, on the other hand, refers to the protection of various types of data that are collected (with or without the knowledge of the users) during users’ interactions with the Internet banking system (Yi-Shun et al. 2003). Since, people care about their privacy and security very much in online transaction. This has been verified by many scholars in preliminary research. So we can establish the hypothesis:

**H2:** Perceived security control is positively related to consumers’ trust.

### 3.2.3 Perceived Benefit

Perceived benefit is a consumer’s belief about the extent to which he or she will become better off from the online transaction with a certain Website (Paula et al. 2003). An increasing number of people do transaction through Internet financial sales platform, because stores on Internet provide products for people with a lower price compare to physical stores. More important, consumer can scan a product from different store in a short time and elect the store they think cheapest or most favorite. Consumers can obtain more profit by purchasing financial products on the internet financial sales platform.

Perceived benefit has been proved that it has significant effect to consumers’ attitude or intention in the context of internet shopping and use of information system. Dan et al had proved that a consumer's perceived benefit positively affects a consumer's intention to purchase. Lee has proved that perceived benefit has a positive effect on attitude to use online banking and intention to use online banking. Based on these prior research, we suppose that perceived benefit would has a positive effect on consumer’s trust on the internet financial sales platform.

Therefore, we establish the following hypothesis:

**H3:** Perceived benefit is positively related to consumers’ trust.

### 3.2.4 Perceived Credibility

Perceived credibility is used as a new construct to reflect the security and privacy concerns in the acceptance of Internet banking (Yi-Shun et al. 2003). The lack of perceived credibility is manifested in people’s concerns that the Internet banking system (and/or the hackers intruding the system) will transfer their personal information or money to third parties without their knowledge or permission (Yi-Shun et al. 2003).

Ganesan defined perceived credibility as the extent to which one partner believes that the other partner has the required expertise to perform the job effectively and reliably (Yi-Shun et al. 2003). Similarly, in the context of Internet, perceived credibility describes the Internet financial sales platform’s ability and integrity in online transaction. Based on these researches on credibility, we establish the following hypothesis:

**H4:** Perceived credibility is positively related to consumers’ trust.

### 3.2.5 Network Size

Doney and Cannon (1997) defined a seller’s size as its overall size and market share position (Thompson and Jing 2007). A large overall size and market share suggests that the firm consistently delivers on its promises to its consumers and many consumers tend to trust it (Thompson and Jing 2007).
Large organizational size also indicates that the firm is likely to possess expertise and necessary support systems that encourage trust and loyalty (Thompson and Jing 2007). Larger firms also tend to have more well-developed Web sites to encourage transactions (Thompson and Yujun 2003). In an e-commerce environment, large size suggests that the vendor is able to assume the risk of product failure or transit losses and to compensate buyers accordingly (Thompson and Jing 2007; Sirkka et al. 2000). Supplier size encompasses the firm’s overall size and its market share position. Supplier size provides a signal to the buying firm that the selling firm can be trusted (Patricia and Jaseph 1997).

In our research, we define network size from two dimensions: consumers’ number and institution size. Consumers’ number refers to the number of consumers who participate in the online transaction or have touched the internet financial sales platform. Institution size refers to assuming the risk of product failure or transit losses and to compensate buyers accordingly (Thompson and Jing 2007; Sirkka et al. 2000). Combine the hypotheses above, we surmise network size play an important role in consumers’ trust, and we establish the following hypothesis:

**H5:** Network size is positively related to consumers’ trust.

### 3.2.6 Third-party guarantees

Third parties are becoming the most important channel for increasing end-users’ confidence to participate in online activities (Paula et al. 2003; Jari and Heikki 2007). Consumers also place greater emphasis on third-party guarantees. A trusted third party can build trustworthiness in the way that web site users are more willing to give away personal information and interact with the web site (Durkan et al., 2003; McKnight et al., 2002). The meaning of third-party guarantees includes system assurance, service assurance. Thompson et al define system assurance as the dependability and security of a vendor’s online transaction system, which enables transactions through the Internet be secure and successful (Thompson and Jing 2007). Service assurance protects consumer’s right of enjoying high-quality service throughout the transaction online. Third-party guarantees demonstrate the commitment of third-party. The commitment conclude compensation commitment if consumer’s property and interests surfer loss because of technical problem. A majority of consumers consider the property of fraud when carry out transaction online, so third-party guarantees is vital to consumers’ trust in internet financial sales platform. Based on the discussion of third-party guarantees, we establish the following hypothesis:

**H6:** Third-party guarantees are positively related to consumers’ trust.

### 4 RESEARCH DESIGN AND METHODOLOGY

#### 4.1 Measurement Development

All measurement items were adapted from previous literature, with minor modifications in wording to make them relevant in the context of online Internet financial platforms. A five-point Likert scale was used for all ratings. To enhance the validity of the proposed model’s measurement items, a pilot study was performed with bachelor’s degree students (n=49) in a MIS program who were frequent Yuebao users to reduce possible ambiguity in the questions. Respondents were asked about any difficulty they may have encountered in the survey. Comments and suggestions on the item contents and structure of
the instrument were solicited. Several revisions of questionnaire items were made.

