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The Use of Payment Technology Through Financial Literacy

Case study in Urban City Indonesia

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Abstract

Payment technology has dominated the fintech sector in Indonesia. Optimizing the use of payment technology requires encouragement in the development of financial literacy. Indonesia still has a low level of financial literacy compared to financial inclusion in Indonesia. The low level of financial literacy will lead to abuse of the use of fintech products and services. This study aims to see the effects of financial literacy on payment technology adoption using the TAM approach in urban cities in Indonesia, Jakarta Raya, Bandung, D.I. Yogyakarta, Semarang and Surabaya. The result demonstrates that financial literacy not an essential factor in adopting payment technology in Indonesia.

1. Introduction

The rapid development of information and technology in Indonesia has brought us into a new digital era. With Indonesia's total population of 272.1million in 2020, 175.4 million internet users and 338.2 million smartphone users. This data shows that Indonesians have become digital savvy or have sufficiently mastered the digital world. Most digital-savvy people live in urban areas or big cities and use technology to support their daily needs.

The urban area covers one city area, includes other adjacent areas, and has a continuous relationship in economy and labor, or built-up urban area (Demographia World Urban Areas, 2020). The population of people who live in urban areas in Indonesia reaches 56% of the total population in Indonesia (Fintech News Singapore, 2018). This urban population uses digital applications for daily needs, such as using multiple products and financial services technology to conduct financial transactions or manage their finances. Financial technology in Indonesia is snowballing; in 2016, 47 fintech startup companies and, ahead of the year in 2017, had grown to 167 fintech companies. Most people find it more convenient to their fintech because everything can be done within grasp and not waste much time.

Financial technology development, such as electronic services, digital, and fintech, has increased productivity. Fintech services have become the focus of new technology applications (Kim et al., 2015).

Digital payments currently dominate the fintech sector in Indonesia at 38% and P2P Lending by 31%. The digital payment sector, or payment technology, in the fintech industry brings innovation for Indonesians in making payment transactions. Until 2019, GoPay and OVO are still the most used payment technology applications and have high awareness, especially for the young and productive digital population.

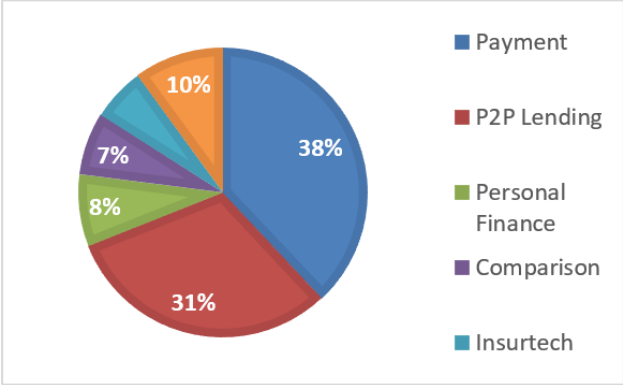

Figure 1. Fintech Sectors in Indonesia
(Source: Fintech News Singapore, 2019)

The use of payment transactions increases as the economy grows. The demand for payments services is expected to increase globally as developing countries build their infrastructure and become more financially inclusive. With the advent of the digital economy, they enabled more "on-demand" products and services driven by consumer demand (Anderson, 2019).

The volume of digital payment transactions rose very sharply in 2018. Almost all urban people were aware of and took advantage of several promotional programs in discounts and cashback on Payment technology applications (Pinem, Afrizal, and Saputra, 2020). In 2018, 30% of the volume of digital payment transactions came from GoPay's total transactions and reached 89.5 trillion rupiahs as of February 2019 (Setyowati, 2019).

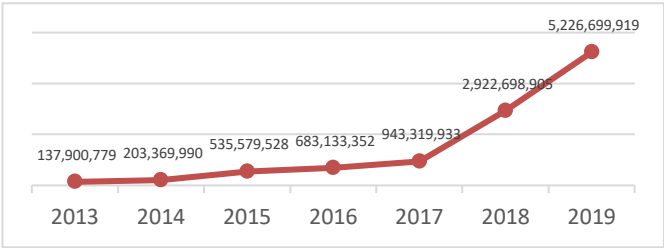

Figure 2 Digital Payments Transaction in Indonesia

There is a gap between the two groups of the digital population in terms of technology and financial literacy. There are two groups in the digital population (Prensky 2001); the first is Digital Immigrants with a total of 40% of the population, born before 1980 who are familiar with technology and the internet as adults; this group has a sense of compulsion to adapt and master the latest technology. The second group, Digital Natives, accounted for 60% of the total population born after 1980 (Jarrahi and Eshraghi, 2019). They are born and live in the age of the internet and the latest technology.

