

# The Innovation Resistance Model of Mobile Payments for Micro and Small Enterprises

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## Available Online

<http://www.jurnal.unublitar.ac.id/index.php/briliant>

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## History of Article

Received on 18 April 2021

Accepted on 11 August 2022

Published on 20 August 2022

Pages. 624-631

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## Keywords

Innovation Resistance; Behavioral Intention; Actual Usage; Micro and Small Enterprises

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## DOI

<http://dx.doi.org/10.28926/briliant.v7i3.996>

**Abstract:** The development of digital technology currently directs people to transact using mobile payments. An efficient payment process or one of them is known as Mobile Payment has its own market compared to the three other services offered by Fintech. This strongly supports the development of the digital economy in Indonesia. This study tries to formulate a conceptual framework and research model developed with the theory of innovation resistance. Methods and models of conceptual formulation are carried out in several stages; literature study, model adoption, and instrument development. Based on theoretical and empirical studies on Innovation Resistance, this study describes the constructs and propositions used as the basis for building a conceptual model. The results of the instrument development can be used for further research.

## INTRODUCTION

Today's development of digital technology has prepared people to carry out all activities online. One of the activities that apply this technology is the transaction payment method. Payments made manually are turned into mobile payments. Applications in Indonesia are currently in bank transfers, internet banking, mobile banking, online store value, mobile applications, payments via telephone (cellphone), and others (Company, 2018). These payment models' most widely used transactions rely on gadgets, both when shopping online and shopping directly in stores (Kim et al., 2010). Thus, this technology strongly supports the development of Indonesia's digital economy, namely an economy that is run based on digital technology.

In the current era of globalization, the Indonesian government seeks to encourage micro and small business actors to participate in strengthening business actors to be ready to compete with other countries (Setyaningrum et al., 2019). With conditions like this indirectly, the application of digitization must be carried out by Micro and Small Enterprises (MSE) to run a digital business. This includes implementing mobile payments to support effectiveness and efficiency in running a business.

Mobile payments have a different market compared to the other three services offered by financial technology. From the business owner's point of view, there are five benefits of usage, namely: (1) customer convenience, (2) reducing costs, (3) increasing cash flow, (4) integrating loyalty programs, (5) Access to actionable data. Thus, this service is widely used by MSEs.

Referring to information from the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia, in 2019 in Indonesia, there were 65,465,497 MSMEs. Of the number of users, mobile payments are still relatively small, which is only 47.5%. This can indicate that mobile payments by MSMEs in Indonesia are still low. This condition is certainly not much different from UMK actors in Blitar City, considering that they are part of MSMEs in Indonesia, which have almost the same characteristics.

The everyday use of this technology still allows for resistance to mobile payments. This is because mobile payment has characteristics, as stated by (Ram & Sheth, 1989), that Innovation Resistance is the resistance of consumers to innovation, either because the innovation may change or because it is contrary to the structure of consumer trust. Innovation Resistance has three characteristics (Ram & Sheth, 1989), namely: (1) Innovation Resistance affects adoption time, (2) Innovation Resistance exists across product classes (3) Innovation Resistance varies in degree.

Customer resistance is a vital variable in figuring out the achievement or failure of the latest technological innovations (Kaur et al., 2020). According to the Innovation Resistance Theory, client resistance may be energetic or passive (Yu & Chantatub, 2016). Consumers accept innovation, and if the innovation changes the consumer's life habits drastically, then consumers also tend to be resistant to innovation (Kuisma et al., 2007; Sobti, 2019). This innovation, initiated by a financial service provider, has drastically changed consumer habits from paying for physical transactions to paying for virtual transactions. Ensuring that this change will not only affect the transaction payment process, considering that the money from the transaction for micro and small businesses will also be used to support their daily needs. Thus, it is very likely that micro and small businesses will resist these innovations. This has a look at examines person conduct in resistance to Mobile Payment packages and intends to undertake Mobile Payment

packages the usage of the Innovation Resistance Theory (IRT) version. By the above explanation, an ideal version of the effect on of the Risk Barrier (RB), Value Barrier (VB), Usage Barrier (UB), Image Barrier (IB), and Traditional Barrier variables on Innovation Resistance to Use (IR), Behavioral Intention (BI), and Actual Use (AU) variables may be built. From the Mobile Payment Application to personnel or proprietors of micro and small groups who can perform the Mobile Payment application.

