

Mohamed Asmy Bin Mohammad Thas Thaker et al.

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Factors affecting investors' intention to invest in a peer-to-peer lending platform in Malaysia: An extended technology acceptance model

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ADB Working Paper Series

**FACTORS AFFECTING INVESTORS' INTENTION
TO INVEST IN A PEER-TO-PEER LENDING
PLATFORM IN MALAYSIA: AN EXTENDED
TECHNOLOGY ACCEPTANCE MODEL**

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Abstract

There has been significant growth in peer-to-peer (P2P) lending platforms in recent years, given the advancement of information and online technologies. Because this type of platform is gaining in importance and popularity, it becomes necessary to examine the factors that influence the behavioral intention of investors to invest in a P2P lending platform. Based on an extended technology acceptance model and using a structured survey questionnaire, this study examines the factors that influence retail investors to invest in a P2P lending platform in Klang Valley, Malaysia. The results show that intention to invest is mainly influenced or driven by trust. Other variables, namely perceived risk, perceived ease of use, and security, are found to have no impact on investors' decisions. The study findings provide managerial implications and theoretical contributions.

Keywords: peer-to-peer (P2P), investors, trust, Malaysia

JEL Classification: G2, G23, G41

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1. INTRODUCTION

Development in information and communication technologies in recent years has undoubtedly changed the global landscape for financial services. The availability of the Internet, in particular, is gradually changing the distributional channel of financial resources from a traditional approach to online platform approaches (Buhalis and Law 2008). The peer-to-peer (P2P) lending platform has become popular and is gradually becoming an alternative to the traditional mode of financing (Greiner and Wang 2010). P2P lending is considered an innovative approach that unites borrowers and lenders without collateral or the intermediation of financial institutions (Lin et al. 2013). According to Transparency Market Research (2015), P2P lending is expected to grow from US\$26.16 billion to US\$897.85 billion between 2015 and 2024. Clearly, as P2P lending has disrupted traditional banking activities (Yin, 2017), it has become a dominant force in the credit markets. Despite its remarkable achievements, online P2P lending has attracted mixed feelings among researchers, investors, and policy makers. Those who argue against online P2P have pointed out issues including information asymmetry, inadequate credit assessment, and potential high default risk, which might make the platform unattractive to investors (Ashta et al. 2010; (Yang and Lee 2016)

Notwithstanding the risks associated with online P2P transactions, studies have shown that online P2P lending still possesses huge potential in the allocation of financial resources. Studies have highlighted some benefits of online P2P lending, among which are efficient capital allocation, competitive rates, and lower transaction costs than alternative credit mechanisms (Duarte et al. 2012; Galloway 2009)

The importance and rise of online P2P lending warrant the need for a critical analysis of the influencing factors that attract lenders to invest in this online market ecosystem. Even though some studies have explored the factors that attract P2P investors (Bi et al. 2017; Yan et al. 2015), studies that have used the extended technology acceptance model (TAM) are limited. Given this research gap, the present study uses TAM to examine the factors that influence the intention of investors from Malaysia to invest in online P2P lending platforms.

This study focuses on retail investors, an important target group of investors for the P2P lending platform. Retail investors currently play a prominent role in the capital market. Unlike institutional and angel investors, retail investors work with smaller capital outlays, which are appropriate to start investing in online P2P lending platforms. Furthermore, this group consists of young investors, who represent a huge proportion of market participants. Indeed, online P2P lending platforms are more suitable for young investors due to factors such as value for money, flexibility, lower cost of the transaction, and better access to information. Young investors are already actively involved in Internet and investment activities (Samsudin and Hasan 2017). Studies on retail investors' behavior, however, are limited (Salm et al. 2016; Kannadhasan 2015). Because a majority of retail investors are young, they have different attitudes, values, and behaviors compared to other groups due to technological, sociocultural, and economic factors (Salm et al. 2016; Nusair et al. 2013).

We choose Malaysia for this study due to the increasing appetite for financial innovation and regulatory support for financial innovation to enhance access to financial resources for entrepreneurs. In November 2016, the Malaysian Securities Commission approved six online P2P lending platforms, making Malaysia the first country in Southeast Asia to regulate online P2P lending platforms. As of January 2018, a total of \$1.036 million was raised for the activities of businesses/SMEs (Fintech News Malaysia 2018). According to a report by fintechnews.my (2018), default rates on online P2P loans range from

minimal to zero. Even though the P2P lending platform is developing rapidly and gaining momentum in Malaysia, research on the subject (both conceptual and empirical) is still limited. Previous studies on the online P2P lending platform have focused on the conceptual framework and secondary data analysis in the context of other countries. Few studies have focused on the platform from investors' perspective. Attracting more investors to the P2P lending market requires an adequate understanding of investors' behaviors and attitude.

This research, therefore, fills a gap by examining the influencing factors for investors' intention to invest in P2P lending platforms in the context of Malaysia. The study thus makes two significant contributions. First, important factors that can attract investors' funds through the online P2P platform are identified and can be useful for their policy implications. Second, this research contributes in the form of its methodology by using partial least squares (PLS) analysis to examine the behavioral intention of investors to invest through this new mechanism.

The paper is divided into six sections. Section 2 is a literature review, and Section 3 elaborates the research methods. The research findings and discussion appear in Section 4. Section 5 focuses on conclusions and implications, and Section 6 discusses limitations of the study.