Digital immigrants will require more effort and time in using technology, especially payment technology. However, it is possible that in the level of payment technology

adaptation, digital immigrants have financial literacy factors that can support them to take advantage of the use of payment technology better than digital natives.

Fishbein & Ajzen (1975) proposed the Theory of Reasoned Action (TRA), and it has been considered the primary reference for predicting or explaining personal behavior. TRA are theories explaining the psychological process by which people's beliefs about performing a behaviour ultimately shape people's actions. TRA proposes that intentions to perform a behavior follow reasonably but not necessarily rationally from certain attitudinal, normative, and control beliefs people have about the behavior. People act on their intentions when they have the skills necessary to perform the behavior and when situational factors enable behavior performance.

Although TRA was not designed to explain the effects of a given medium, there are significant implications that advance the understanding of the effects of these media. In general, the relationship between attitudinal, normative, control, and intention variables is based on belief in the process of explaining mediation in the black box that connects media content with human behavior. The media do not necessarily contribute to behavioral effects, but if they do, it is by introducing new beliefs or changing or reinforcing existing beliefs, among other possibilities. It is through the belief that media ultimately influence human behavior.

Several research models are developed to determine the level of adaptation to new technology in society. One of the models used is the TAM (Technology Acceptance Model); TAM is a model that explores the relationship between attitude (A) and behavioral intention (BI) (Davis, Bagozzi, and Warshaw, 1989). TAM replaces many TRA attitude measures with two technological acceptance measures, ease of use (EOU) and usefulness (U). (Palvia, 2009). TAM assumes that the main determinants of behavioral intention (BI) depend on people's beliefs about their own ability to use technology. The subjective evaluation of the usefulness of the technology (Bruner and Kumar, 2005; Hernandez, Jimenez, and Jose Martin, 2009; Morgan-Thomas and Veloutsou, 2013; Palvia, 2009; Pavlou and Liang, 2007).

Several previous studies on TAM have argued that consumer convenience alone cannot fully explain the increasing popularity of new technologies and services in the financial industry (Aldás-Manzano et al., 2009; Featherman and Pavlou, 2003; Lee, 2009; Mangin et al., 2015). They show that consumers' personality, cognitive and behavioral dimensions impact fintech product adoption.

Lack of trust and dissatisfaction are the main reasons why many people choose to switch to using digital financial services (Maier, 2016; Manrai and Manrai, 2007). Maier (2016) also adds that if fintech can produce a better customer satisfaction level through attractive services and offers, fintech companies can increase dissatisfaction with conventional financial services and market share. However, optimizing the use of payment technology requires encouragement in developing financial literacy. Indonesia still has a low level of financial literacy compared to financial inclusion in Indonesia. The low level of financial literacy will lead to abuse of the use of fintech products and services.

This study shows how financial literacy could affect the digital population adopting and using payment technology products and services using the TAM approach. The TAM approach is used because it is the basis of the technology acceptance model and to see

whether using TAM is still relevant and can interpret the actual situation in this study. Hopefully, this study can be the basis for further research using applied models from TAM, such as TAM 2 or UTAUT (Unified Theory of Acceptance and Use of Technology). It can be used as a reference for practitioners to participate in increasing literacy in the community to optimize the use of fintech products and services and reduce risks that can harm fintech users and developers.

2. Literature Review

Financial literacy is all about people's ability to process financial information and make decisions about financial planning, wealth, retirement, and debt (Lusardi & Mitchell, 2013). Financial literacy combines awareness, knowledge, skills, attitudes, and behaviors necessary to make sound financial decisions and achieve individual financial well-being (OECD, 2018). The concept of financial literacy is multidimensional, reflecting not only knowledge but also fundamental skills, attitudes, and behaviors. OJK, in 2017, conducted a study on financial literacy in Indonesia. The result of the study is that financial literacy is influenced by Indonesian financial practices and inclusions, which are conventional and fintech.