4.2 Survey Procedure

This research takes China as the site of the empirical investigation because the supporting infrastructure required for micro-blog developments has been put in place. According to CNNIC’s report, up to December, 2011, the number of net citizens in China has reached 457 million, the number of mobile net citizens in China has reached 303 million.

A total of 380 questionnaires were distributed in the formal survey between December, 2013 and January, 2014. The questionnaires were distributed through paper-based questionnaire to people who were working in diverse industries and social institutions, including schools, universities, offices, companies in China. Altogether, 287 questionnaires were collected. After reviewing, 42 questionnaires were eliminated due to invalid answers, leaving 245 questionnaires for the empirical analysis. Our sample comprised 47.3% male and 52.7% female respondents. The respondents are relatively young and generally well educated.

4.3 Measurement Model Development

Both of validity and reliability were determined to evaluate the measurement model. Hair et al. (1998) indicates that Cronbach's α value of 0.7 is the minimum acceptable value for reliability. The α value of each construct is over 0.7, which represents good reliability. Content validity and construct validity are often used to measure validity. The variables in this study were derived from existing literature, thus exhibiting strong content validity. Construct validity was examined by investigating discriminant validity and convergent validity. The convergent validity of the scales was verified by using the criteria suggested by Fornell and Larcker (1981). All the factor loadings for all items exceed the acceptable level of 0.6, and all factor loadings are significantly related, via t-tests at p < 0.001, to their respective constructs, the composite reliability of the constructs ranged from 0.74 to 0.88, and thus all exceeded the generally accepted value of 0.70. In addition, the AVE ranged from 0.56 to 0.66. Hence, all three conditions for convergent validity were met. Discriminant validity was examined using criteria suggested by Fornell and Larcker (1981). The shared variance between each pair of constructs was less than the average variances extracted, providing evidence of discriminant validity.

4.4 Goodness Fit of Structural Model

To assess how well the model represents the data, this research employed AMOS 6.0 to evaluate “goodness of fit” indices. χ²/df=1.73, RMSEA=0.05, GFI=0.87, AGFI=0.89, CFI =0.93, NFI=0.88 and IFI=0.92 are all within the commonly accepted thresholds suggested in the literature (Fornell and Larcker 1981, Hair et al. 1998). The fit indices indicate that the model provides a reasonably good fit.

5 DISCUSSION AND CONCLUSION

According to the result of our research, the effect of perceived ease of use, perceived benefit, perceived security control and third-party guarantees (β ease of use=0.295, t=3.112, p<0.001; β benefit=0.302, t=3.778, p<0.001; β security=0.317, t=3.473, p<0.005; β third-party=0.397, t=4.172, p<0.001) are significant to trust. Compare to these significant factors, perceived credibility and network size (β credibility=0.245,
t=3.326, p<0.005; β_{network}=0.211, t=3.115, p<0.001) have weaker effect on consumers’ trust. These findings are consistent with our expectation basically. In many prior research, perceived ease of use, perceived benefit, perceived security control and third-party guarantees have been found having positive effect to trust. Our results support all these findings. Credibility and network size are related in many papers of different disciplines. Some research examined credibility or network size positive to trust and others not. So our findings are objective. Besides, perceived credibility, in some extent, has common with security partly. Consequently, it may lead to repeat experiment in our study. Firm size and supplier size have been studied in some research about trust. Tough it feels like similar to network size, firm size and supplier size may have difference softly.

Our findings have both theoretical and practical significance. Theoretically, we recognizing the importance of perceived ease of use, perceived security control, perceived benefit and third-party guarantees in the context of internet financial sales platform. Although, these factors have been demonstrated to have significant impact on trust, they are not verified based on internet financial sales platform. Different context have different interpretation to trust factors. In addition, we adopt resource theory in our research, and it helps us determine the key factors influencing trust. Resource theory offers a new insight in the study of trust in different context. Therefore, our study has theoretical significance.

Our research in consumers’ trust in internet financial sales platform is mostly practically oriented. Based on the six hypotheses we propose above, four hypotheses have been tested positively related to consumers’ trust in internet financial sales platform. Internet vendors and website owner can take advantage of these factors and understand the barriers of using financial products. Then, they can take measures to overcome these barriers and encourage consumers purchasing and using financial product.

This study has a number of limitations. First, the study is based on the data of Yuebao, and Yuebao is proposed by Taobao. Taobao is the largest shopping site, and its consumer number has increased to millions. Consequently, Yuebao has a relative advantage comparing with other financial produces. This advantage leads to its high recognition and acceptance of consumers. So, our study may be affected by consumers’ potential recognition. Meanwhile, our result will not accurate as our anticipation.

A second limitation is that the amount of data collecting from Yuebao is limited due to limited resources and time. The small number of data may not demonstrate our objective in this study. In addition, some potential factors influencing consumers’ trust in internet financial sales platform may can’t be exposed. Therefore, it will not conductive to our further research.

Another limitation is that we are not conducting experiment to study the relationship among the six factors, and it may exists other factors that are significant to consumers’ trust. From privacy research, many researches notice the relationship among those factors and find out their relationships though relative experiment. In this paper, we neglect the relationships and it makes our study not integrated.

Despite these limitations, this study contributes to the literature on differential factors of trust in the internet financial sales platform. More important, we have examined the effect of the six factors to consumers’ trust, and it will help merchants do business online to recognize the advantages of security, ease of use and third-party guarantees.
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