2. LITERATURE REVIEW

Using an extended TAM, the present study intends to overcome some of the shortcomings of the original TAM model. Application of an extended TAM will thus help in identifying other factors that influence investors' behavioral intention to invest in P2P lending platforms in Malaysia, in addition to the two main constructs, namely perceived usefulness (PU) and perceived ease of use (PEU), contained in the original TAM (Esmailzadeh et al. 2012). In accordance with the extended TAM model, additional variables are considered in the present study, namely perceived ease of use, perceived risk, trust, and security.

2.1 Perceived Risk

Perceived risk is considered as an uncertainty, with unfavorable implications, arising prior to a purchasing decision in terms of searching and choosing information for goods and services (Bauer 1960; Featherman and Pavlou 2003). Perceived risk is especially relevant to the intangible products that relate to online transactions (Mitchell and Greatorex 1993; Laroche et al. 2001; Rotchanakitumnuai and Speece 2003; Ndubisi and Sinti 2006). Inability to physically assess online products, exposure to fraud, and the possibility of receiving faulty products are major sources of perceived risk for customers (Polasik and Wisniewski 2009; Nor and Pearson 2008; Gerrard et al. 2006; Ndubisi and Jantan 2003).

Similarly, there is also the risk of inadequate infrastructure-related capacity by providers, which has an additional negative affect on online financial transactions (Kesharwani and Bisht 2012). Fear of inadequate infrastructure-related capacity may spark perceived risk when making an investment using the P2P lending platform. Extant studies have recognized the multidimensional nature of individual perceived risk and identified six components: financial, performance, time, social, privacy, and psychological (Jacoby and Kaplan 1972; Peter and Tarpey 1975; Featherman and Pavlou 2003). Perceived risk in the present study involved the expectation of loss arising from investing money in the P2P lending platform and we propose this hypothesis accordingly:

H1. *The higher the perceived risk, the lower will be the behavioral intention of investors to use P2P lending platforms.*

2.2 Trust

According to Komiak and Benbasat (2004) and Geyskens et al. (1996), if an individual feels secure and confident with the services offered by a merchant, this is known as trust. A higher level of trust seems to be strongly related to the degree of risk involved in uncertain situations (Gefen 2000). Trust describes the extent of protection the customers enjoy, which consequently determines the sustainability of online business (Kooli et al. 2014). While many scholars have discussed the relationship between trust and risk by focusing on industrial relationships (Yu et al. 2018; Brown et al. 2015), there are few studies providing theoretical and empirical validation of crowdfunding platforms, particularly P2P platforms.

Studies such as those by Delafrooz et al. (2011) and Yousafzai et al. (2010) have established a positive relationship between the adoption of online banking and trust. Trust plays a major role in online transaction decisions (Hong et al. 2013). Hence the sustainability of any online business strongly depends on trust building.

In an attempt to assess the role of trust in a proposed online lending platform for the case of the People's Republic of China (PRC), Wang et al. (2004) indicated the influence of social relations and a good reputation in building trust-based lending platforms and mitigating perceived institutional risks.

Just like any other credit market, trust is always a key factor in P2P lending platforms (Lo and Lie 2008). In an attempt to identify factors that drive P2P lending in the PRC, Chen et al. (2014) concluded that trust in borrowers and trust in the intermediaries who influence lenders are the two main determinants of trust. Similarly, Wang et al. (2015) and Yang and Lee (2016) emphasized the importance of trust in borrowers. Borrowers' information integrity, reputation, and trustworthiness thus represent important elements of trust for lenders.

In an attempt to propose a specific model for enhancing trust between lenders and borrowers, Sukmaningsih (2018) suggested that full access to borrowers' online information, i.e., photo, age, gender, and individual information, help to enhance trust. In a related study that tried to identify distrust in P2P transactions, Mohammadi and Broström (2018) revealed that distrust is highly associated with larger loan amounts with longer repayment periods and greater geographic distance between borrowers. Other factors that equally influence trust include the demographic background of the borrower, such as cultural factors, personal characteristics, experience, and stage of the business relationship and business network (Hofstede 1980; McKnight et al. 2004). Given the role of trust in the use of online P2P lending platforms, the following hypothesis has been proposed:

H2. *The higher the users' trust level, the higher their trust in the P2P lending platform will be.*

2.3 Perceived Ease of Use

Davis (1989) and Davis (1993) stated that if the target system is free from any effort required by the user to function, it is known as perceived ease of use. In one study, Ramayah et al. (2009) claimed that perceived ease of use in the dimension of online internet banking refers to the degree of ease of understanding, learning, and using. A system which carries less effort in terms of its operation can enhance job performance and potentially bring about a positive attitude toward it (Davis 1989; Nunkoo et al. 2013; Venkatesh and Davis 2000).

Indeed, the usage of perceived usefulness has been widely discussed in the literature, such as in studies by Akturan and Tezcan (2012), Maduku (2013), and Maduku and Mpinganjira (2012) in the area of e-banking.

In a study that explored the factors that attract customers to online banking, Maduku (2014) indicated that perceived usefulness and perceived ease of use are among the key factors that play a role in the adoption of mobile phone banking services. Another study by Alsamydai (2014) found that perceived ease of use, perceived usefulness, and attitude significantly influenced the use of mobile banking services in Jordan.