From figure 3, we can see how unbalanced financial literacy and financial inclusion are in Indonesia. People with low literacy financial levels will be easily tricked into using their money. People with high levels of financial literacy will be able to utilize financial products and services that suit their needs, do better financial planning, avoid investing in obscure financial instruments, and understand the benefits and risks of financial products services.

There is a paradigm shift in financial literacy in various financial literacy strategies. Changes are made as a form of alignment with the concept of financial well-being.
In 2019, Peter J. Morgan, Bihong Huang, and Long Q. Trinh presented a concept of Digital Financial Literacy in a research paper at the G20 conference in Japan, titled "The Need To Promote Digital Financial Literacy for the Digital Age". They say that digital financial literacy is essential and crucial to education in the digital age. Similar to the concept of financial literacy, digital financial literacy also has a multidimensional concept. There are four aspects to digital financial literacy (Morgan, Huang, and Trinh, 2019): Information and knowledge about digital financial products and services when people should be aware of non-traditional financial services and financial systems. The awareness of digital financial risks, not only for individuals but also for prominent companies or organizations to understand the risks of financial technology services. For example, phishing and pharming. Knowledge of digital financial risk control protects users from cybercrime and self-control to know how to use fintech services: consumer rights and indemnity procedures.

At first, payment transactions in exchange of goods or barter until innovating into payment transactions using physical money and banknotes. Now payment transactions can quickly be done with a handheld greeting. Payment methods greatly influence economic behavior, trade, and purchasing. Payments can decide customer satisfaction, taking advantage of new target groups or retailer success. Currently, payment transactions are only "one-click", and purchases are completed. It supports e-commerce users about how important it is to ensure that the checkout process is made as accessible and straightforward as possible(Eichinger, 2019).

China was one of the first countries to innovate with digital payments through smartphones, where previously digital payments used physical payment cards. The Alipay and WeChat Pay apps, dubbed The Super App, are used to make payments on daily life in China, from transportation, retailers, e-commerce to shoeshine businesses around the corner. However, the app can also order food, pay electricity bills, take out loans, invest money, etc.

Today the experience in payment transactions has been very different. Payments are no longer limited to cash in hand or the amount available in a bank account. Moreover, using digital payments, in the form of tap cards or payment technology, allows impulsive purchases and a lack of physical restrictions to facilitate increased spending (Connors, 2019).

Based on the literature review, the authors examined the influence of financial literacy on the adoption of payment technology using TAM, with the hypotheses

The relationship between financial literacy (FL) and Use of Payment Technology through perceived usefulness (PU) and perceived ease of use (PEU)

Financial literacy theory affected perceived usefulness, and perceived ease of use is hardly found in the literature. As an external variable in this research, financial literacy is to investigate whether financial literacy affected the adoption of payment technology. Based on this, we hypothesize that:

H1: Financial literacy positively affects the Use of Payment Technology through perceived usefulness.

H2: Financial literacy positively affects the Use of Payment Technology through perceived ease of use.

Perceived ease of use occurs when users perceive new technologies are easy to use and require less power and time. Then new technologies are more likely to be accepted by users. Some theories found that PEU affected how users perceive the usefulness of the technology and affected their attitude when using the technology (Chen, 2008; Chuang, Liu, and Kao, 2016; Purwanto, Hartini, and Premananto, 2019; Raza, Umer, and Shah, 2017; Riskinanto, Kelana, and Hilmawan, 2017; Rouibah, Thurasamy, and May, 2009; Suyanto, 2019)

3. Methodology

This research aims to analyze the relationship between variables contained in the Hypotheses. As a data collection tool used is a questionnaire that has been spread online to the digital population living in urban areas in Java, Indonesia; such as Jakarta area (Jakarta, Bogor, Tangerang, Depok, and Bekasi), Bandung area (Bandung, Cimahi, and Sumedang), Surabaya, Semarang, and Yogyakarta. A sample of 250 respondents was chosen for the study.