## **METHOD**

This study uses a literature survey method in presenting a conceptual model between Usage Barrier (UB), Value Barrier (VB), Risk Barrier (RB), Tradition Barrier (TB), Image Barrier (IB), Innovation Resistance Behavioral Intention, and Actual Usage for using a mobile payment system. The sources of information used are journaled publication websites (Emerald, Scencedirect, Research Gate, and so on). The keywords used in the search literature are Mobile Payment, Innovation Resistance Theory, Micro and Small Enterprises.

This study was developed in three stages. First, collect then review the literature and previous study. Then, they are analyzed and adopted to be formulated into a research model. The third is instrument development. At this stage, each in the variable is explained, including compiling measurement item.

## **RESULT AND DISCUSSION**

Figure 1 presents the theoretical model proposed in this study, consisting of 5 essential IRT variables. The theoretical model is derived from the results of previous research.

The theoretical model depicted in Figure 1 is taken from the basic IRT model. To present mobile payments to MSEs in Blitar City using IRT's basic construction and several external factors. The selected external factors refer to several studies that appear in several existing studies. External factors/exogenous variables are Behavioral Intentions to Use a Cellular Payment System and Actual Use of a Cellular Payment System. With this conceptual study, it is hoped that researchers can follow up further research.

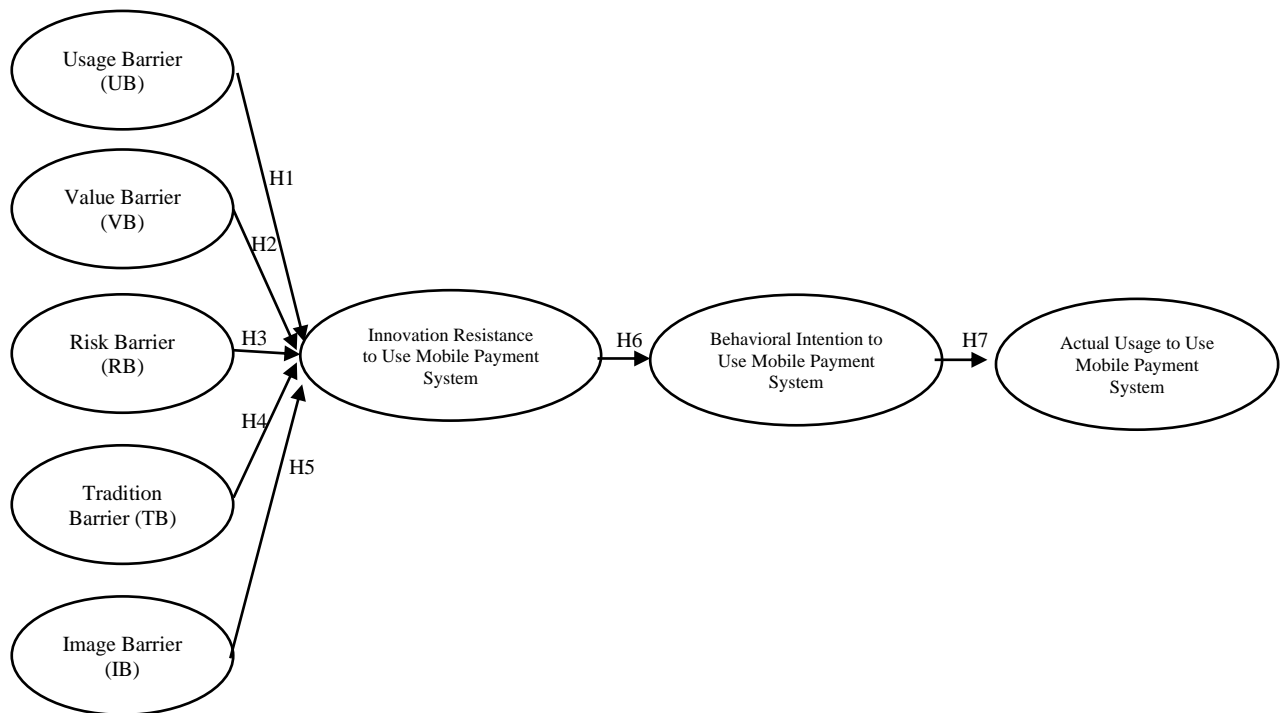


Figure 1. Conceptual Model

Figure 1 shows the determinant factors that are interconnected between one variable and another so that the conceptual model has 7 Hypothesis Formulations which are supported by previous research references as described in Table 1 below:

Table 1. Hypothesis

Hypothesis	
H1	: Effect of <i>Usage Barrier (UB)</i> on <i>Innovation Resistance to use Mobile Payment applications</i> .
H2	: Effect of <i>Value Barrier (VB)</i> on <i>Innovation Resistance to use Mobile Payment applications</i> .
H3	: Effect of <i>Risk Barrier (RB)</i> on <i>Innovation Resistance to use Mobile Payment applications</i> .
H4	: Effect of <i>Tradition Barrier (TB)</i> on <i>Innovation Resistance to use Mobile Payment applications</i> .
H5	: <i>Image Barrier (IB)</i> Effect on <i>Innovation Resistance to use Mobile Payment applications</i> .
H6	: The Influence of <i>Innovation Resistance</i> on <i>Behavioral Intention to use the Mobile Payment application</i>
H7	: The effect of <i>Behavioral Intention</i> on the <i>Actual Usage of the Mobile Payment application</i> .

In growing the model, these studies will offer fundamental points: perception and hassle validity. First, the implementation of these studies turned transparently and clearly, as defined within the studies strategies section. Second, aside from using the aggregate and model process, readers can also take note of questions from signs and variables.

Table 2: List of questionnaire statements

<b>Not</b>	<b>variable</b>	<b>Goods</b>	<b>Reference</b>
1.	<i>Usage Barriers</i>	<ol style="list-style-type: none"> <li>1. Mobile Payment service is challenging to use</li> <li>2. Mobile Payment service is complicated to use</li> <li>3. Mobile Payment service is slow or inappropriate to use</li> <li>4. Mobile Payment Service hassame revision</li> <li>5. Mobile Payment service is challenging to use to change PIN code</li> </ol>	(Ram & Sheth, 1989)(Laukkanen et al., 2007)
2.	<i>Value Barriers</i>	<ol style="list-style-type: none"> <li>1. A Mobile Payment application is a service that is charged</li> <li>2. Mobile Payment services do not provide distinct advantages compared to other payment services</li> <li>3. Mobile Payment service does not increase the ability to control personal financial matters</li> </ol>	(Fain & Roberts, 1997)(Laukkanen et al., 2007)
3.	<i>Risk Barrier</i>	<ol style="list-style-type: none"> <li>1. The use of the Mobile Payment Service will cause the internet connection to be disconnected in the middle of the payment process.</li> <li>2. Printable Proof of payment transactions via Mobile Payment is proof of transactions that can betrustedworthy and verifiable.</li> <li>3. The use of Mobile Payment services raises the possibility of incorrect billing information.</li> <li>4. The use of Mobile Payment services raises the possibility of losing the PIN code list and ending up in the wrong hands.</li> <li>5. Mobile Payment services give rise to third parties who can access information.</li> </ol>	[8] , (Laukkanen et al., 2007)
4.	<i>Tradition Barriers</i>	<ol style="list-style-type: none"> <li>1. Users are impatient with the Mobile Payment service</li> <li>2. Users prefer physical forms of payment</li> <li>3. Users prefer to engage in face-to-face interactions when making payments</li> <li>4. Users prefer to make payments via computer</li> </ol>	(Moorthy et al., 2017)
5.	<i>Image Barrier</i>	<ol style="list-style-type: none"> <li>1. Mobile Payment service has a very negative image.</li> </ol>	(Laukkanen et al., 2007)

Not	variable	Goods	Reference
		<ol style="list-style-type: none"> <li>2. Mobile Payment service is a new technology that is often too complicated to use</li> <li>3. Mobile Payment services are considered difficult to use</li> </ol>	
6.	<i>Innovation Resistance</i>	<ol style="list-style-type: none"> <li>1. Mobile Payment service is possible to use, but not currently.</li> <li>2. Will never use Mobile Payment services.</li> <li>3. Against the use of Mobile Payment services</li> </ol>	(Sivathanu, 2019)
7.	<i>Behavioral Intention</i>	<ol style="list-style-type: none"> <li>1. I am planning to accept payments using the Mobile Payment service.</li> <li>2. Plans to carry out all financial transactions using the Mobile Payment service.</li> <li>3. I am interested in Mobile Payment services.</li> <li>4. I am planning to set up accounts using the Mobile Payment service.</li> <li>5. Planning to accept payment transfers using the Mobile Payment service.</li> <li>6. Want to know about Mobile Payment services.</li> </ol>	(Sivathanu, 2019)
8.	<i>Actual Use</i>	<ol style="list-style-type: none"> <li>1. Using the Mobile Payments service.</li> <li>2. I am using <i>the Mobile Payment Service</i> to manage my accounts.</li> <li>3. Use the Mobile Payment service to make transactions.</li> <li>4. Sign up for a financial service specially made for <i>Mobile Payments service</i>.</li> </ol>	(Sivathanu, 2019)