Additionally, Changchit et al. (2017) found that the usage of mobile banking among students of a southwestern US university was influenced by perceived usefulness, perceived ease of use, perceived security, and previous experience. Similar results have appeared in other studies such as those by Bhatt (2016), Svilar and Zupančič (2016), and Alalwan et al. (2017).

In the case of Zambia, Mwiya et al. (2017) evaluated the factors that affected e-banking adoption. They found that perceived usefulness, trust, and perceived ease of use were significant influences on the adoption of e-banking services in that particular country.

Another study by Raza et al. (2017) found that perceived ease of use reduced the behavioral intention of bank customers to use mobile banking in Pakistan. However, the study found a positive relation between resistance and perceived usefulness.

Meanwhile, using an extended TAM, Al-Subari et al. (2018) examined the factors motivating academicians to conduct online transactions in Malaysia. Their findings indicated that perceived ease of use and perceived usefulness influenced the adoption of online banking.

Based on a literature review, there is a dearth of studies on P2P lending platforms using the TAM. However, studies on online banking and particularly mobile banking provide great benefit for the present study. The ease of use of any technological innovation has been found to be one of the success factors for that innovation (Ramayah and Ignatius 2005; Al Soufi and Ali 2014).

An online P2P platform should be designed in such a way that it is flexible and convenient, where the users are able to search for information and be well informed about the main activities of the fund-raisers. This is especially vital for the customer who is using the P2P platform for the first time, to minimize the fear of loss or the psychological burden. Given this, the following hypothesis has been developed to test this:

H3. *Perceived ease of use is positively related to the behavioral intention to use P2P lending platforms.*

2.4 Security

Security deals with the security in a financial transaction performed through an online platform (Cheskin Research 1999). Security is considered to be an important factor to build trust in many online transactions (Nasri 2011; Haque et al. 2009). Indeed, Urban et al. (2009) stated that in most cases, customers are likely to avoid any online platform characterized by ambiguous information.

Many existing studies have revealed that clients' confidence mostly relies on the security of their financial information data (Ba et al. 2005). In a mobile banking platform, the security issue is a major concern to users before adopting the system (Bhatt 2016; Svilar and Zupančič 2016). This has also been supported by other studies such as those of Roca et al. (2009), Luarn and Lin (2005), and Flavia'n and Guinali'u (2006), who suggested that users may withdraw from a platform if they feel unsecured. According to the study by Roca et al. (2009), "security is a threat that creates a circumstance, condition, or event with the potential to cause economic hardship to data or network resources in the form of destruction, disclosure, modification of data, denial of service, and/or fraud, waste and abuse."

It happens that users are very worried about their personal information, particularly about their credit card (Fawzy and Abdel Salam 2015; Farid 2012). It is generally believed that users of online-based systems, including P2P platforms, are reluctant to conduct any type of online transaction if they are doubtful regarding the security of their personal and financial information.

The concern about security for crowdfunding platforms is especially relevant because of its relationship with corporate governance and investor protection. In some cases, crowdfunding platforms offer very little protection as compared with traditional banking transactions. The crowdfunding industry faces many challenges related to security, such as the risk of identity and payment data theft, as well as money laundering and risks of cyberattacks (OECD 2014). Šetlers and Valdmanis (2016) identified that information technology security standards are a significant factor influencing investors' decisions.

Some studies have included security as a parameter in capturing online and mobile banking adoption. For example, Abbasi et al. (2017) revealed that security is an important factor in influencing the adoption of Internet banking. Security is also considered a vital issue for the mobile banking system (Laforet and Li 2005), particularly for clients who are more concerned about security at the time of online payment (Tavilla 2015). Security risks need to be eliminated by financial institutions, whether they are providing physical or online transactions, because they are negatively linked to the adoption of Internet banking (Lee 2009). That is the reason why commercial banks and some similar institutions offer an upgrade of online services systems via mobile phone SMS, proof of confirmation, transaction passwords from the institution, and one-time passwords from the user (Viriyarungsarit 2017).

Leng and Ye (2015) studied the security system of Ebaodai, a P2P platform in the PRC. Issues were related to accessibility, multi-security checking, funds custody, joint liability, loan loss provision, asset value assessment, consultant guidance, supervision by financial experts, legal protection, and technical security of the platform. According to the authors, because of these security systems and other advantages, Ebaodai became one of the most popular and fastest growing online lending–borrowing platforms in the PRC.

Milne and Parboteeah (2016) proposed that commercial banks offer P2P lending after carefully addressing the risks and business and regulatory issues related to it. The authors focused on five areas of risk for the expansion of its platform, and one of the areas was to tackle the challenges of fraud, cryptographic security, and operational risks which needed to be eliminated. Additionally, the P2P lending platform must be transparent and standardized with appropriate regulation for the benefit of customers.