The questionnaire was adapted and reworded to suit the context of the study. The questionnaire contained 36 closed-ended questions previously used in similar studies. It was divided into sections I, II, and III. Section I sought to collect the respondents' demographic information, such as their gender, age range, income level, education level, and domicile or residency. Section II contained financial literacy statements, which measure an individual's financial knowledge, behavior, and attitude (Bongomin, Munene, Ntayi, & Malinga, 2017; Lusardi & Mitchell, 2008). Section III contained TAM statements to

measure perceived usefulness, perceived ease of use and attitude toward use of using payment technology. The question of the TAM model was adapted from Davis, Bagozzi, & Warshaw (1989).

All the questions under Section II and III were measured using a four-point Likert-type scale, 1=strongly disagree 2=disagree 3=agree 4=strongly agree. The data was analyzed using PLS-SEM using the Structural Equation Modelling (SEM) approach 1.

4. Results and Discussions

In the outer model estimation, 14 questions in this research were not valid and had an outer loading score less than 0,6. Based on that, we eliminated the invalid question and re-estimate the outer model.

Table 1. Indicator's Outer Loading

Code	Indicator	Outer Loading
Financial Literacy (FL)		
FL2	I have a knowledge base in finance and economics (formal and informal education)	0,716
FL3	I can manage my source of income well	0,616
FL4	I understand the terms in finance	0,842
FL5	My knowledge is sufficient about loans /credits to avoid financial losses	0,781
FL6	I understand and make reports relating to balance sheets, income statements, and capital budgets	0,76
FL8	I always take interest into account before borrowing or investing or deposits	0,671
FL18	I know the products and services provided by fintech and registered OJK	0,677
Perceived Usefulness (PU)		
PU2	I use digital payment in my daily life	0,791
PU3	I feel I can use digital payment very efficiently	0,86
PU4	I feel I can use digital payment anywhere and anytime	0,778
PU5	I feel that using digital payment makes me comfortable	0,862
PU6	I am not unfamiliar with the terms in the digital payment application I use	0,837
PU7	I think I can easily get information about digital payment	0,859
Perceived Ease of Use (PEU)		
PEU1	I can easily download the digital payment app	0,863
PEU2	I can easily register and fill out the form on the digital payment application	0,84
PEU3	I can easily transact using digital payment	0,891
PEU4	I can easily use the digital payment application without having to read the procedure for using	0,801
PEU5	I can use digital payment without needing to take a long time	0,852
Attitude toward use		

ATU1	I can comfortably find information about the digital payment I use anytime and anywhere	0,883
ATU2	I feel safe using digital payment	0,809
ATU3	I think using digital payment is a good idea	0,943
ATU4	I love the idea of using digital payment	0,912

After re-estimated of the outer model, we found that all questions were valid with an outer loading score of more than 0,6. The next step is the validity test using a cross-loading score.

Table 2. Cross loading factors

	FL	PU	PEU	ATU
fl_2	0,616	0,155	0,221	0,225
fl_3	0,842	0,332	0,336	0,299
fl_4	0,781	0,356	0,347	0,334
fl_5	0,760	0,262	0,270	0,249
fl_6	0,671	0,386	0,431	0,400
fl_8	0,616	0,155	0,221	0,225
fl_18	0,677	0,321	0,308	0,319
pu_2	0,361	0,791	0,594	0,524
pu_3	0,328	0,860	0,713	0,742
pu_4	0,265	0,778	0,635	0,607
pu_5	0,310	0,862	0,704	0,759
pu_6	0,459	0,837	0,778	0,675
pu_7	0,405	0,859	0,807	0,757
peu_1	0,359	0,734	0,863	0,656
peu_2	0,348	0,761	0,840	0,728
peu_3	0,400	0,782	0,891	0,707
peu_4	0,375	0,651	0,801	0,617
peu_5	0,431	0,691	0,852	0,716
atu_1	0,395	0,749	0,769	0,883
atu_2	0,343	0,595	0,617	0,809
atu_3	0,384	0,799	0,774	0,943
atu_4	0,384	0,759	0,699	0,912

After the cross-loading test, we also estimate the Average Variance Extracted (AVE) and compare the square root of AVE of each construct with the correlation between other constructs in the model. If AVE's square root is greater than the correlation with all other constructs, the construct had good discriminant validity, and the recommended measurement value should be greater than 0.50.