## CONCLUSION

This study explain how the formation of the Innovation Resistance version for Micro and Small Enterprises withinside the City of Blitarwithinside the Adoption of Mobile bills is made. In addition, it additionally discusses the connection among models, variables, indicators, and questions from every indicator proven through the author. Regarding the restrictions of the studies across the author's understanding, assumptions, and angle of the problem, Apart from that which is suggested to be taken into consideration for destiny work, the proposed version and its contraptions also can be advocated to continue to the exam and improvement stage.

## SUGGESTION

From this conceptual study, it can be followed up with future research and can be added with variables. The object of the research can also be extended to micro and small enterprises in East Java.

## REFERENCES

- Company, G. (2018). "Easier payment with gopay."
- Fain, D., & Roberts, M. Lou. (1997). Technology vs. Consumer behavior: The battle for the financial services customer. *Journal of Interactive Marketing*, 11(1), 44–54. [https://doi.org/10.1002/\(SICI\)1522-7138\(199724\)11:13.O.CO;2-Z](https://doi.org/10.1002/(SICI)1522-7138(199724)11:13.O.CO;2-Z)
- Kaur, P., Dhir, A., Ray, A., Bala, P. K., & Khalil, A. (2020). Innovation resistance theory perspective on the use of food delivery applications. *Journal of Enterprise Information Management*, 34(6), 1746–1768. <https://doi.org/10.1108/JEIM-03-2020-0091>
- Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior*, 26(3), 310–322. <https://doi.org/10.1016/j.chb.2009.10.013>
- Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the reasons for resistance to Internet banking: A means-end approach. *International Journal of Information Management*, 27(2), 75–85. <https://doi.org/10.1016/j.ijinfomgt.2006.08.006>
- Laukkanen, T., Sinkkonen, S., Kivijärvi, M., & Laukkanen, P. (2007). Innovation resistance among mature consumers. *Journal of Consumer Marketing*, 24(7), 419–427. <https://doi.org/10.1108/07363760710834834>
- Moorthy, K., Suet Ling, C., Weng Fatt, Y., Mun Yee, C., Ket Yin, E. C., Sin Yee, K., & Kok Wei, L. (2017). Barriers of mobile commerce adoption intention: Perceptions of generation X in Malaysia. *Journal of Theoretical and Applied Electronic Commerce Research*, 12(2), 37–53. <https://doi.org/10.4067/S0718-18762017000200004>
- Ram, S., & Sheth, J. N. (1989). Consumer resistance to innovations: The marketing problem and its solutions. *Journal of Consumer Marketing*, 6(2), 5. <https://doi.org/10.1108/EUM0000000002542>
- Setyaningrum, I., Sari, D. W., Handoyo, R. D., & Tandelilin, E. (2019). *MSEs – Large Industry Partnerships Based on Technology Innovation in Indonesia*. January. <https://doi.org/10.2991/icoi-19.2019.74>
- Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India: An empirical study. *Journal of Science and Technology Policy Management*, 10(1), 143–171. <https://doi.org/10.1108/JSTPM-07-2017-0033>
- Sobti, N. (2019). Impact of demonetization on diffusion of mobile payment

- service in India: Antecedents of behavioral intention and adoption using extended UTAUT model. *Journal of Advances in Management Research*, 16(4), 472–497. <https://doi.org/10.1108/JAMR-09-2018-0086>
- Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Research*, 24(3), 369–392. <https://doi.org/10.1108/IntR-12-2012-0244>
- Yu, C. S., & Chantatub, W. (2016). Consumers' resistance to using mobile banking: Evidence from Thailand and Taiwan. *International Journal of Electronic Commerce Studies*, 7(1), 21–38. <https://doi.org/10.7903/ijecs.1375>