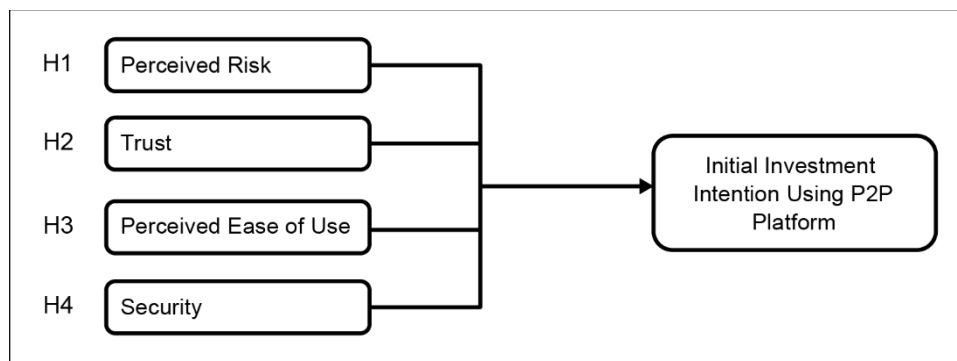
Based on the above discussion, the P2P platform should put emphasis on safety in terms of the inflow and management of cash. For example, Dayal et al. (1999) and Urban et al. (2009) mentioned that the P2P platform should convince consumers that they are using the most advanced and reliable technology to ensure the security of each transaction. Based on these arguments, the following hypothesis has been developed:

H4. *Security is positively related to one's behavioral intention to use P2P lending platforms.*

3. CONCEPTUAL FRAMEWORK

The literature survey shows that perceived risk, trust, perceived ease of use, and security are considered to be the independent variables that could influence the behavioral intention (as the dependent variable) to invest in P2P lending platforms. Figure 1 provides the conceptual framework of the present study.

Figure 1: Conceptual Framework



4. RESEARCH METHODS

4.1 Data Collection

The primary data are collected from a survey of retail investors in the Klang Valley, consisting of Kuala Lumpur and Selangor. Out of 260 questionnaires, 250 were returned and used for data analysis.

To analyze the behavioral intention of investors to participate in P2P platforms in Malaysia, partial least squares (PLS) analysis was used. PLS examines the reliability and validity of the constructs from a particular theoretical framework and also allows the constructs to be estimated simultaneously (Thakur 2014). In addition, parameters and structural path coefficients are also tested using this approach. It is important to emphasize that the PLS approach is becoming popular and mostly used among researchers from the field of information science. Bock et al. (2005) and Chin et al. (2003)

highlighted the advantages of PLS in terms of sample size, measurement scales, and residual distributions.

5. RESEARCH FINDINGS AND DISCUSSION

Common method bias in the survey questionnaire was tested using the Harman Single Factor Test. Its results showed that the data had 27.44% of variance, which is lower than the 50% threshold proposed by Podsakoff et al. (2003).

The majority of respondents were men (66%), with women representing 34% of respondents. Of all participants, 97% were in the age group of 20–40 years, and 88.2% had a bachelor's degree and above. As for occupational status, 70% of the respondents worked in the private sector, 17.2% were in the public sector, and 4% were self-employed.

Table 1: Demographic Information on Respondents

		N	Percent
Gender	Male	165	66
	Female	85	34
Age Group	20–30	217	87
	31–40	25	10
	41–50	4	2
	Above 50	4	2
Status of Marriage	Single	211	85
	Married	39	16
	Divorced	0	0
Educational Level	No Education	0	0
	Secondary School	13	5.2
	Diploma	17	7
	Bachelor's	203	81.2
	Postgraduate (Master's or PhD)	17	7
Occupational	Public	43	17.2
	Private	172	70
	Self-employed	9	4
	Housewife	1	0.4
	Student	25	10

5.1 Measurement

The measurement constructs and items were adopted from past studies to suit the objectives of the current study (Featherman and Pavlou 2003; Gefen 2000; Urban et al. 2009; Yoon 2002; Van Der Heijden et al. 2003; Yang 2005). A 5-point Likert scale was used, ranging from strongly disagree (1) to strongly agree (5). Topics of measurement included perceived ease of use (three items), security (three items), risk (four items), trust (four items) and initial investment intention (three items).

5.2 Measurement Model Assessment

During the preliminary assessment, the convergent validity of items loading, average variance extracted (AVE), and composite reliability (CR) was examined. The results (Table 2) show that the items loading was more than 0.5, which meets the criteria proposed by Hair et al. (2009), except for two items (D2 and I4). These two items were removed because the factor loading was lower than the threshold of 0.5. For AVE, the threshold is 0.5 (Hair et al., 2009), and the AVE for all constructs in this study was above this threshold. The CR values were above 0.7, which fulfills the threshold value as mentioned by Hair et al. (2009).

Table 2: Results of Measurement Model

Constructs	Items	Items Loading	AVE	CR
Perceived Ease of Use	D1	0.934	0.837096	0.911283
	D3	0.894		
Security	E1	0.855	0.733322	0.891885
	E2	0.853		
	E3	0.860		
Risk	I1	0.730	0.725498	0.887028
	I2	0.918		
	I3	0.896		
Trust	J1	0.817	0.682419	0.895677
	J2	0.842		
	J3	0.858		
	J4	0.785		
Initial Investment Intention	K1	0.917	0.820804	0.93215
	K2	0.914		
	K3	0.887		

Discriminant validity using the heterotrait-monotrait (HTMT) ratio of correlations was tested after fulfilling the convergent validity criteria as suggested by Henseler et al. (2015). For values of HTMT which are greater than the threshold of $HTMT_{0.85}$ and $HTMT_{0.90}$ as suggested by Kline (2011) and Gold et al. (2001), respectively, there is a problem of the presence of discriminant validity. The results of HTMT as shown in Table 3 indicate that its values passed the HTMT thresholds.