Two tests will be conducted using composite reliability and Cronbach's alpha in conducting a reliability test.

Table 3. Reliability Test Result

Variables	AVE	Discriminant validity	CR	Cronbach's Alpha
Financial Literacy (FL)	0,528	0,727	0,886	0,85
Perceived Usefullness (PU)	0,692	0,832	0,931	0,911
Perceived Ease of Use (PEU)	0,723	0,85	0,929	0,904
Attitude toward use	0,789	0,888	0,937	0,91

In the evaluation of structural models, bootstrapping is needed as well as testing on previously established hypotheses. Once this has been done, the result of bootstrapping can be found seen in table 4 below.

Table 4. Hypotheses Test Result

Hypotheses	Relationship	Original Sample	T Statistics	P Values	
H1	FL -> PU_ -> ATU	0,056	1,312	0,19	Not Supported
H2	FL -> PEU -> ATU	0,45	7,143	0	Supported

The relationship between financial literacy and perceived usefulness has an original sample value of 0.056, a t-statistic value of 1,312, and a p-value of 0.190, indicating an insignificant relationship. It is also known that the resulting t-statistic has a smaller value than t-table 1.96, and the probability value (p-value) is less than 0.05. *H1 is rejected.*

The relationship between financial literacy and perceived usefulness has an original sample value of 0.450, a t-statistic value of 7,143 with a p-value of 0.000 indicates a significant relationship. *H2 is accepted.*

Based on the results that have been described, there is no significant direct relationship between *Financial Literacy* and *Perceived Usefulness*. This result means that the digital population's financial knowledge does not affect the perceived usefulness of using payment technology, such as transactions or understanding the languages in the payment technology application. The perceived usefulness in using payment technology is due to other factors, social influence. Meanwhile, The digital population perceives the usefulness of payment technology to affect the attitude in its use. Payment technology application users feel that there are uses and benefits to feeling comfortable and time-efficient (Isrososiawan, Hurriyati, and Dirgantari, 2019).

The relationship between *Financial Literacy* and *Perceived Usefulness* shows a significant relationship with a value of 0.450. The increase in Financial Literacy can increase Perceived Usefulness by 45 %. This result shows that financial literacy, especially the digital

population's financial knowledge, influences the perceived ease of using payment technology.

Ease of obtaining applications, ease of downloading, ease of install, ease of learning applications, ease of registering and ease of use of applications entirely adhere to user attitudes. However, the ease of use is not as considerable as the perceived usefulness of the user. It is also in line with previous research, where Perceived Usefulness influences Perceived Ease of Use on attitudes in using payment technology applications. (Isrososiawan, Hurriyati, and Dirgantari, 2019; Suyanto, 2019).

The difficulty in using payment technology is not an essential concern because technology is increasingly user-friendly. Because the payment technology application has become more general and standardized, the public is increasingly competent in its use.

With the mediating variable Perceived Ease of Use and the variable Perceived Usefulness, Financial Literacy has an indirect relationship with attitude toward use. It can be said that a person's level of financial literacy is quite influential in the acceptance rate of payment technology applications. However, it must be underlined that in Indonesia, financial literacy is still deficient compared to financial inclusion. It also causes the level of consumption and the level of transactions using payment technology to increase, especially among productive age or digital natives, which is not balanced with saving. William, the marketing director of the Indonesian Fintech Association, said that 90 % of young people's income was spent by lifestyle expenses, not being allocated to saving or investment. Data obtained from the UOB Bank survey in 2019 shows that 50% of digital natives' income is used up for 4S-Lifestyle, which consists of sugar (food and drink), skin (beauty and personal care), sun (travel and leisure), and screen (consumption of digital screens). .

5. Conclusions

This study is to see if financial literacy as an external variable affects acceptance rates in payment technology use. In Indonesia, due to the level of financial literacy that is still not balanced with the level of financial inclusion, financial literacy has a negligible effect on payment technology.

An essential factor in accepting and using payment technology is the ease of use and usefulness. The perceived usefulness also dramatically affects the user's intention in using payment technology; the more valuable a technology application is, the higher a person's interest in adapting and using the application, especially when the application is beneficial in daily life.

It can be concluded that an essential factor in the acceptance and use of payment technology in this study is the ease and usefulness felt by the digital population. We can access and carry out transactions on the Payment technology application anytime and anywhere. The perceived usefulness also dramatically affects the user's intention to use Payment technology; the more valuable a technology application is, the higher one's interest is in adapting and using the application, especially when the application is beneficial in daily life activities.

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Reference

Aldás-Manzano, Joaquín, Carlos Lassala-Navarré, Carla Ruiz-Mafé, and Silvia Sanz-Blas. 2009. "The Role of Consumer Innovativeness and Perceived Risk in Online Banking Usage." *International Journal of Bank Marketing* 27(1): 53–75.

Anderson, By Tyler. 2019. "Payments Explained." In *The PayTech Book*,.

Bruner, Gordon C., and Anand Kumar. 2005. "Explaining Consumer Acceptance of Handheld Internet Devices." *Journal of Business Research* 58(5): 553–58.

Candiya Bongomin, George Okello, John C. Munene, Joseph Mpeera Ntayi, and Charles Akol Malinga. 2017. "Financial Literacy in Emerging Economies: Do All Components Matter for Financial Inclusion of Poor Households in Rural Uganda?" *Managerial Finance* 43(12): 1310–31.

Chen, Lei Da. 2008. "A Model of Consumer Acceptance of Mobile Payment." *International Journal of Mobile Communications* 6(1): 32–52.

Chuang, Li-Min, Chun-Chu Liu, and Hsiao-Kuang Kao. 2016. "The Adoption of Fintech Service: TAM Perspective." *International Journal of Management and Administrative Sciences (IJMAS* 3(07): 1–15. www.ijmas.orgwww.ijmas.org.

Connors, Teresa. 2019. "Do We Still Need to Pay?" In *The PayTech Book*,.

Davis, Fred D., Richard P. Bagozzi, and Paul R. Warshaw. 1989. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models." *Management Science* 35(8): 982–1003.

Davis, Fred D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." *MIS Quarterly* 13(3): 319–40.

Demographia World Urban Areas. 2020. *Demographia World Urban Areas, 16th Annual Edition 2020.06*.

Eichinger, By Markus. 2019. "From Barter to App – How Payments Have Changed." In *The PayTech Book*,.

Featherman, Mauricio S., and Paul A. Pavlou. 2003. "Predicting E-Services Adoption: A Perceived Risk Facets Perspective." *International Journal of Human Computer Studies* 59(4): 451–74.

Fintech News Singapore. 2018. "FINTECH LANDSCAPE REPORT MAY 2018 INDONESIA INDONESIA." (May).

Hernandez, Blanca, Julio Jimenez, and M. Jose Martin. 2009. "The Impact of Self-Efficacy, Ease of Use and Usefulness on e-Purchasing: An Analysis of Experienced e-Shoppers." *Interacting with Computers* 21(1–2): 146–56. http://dx.doi.org/10.1016/j.intcom.2008.11.001.

Isrososiawan, Safroni, Ratih Hurriyati, and Puspo Dewi Dirgantari. 2019. "User Mobile Payment Behavior Using Technology Acceptance Model (TAM): Study of 'Dana' E-Wallet Users." *Jurnal Minds: Manajemen Ide dan Inspirasi* 6(2): 181.

Jarrahi, Mohammad Hossein, and Ali Eshraghi. 2019. "Digital Natives vs Digital Immigrants: A Multidimensional View on Interaction with Social Technologies in

Organizations." *Journal of Enterprise Information Management* 32(6): 1051–70.

Kim, Yonghee, Young-Ju Park, Jeongil Choi, and Jiyoung Yeon. 2015. "An Empirical Study on the Adoption of 'Fintech' Service: Focused on Mobile Payment Services." 114(Business): 136–40.

Lee, Ming Chi. 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): 130–41. http://dx.doi.org/10.1016/j.elerap.2008.11.006.