Table 3: Results of Discriminant Validity Analysis

	INTEN	PEU	RISK	SECU	TRUST
INTEN					
PEU	0.045				
RISK	0.094	0.053			
SECU	0.467	0.032	0.092		
TRUST	0.753	0.087	0.089	0.683	

5.3 Assessment of Structural Model

For the goodness of the structural model, R^2 is used, as supported by Ramayah et al. (2016). Hair et al. (2011) mentioned that the coefficient of determinants and path coefficients will be captured by R^2 . The R^2 value of the present study was 0.42, where 42% of the variance of behavioral intention of retail investors to use P2P lending platforms can be explained by the independent variables of perceived ease of use, security, risk, and trust.

Subsequently, a bootstrap analysis with resampling of 500 was conducted to assess the significance of path coefficients. Results revealed that only the factor of trust had a significant relationship with the behavioral intention of investors to use P2P financing. Thus, H4 is supported. However, other variables were not significant; thus the hypotheses are not supported. The results are provided in Table 4.

Table 4: Results of Structural Model

Hypotheses	Relationship	Beta	SE	t-Value	Decision
H1	PEU > INTEN	-0.060	0.074	0.808	Not Supported
H2	RISK > INTEN	-0.049	0.058	0.846	Not Supported
H3	SECU > INTEN	0.050	0.066	0.761	Not Supported
H4	TRUST > INTEN	0.611	0.06	10.198	Supported

5.4 Discussion and Implications of the Study

As indicated in Section 2, an extended TAM was employed by incorporating the additional variables of perceived ease of use, perceived risk, security, and trust. As suggested by the results, perceived ease of use, perceived risk, and security do not have a significant relationship with influencing investors' intention to invest through P2P lending platforms. First, online banking and transactions have undergone huge improvements over the past few decades through information and communication technologies, and the P2P lending platform is one type of online transaction system where potential users might assume that technological inclusion has already been adopted for its ease of use. Second, the risk associated with P2P lending platforms is much lower than with other online transaction platforms, and in most cases, transacting parties within the platform are known to each other. This is because the information provided is authenticated through an investigation process. This might be the reason why the risk factor is not so important. Third, interestingly enough, security was not found to be relevant to the P2P platform based on the study results. This might be due to tight regulations, strong restrictions, and continuous supervision in the banking and financial sector by Bank Negara Malaysia and other regulatory authorities. This might also be associated with a high level of computer savvy among the younger generation and the

existence of more advanced technology, such as blockchain, which significantly reduces insecurity in online transactions. Moreover, another reason might be the strong personal relationship between the parties involved, who are known to each other and for whom security is not a pressing issue. Finally, this study found that trust was the most important feature for investors to start their initial investments through P2P lending in Malaysia. This is also consistent with the findings of earlier studies (Balasubramanian et al. 2003; Urban et al. 2009; Bart et al. 2005), where trust constituted the main factor for online business and for customers to adopt the new technology (Suh and Han 2003). This finding thus suggests that a level of trust built on available information can significantly influence investors' intention to invest in online P2P lending platforms.

Considering that the financing process via P2P lending platforms is faceless, the information asymmetries could be magnified, leading to lots of uncertainties. A substantial level of trust should be established by diligently evaluating the situation and transacting parties in order to tackle the associated uncertainty (Lo and Lie 2008). This is especially important when the service or product involves high risk. If there is a lack of trust among the investors on a P2P platform, it will drive away these investors from engaging in the platform (Turban et al. 2002; Pavlou 2003). Therefore, trust plays an important role in determining users' feelings about using the P2P platform. If investors feel comfortable while interacting with the website, it will develop their trust and mitigate any fear and uncertainty.

6. CONCLUSION AND RECOMMENDATIONS

P2P lending is a form of crowdfunding which possesses great potential in providing alternative financing for borrowers, especially for SMEs. Given the rapid growth and attention paid to this mechanism, this study examined the behavioral intention of investors to invest via P2P lending platforms.

The results showed that the behavioral intention of investors to invest via this mechanism is influenced by the element of trust. Hence, a concerted effort for market presence should be made by both P2P lending advocates and regulators. Road shows, seminars, and conferences are some media that could be used to market the benefits of this mechanism. Other than that, awareness could also be increased through the involvement of higher education and social and electronic media.

Through this research we hope to contribute to the development of specific frameworks by regulators in Malaysia. In addition, by the application of PLS analysis, the study contributes to the body of literature related especially to crowdfunding.