Lusardi, Annamaria, and Olivia S Mitchell. 2008. "NBER WORKING PAPER SERIES PLANNING AND FINANCIAL LITERACY: HOW DO WOMEN FARE? Planning and Financial Literacy: How Do Women Fare?" : 413–17. http://www.nber.org/papers/w13750.

Maier, Erik. 2016. "Supply and Demand on Crowdlending Platforms: Connecting Small and Medium-Sized Enterprise Borrowers and Consumer Investors." *Journal of Retailing and Consumer Services* 33: 143–53. http://dx.doi.org/10.1016/j.jretconser.2016.08.004.

Mangin, Jean-Pierre Levy, Normand Bourgault, Cristina Calvo-Porral, and Olivier Mesly. 2015. "The Moderating Role of Risk, Security and Trust Applied to the TAM Model in The Offer of Banking Financial Services in Canada." *Journal of Internet Banking and Commerce* 19(2). http://eprints.utm.my/8136/.

Manrai, Lalita A., and Ajay K. Manrai. 2007. "A Field Study of Customers' Switching Behavior for Bank Services." *Journal of Retailing and Consumer Services* 14(3): 208–15.

Morgan-Thomas, Anna, and Cleopatra Veloutsou. 2013. "Beyond Technology Acceptance: Brand Relationships and Online Brand Experience." *Journal of Business Research* 66(1): 21–27. http://dx.doi.org/10.1016/j.jbusres.2011.07.019.

Morgan, Peter J, Bihong Huang, and Long Q. Trinh. 2019. "The Need to Promote Digital Financial Literacy for the Digital Age." *T20 Japan 2019*.

Palvia, Prashant. 2009. "The Role of Trust in E-Commerce Relational Exchange: A Unified Model." *Information and Management* 46(4): 213–20.

Pavlou, Liang, & Xue. 2007. "Understanding and Mitigating Understanding Online Exchange Relationships : Agent Perspective1 A Principal." *MIS quarterly* 31(1): 105–36.

Pinem, Robetmi Jumpakita, Teuku Afrizal, and Jumadil Saputra. 2020. "The Relationship of Cashback , Discount , and Voucher toward Decision to Use Digital Payment in Indonesia." 12(3): 2766–74.

Prensky, Marc. 2001. "Digital Natives, Digital Immigrants, Part II." *MCB University Press* 9(5).

Purwanto, Sugeng, Sri Hartini, and Gancar C Premananto. 2019. "Understanding Consumer Intention to Use Go-Pay: Development and Testing of Technology Acceptance Models for Consumers 1." 14(1).

Raza, Syed Ali, Amna Umer, and Nida Shah. 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.

Riskinanto, Anggar, Bayu Kelana, and Deliar Rifda Hilmawan. 2017. "The Moderation

Effect of Age on Adopting E-Payment Technology." *Procedia Computer Science* 124: 536–43. https://doi.org/10.1016/j.procs.2017.12.187.

Rouibah, Kamel, Ramayah Thurasamy, and Oh Sook May. 2009. "User Acceptance of Internet Banking In Malaysia: Test of Three Competing Models." *International Journal of E-Adoption (IJEA)* 1(1): 1–19.

Setyowati, Desy. 2019. "Transaksi Tembus Rp 89,5 Triliun, Pengguna Aktif GoPay Terbanyak Di RI." *Katadata*. https://katadata.co.id/desysetyowati/digital/5e9a50396948f/transaksi-tembus-rp-895-triliun-pengguna-aktif-gopay-terbanyak-di-ri#:~:text=Pada 2018%2C transaksi melalui layanan,di Indonesia berasal dari GoPay.

Suyanto, Taufan Adi Kurniawan. 2019. "Faktor Yang Mempengaruhi Tingkat Kepercayaan Penggunaan FinTech Pada UMKM Dengan Menggunakan Technology Acceptance Model (TAM)." *Jurnal Akutansi & Manajemen Akmenika* 16(1): 175–86. https://journal.upy.ac.id/index.php/akmenika/article/view/166.

Won-jun, Lee. 2018. "Understanding Consumer Acceptance of Fintech Service : An Extension of the TAM Model to Understand Bitcoin." *Journal of Business and Management (IOSR-JBM)* 20(7): 34–37.