REFERENCES

- Abbasi S., Kamran S., and Akhtar C. S. (2017). Factors affecting customers' adoption of internet banking in Pakistan. *Pakistan Administrative Review*, 1(2), 115–129.
- Akturan, U., and Tezcan, N. (2012). Mobile banking adoption of the youth market: Perceptions and intentions. *Marketing Intelligence & Planning*, 30(4), 444–459.
- Alsamydai, M. J. (2014). Adaptation of the technology acceptance model (TAM) to the use of mobile banking. *International Review of Management and Business Research*, 3(4), 2039–2051.
- AlSoufi A and Ali H. (2014). Customers' Perception of M-Banking Adoption in Kingdom of Bahrain: An Empirical Assessment of an Extended Tam Model. *International Journal of Managing Information Technology (IJMIT)* Vol.6, (1) February 2014 DOI: 10.5121/ijmit.2014.64011.
- Al-Subari, N. S., Zabri, M. S., Ahmad, K. (2018). Factors influencing online banking adoption: The case of academicians in Malaysian Technical University Network (MTUN). *Advanced Science Letters*, 24(5), 3193–3197(5).
- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., and Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177–1190.
- Ashta, A., Assadi, D., and Johnson, S. (2010). Online or offline?: The rise of “peer-to-peer” lending in microfinance. *Journal of Electronic Commerce in Organizations*, 8, 26–37.
- Ba, S., Stallaert, J., Whinston, A. B., and Zhang, H. (2005). Choice of transaction channels: The effects of product characteristics on market evolution. *Journal of Management Information Systems*, 21(4), 173–197.
- Balasubramanian, S., Konana, P., and Menon, N. M. (2003). Customer satisfaction in virtual environments: A study of online investing. *Management Science*, 49(7), 871–889.
- Bart, Y., Shankar, V., Sultan, F., and Urban, G. L. (2005). Are the drivers and role of online trust the same for all websites and consumers? A large-scale exploratory empirical study. *Journal of Marketing*, 69(4), 133–152.
- Bauer, R. A. (1960). Consumer behavior as risk taking. *Chicago, IL*, 384-398.
- Bhatt, A. (2016). Factors affecting customer's adoption of mobile banking services. *Journal of Internet Banking and Commerce*, 21(1), 1–22.
- Bi, S., Liu, Z., and Usman, K. (2017). The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71, 10–18.
- Bock, G. W., Zmud, R. W., Kim, Y. G., and Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 87–111.
- Brown, S., Gray, D., McHardy, J., and Taylor K. (2015). Employee trust and workplace performance. *Journal of Economic Behavior & Organization*, 116, 361–378.
- Buhalis, D., and Law, R. (2008). Progress in information technology and tourism 643 management: 20 years on and 10 years after the internet—The state of etourism 644 research. *Tourism Management*, 29(4), 609–623.

- Changchit, C., Lonkani, R., & Sampet, J. (2017). Mobile banking: Exploring determinants of its adoption. *Journal of Organizational Computing and Electronic Commerce*, 27(3), 239-261.
- Chen, D, Lai, F., and Lin, Z. (2014). A trust model for online peer-to-peer lending: A lender's perspective. *Journal of Information Technology and Management*, 15(4), 239–254.
- Cheskin Research and Studio Archetype/Sapient, e-Commerce Trust Study, monograph, January 1999, http://www.gii.com/trust_study.html, accessed on August 17, 2017.
- Chin, W. W., Marcolin, B. L., and Newsted, P. R. (2003). A partial least squares latent variable modelling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14(2), 189–217.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- . (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International Journal of Man–Machine Studies*, 38(3), 475–487
- Dayal, S., Landesberg, H., and Zeisser, M. (1999). How to build trust online. *Marketing Management*, 8(3), 64–71.
- Delafrooz, N., Paim, L. H., and Khatibi, A. (2011). Understanding consumer's internet purchase intention in Malaysia. *African Journal of Business Management*, 5(3), 2837–2846.
- Duarte, J., Siegel, S., and Young, L. (2012). Trust and credit: The role of appearance in peer-to-peer lending. *The Review of Financial Studies*, 25(8), 2455–2484.
- Farid, S. (2012). *Investigating the factors that affect online shopping behavioral intentions in Egypt*. (Doctoral dissertation, University of Lincoln School of Business-UK).
- Fawzy, S. F., and Salam, E. M. A. (2015). M-commerce adoption in Egypt: An extension to theory of reasoned action. *The Business & Management Review*, 6(1), 123.
- Featherman, M. S., and Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451–474.
- Fintech News Malaysia (2018). *Fintech Malaysia Report 2018 – The State of Play for Fintech Malaysia*. Kuala Lumpur, Malaysia.
- Flavia'n, C., and Guinali'u, M. (2006). Consumer trust perceived security and privacy policy: Three basic elements of loyalty to a website. *Industrial Management & Data Systems*, 106(5), 601–620.
- Galloway, I. (2009). Peer-to-peer lending and community development finance. *Community Development Investment Center Working Paper*, 39(1), 19–23.
- Gefen, D. (2000). E-commerce: The role of familiarity and trust. *Omega*, 28(6), 725–737.
- Gerrard, P., Barton Cunningham, J., and Devlin, J. F. (2006). Why consumers are not using internet banking: a qualitative study. *Journal of services Marketing*, 20(3), 160–168.

- Geyskens, I., Steenkamp, J. B. E., Scheer, L. K., and Kumar, N. (1996). The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. *International Journal of Research in Marketing*, 13(4), 303–317.
- Greiner, M. E., and Wang, H. (2010). Building consumer-to-consumer trust in e-finance marketplaces: An empirical analysis. *International Journal of Electronic Commerce*, 15(2), 105–136.
- Gold, A. H., and Arvind Malhotra, A. H. S. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2009). *Análise Multivariada De Dados*. Bookman Editora.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Haque A, Tarofder A. K., Rahman, S., and Raquib, M. A. (2009). Electronic transaction of internet banking and its perception of Malaysian online customers. *African Journal of Business Management*, 3(6), 248–259.
- Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115–135.
- Hofstede, G. (1980). Motivation, leadership, and organization: Do American theories apply abroad?. *Organizational Dynamics*, 9(1), 42–63.
- Hong, H. Y., Teh, B. H., Vinayan, G., Soh, C. H., Khan, N., and Ong, T. S. (2013). Investigating the factors that influence the adoption of Internet banking in Malaysia: Adopters' perspective, *International Journal of Business and Management*, 8(9), 24–31.
- Jacoby, Jacob and Leon B. Kaplan. (1972). The Components of Perceived Risk. pp. 382–393 in M. Venkatesan (Ed.), *Proceedings of the Third Annual Conference*. Iowa City, Iowa: Association for Consumer Research.
- Jeong, B., and Yoon, T. E. (2013). An empirical investigation on consumer acceptance of mobile banking services. *Business and Management Research*, 2(1), 31–40.
- Kline, R. (2011). *Principles and Practice of Structural Equation Modeling*, 3rd edn Guilford Press. New York.
- Kannadhasan, M. (2015). Retail investors' financial risk tolerance and their risk-taking behaviour: The role of demographics as differentiating and classifying factors. *IIMB Management Review*, 27(3), 175–184.
- Kesharwani, A., and Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303–322.
- Kooli, K., Ben Mansour, K., and Rizky, U. (2014). Determinants of online trust and their impact on online purchase intention. *International Journal of Technology Marketing*, 9(3), 305–319.
- Komiak, S. Y., and Benbasat, I. (2006). The effects of personalization and familiarity on trust and adoption of recommendation agents. *MIS quarterly*, 941–960.
- Laforet, S., and Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International journal of bank marketing*, 23(5), 362–380.

- Laroche, M., Bergeron, J., and Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503–520.
- Lee, M. C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8(3), 130e141.
- Leng, J. F., and Ye, Q. Y. (2015). How can new online P2P lending platform catch up from behind—Take Ebaodai as an example. *iBusiness*, 7, 132–136.
- Lin, M., Prabhala, N. R., Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending. *Management Science*, 59(1), 17–35.
- Lo, S. K., and Lie, T. (2008). Selection of communication technologies perspective based on information richness theory and trust. *Technovation*, 28(3), 146–153.
- Luarn, P., and Lin, H. (2005). Toward an understanding of the behavioural intention to use mobile banking. *Computers in Human Behavior*, 21(6), 873–891.
- Maduku, D. K. (2013). Predicting retail banking customers' attitude towards internet banking in South Africa. *Southern Africa Business Review*, 17(3), 96–100.
- . (2014). Customers' adoption and use of e-banking services: The South African perspective. *Banks and Bank Systems*, 9(2), 67–77.
- Maduku, D. K., and Mpinganjira, M. (2012). Empirical investigation into customers' attitude towards usage of cellphone banking in Gauteng, South Africa. *Journal of Contemporary Management*, 9, 172–189.
- McKnight, D. H., Kacmar, C. J., and Choudhury, V. (2004). Dispositional trust and distrust distinctions in predicting high-and low-risk internet expert advice site perceptions. *E-Service Journal*, 3(2), 35–55.
- Milne, A., and Parboteeah, P. (2016) The business models and economics of peer-to-peer lending. No. 17, May 2016, European Credit Research Institute.
- Mitchell, V. W., and Greatorex, M. (1993). Risk perception and reduction in the purchase of consumer services. *Service Industries Journal*, 13(4), 179–200.
- Mohammadi, A., and Broström, A. (2018). Distrust in financial institutions and fintech adoption: The case of P2P loans. Paper presented at DRUID18, Copenhagen Business School, Copenhagen, Denmark, June 11–13, 2018.
- Mwiya, B., Chikumbi, F., Shikaputo, C., Kabala, E., Kaulung'ombe, B., and Siachinji, B. (2017). Examining factors influencing e-banking adoption: Evidence from bank customers in Zambia. *American Journal of Industrial and Business Management*, 7, 741–759.
- Ndubisi, O., N., and Jantan, M. (2003). Evaluating IS usage in Malaysian small and medium-sized firms using the technology acceptance model. *Logistics information management*, 16(6), 440–450.
- Ndubisi, O., N., and Sinti, Q. (2006). Consumer attitudes, system's characteristics and internet banking adoption in Malaysia. *Management Research News*, 29(1/2), 16–27.
- Nor, K. M., and Pearson, J. M. (2008). An exploratory study into the adoption of internet banking in a developing country: Malaysia. *Journal of Internet Commerce*, 7(1), 29–73.

- Nusair, K. K., Bilgihan, A., and Okumus, F. (2013). The role of online social network travel websites in creating social interaction for Gen Y travelers. *International journal of tourism research*, 15(5), 458–472.
- Nasri, W. (2011). Factors influencing the adoption of internet banking in Tunisia. *International Journal of Business and Management*, 6(8), 143–160.
- Nunkoo, R., Juwaheer, T. D., and Rambhunjun, T. (2013). *Applying the extended technology acceptance model to understand online purchase. The behaviour of traveller*. Proceedings of 21st international business research conference 10–11 June (2013), Ryerson university, Toronto, Canada.
- OECD. (2014). *New approaches to SME and entrepreneurship finance: The case of crowdfunding*. OECD, Paris.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134.
- Peter, J. P., and Tarpey Sr, L. X. (1975). A comparative analysis of three consumer decision strategies. *Journal of Consumer Research*, 2(1), 29–37.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Polasik, M., and Piotr Wisniewski, T. (2009). Empirical analysis of internet banking adoption in Poland. *International Journal of bank marketing*, 27(1), 32–52.
- Ramayah, T., Rouibah, K., Gopi, M., and Rangel, G. J. (2009). A decomposed theory of reasoned action to explain intention to use Internet stock trading among Malaysian investors. *Computers in Human Behavior*, 25(6), 1222–1230.
- Ramayah, T., and Ignatius, J. (2005). Impact of perceived usefulness, perceived ease of use and perceived enjoyment on intention to shop online. *Journal of Systems Management*, 1–16.
- Ramayah, T., Ling, N. S., Taghizadeh, S. K., and Rahman, S. A. (2016). Factors influencing SMEs website continuance intention in Malaysia. *Telematics and Informatics*, 33(1), 150–164.
- Raza, S. A., Umer, A., and Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. *International Journal of Electronic Customer Relationship Management*, 11(1), 44–65.
- Roca, J. C., Garcia, J. J., and De La Vega, J. J. (2009). The importance of perceived trust, security and privacy in online trading systems. *Information Management & Computer Security*, 17(2), 96–113.
- Rotchanakitumnuai, S., and Speece, M. (2003). Barriers to Internet banking adoption: a qualitative study among corporate customers in Thailand. *International Journal of Bank Marketing*, 21(6/7), 312–323.
- Salm, S., Hille, S. L., and Wüstenhagen, R. (2016). What are retail investors' risk-return preferences towards renewable energy projects? A choice experiment in Germany. *Energy Policy*, 97, 310–320.
- Samsudin, A. R., and Hasan, H. H. (2017). Digital Engagement: A Preliminary Analysis of Marginalized Youth in the Information Society. *Pertanika Journal of Social Sciences & Humanities*, 25.

- Šetlers, G., and Valdmanis, J. (2016). Crowdlending: Factors driving investors' decision-making in Latvia. *SSE Riga Student Research Papers*, 1(177), 1691–4643.
- Suh, B., and Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of Electronic Commerce*, 7(3), 135–161.
- Sukmaningsih, D. W. (2018). A model for lender-borrower trust in peer-to-peer lending. *ComTech: Computer, Mathematics and Engineering Applications*, 9(1), 15–24.
- Svilar, A., and J. Zupančič. (2016). User experience with security elements in internet and mobile banking. *Organizacija*, 49(4), 251–260.
- Tavilla, E. (2015). Transit mobile payments: driving consumer experience and adoption. *Federal Reserve Bank of Boston Research Report*. Boston, USA
- Thakur, R. (2014). What keeps mobile banking customers loyal?. *International Journal of Bank Marketing*, 32(7), 628–646.
- Transparency Market Research (2015). *Peer-to-Peer Lending Market – Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2016-2024*. New York, USA
- Turban, D. B., Dougherty, T. W., and Lee, F. K. (2002). Gender, race, and perceived similarity effects in developmental relationships: The moderating role of relationship duration. *Journal of Vocational Behavior*, 61(2), 240–262.
- Urban, G. L., Amyx, C., and Lorenzon, A. (2009). Online trust: State of the art, new frontiers, and research potential. *Journal of Interactive Marketing*, 23(2), 179–190.
- Van der Heijden, H. (2003). Factors influencing the usage of websites: The case of a generic portal in The Netherlands. *Information & Management*, 40(6), 541–549.
- Venkatesh, V., and Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186–204.
- Viriyarungsarit, S. (2017). Bank of the year 2017. *Money and Banking Magazine*, 35, 24e28.
- Wang, M., Wang, T, Kang, M, and Sun, S. (2004). Understanding perceived platform trust and institutional risk in peer-to-peer lending platforms from cognition-based and affect-based perspectives (2014). *Pacis 2014 Proceedings*, 208. <http://aisel.aisnet.org/pacis2014/208>.
- Wang, P., Zheng, H., Chen, D., and Ding, L. (2015). Exploring the critical factors influencing online lending intentions. *Financial Innovation*, 1(1), 8. <https://doi.org/10.1186/s40854-015-0010-9>.
- Yan, J., Yu, W., and Zhao, J. L. (2015). How signaling and search costs affect information asymmetry in P2P lending: the economics of big data. *Financial Innovation*, 1(1), 19.
- Yang, K. C. (2005). Exploring factors affecting the adoption of mobile commerce in Singapore. *Telematics and Informatics*, 22(3), 257–277.
- Yang, Q., and Lee, Y. C. (2016). Influencing factors on the lending intention of online peer-to-peer lending: Lessons from Renrendai.com. *The Journal of Information Systems*, 25(2), 79–110.

- Yoon, S. J. (2002). The antecedents and consequences of trust in online-purchase decisions. *Journal of Interactive Marketing*, 16(2), 47–63.
- Yousafzai, S. Y., Pallister, J. G., and Foxall, G. R. (2010). A proposed model of e-trust for electronic banking. *Technovation*, 23, 847–860.
- Yu, M. C., Mai, Q., Tsai, S. B., and Dai, Y. (2018). An empirical study on the organizational trust, employee-organization relationship and innovative behavior from the integrated perspective of social exchange and organizational sustainability. *Sustainability*, 10(3), 864–878.