



4th Information Systems International Conference 2017, ISICO 2017, 6-8 November 2017, Bali, Indonesia

The Moderation Effect of Age on Adopting E-Payment Technology

Anggar Riskinanto, Bayu Kelana, Deliar Rifda Hilmawan*

Sekolah Tinggi Ilmu Manajemen dan Ilmu Komputer ESQ, TB Simatupang Kav. 1, Jakarta Selatan, 12560, Indonesia

Abstract

E-payment is one of the fin-tech solutions that has gained users from different generations. This is unique as it is known that distinctive generations may adopt technology differently. This study aimed to assess on how the adoption of an e-payment system differs on different generations using the quantitative method. We used TAM model moderated by age as the research model. Data was collected through an online questionnaire and successfully gathered 532 responses from application users. The findings showed that only perceived ease of use has a positive effect on perceived of usefulness, that was moderated by age. This result may provide a new perspective on how e-payment being adopted on Indonesian users.

© 2017 The Authors. Published by Elsevier B.V.

Peer-review under responsibility of the Conference Program Chairs.

Keywords: e-payment, TAM, partial least square

1. Introduction

Technology has become the part of today's people life even when they don't realize it. The application of technology stretching from basic things, such as electricity to the more sophisticated as in financial technology (fin-tech). The simplicity and speed of this technology have led people to adopt it in their everyday life. This has been augmented with the invention of the smartphone, allowing people to use applications of fin-tech (eg. e-payment) directly from their own hand.

However, the use of technology may be different for some generation. For example, older generation may perceive technology or new inventions as hard to use, while the younger one might accept it with ease [1]–[3]. This phenomenon raises a question on how different generations perceive new technology, such as e-payment in their daily lives in

* Corresponding author. Tel.: +6221-2940-6999; fax: +6221-2940-6999

E-mail address: anggar.r@esqbs.ac.id

Indonesia. This paper will try to find the effects of age or generation on the technology acceptance, especially in electronic payment.

This study used Technology Acceptance Model (TAM) with age or generation as a moderating variable. We use this model as it has been the most frequently used to explain the behavioral intention of technology usage. Several studies have been made, focused on several areas such as banking, education, and manufacturing. On contrary, this study aims for users in consumer electronic payment. The findings of this study hopefully will serve as a guideline for companies intend to develop a similar solution.

2. Theoretical Background

2.1. Fintech

Fintech is an acronym for financial technology, which can be interpreted as a way of payment through an electronic or information technology. It is the convergence of financial service and information technology that provide innovative services offered to people. Two most known solution in worldwide may be Apple Pay and Google Wallet [4]. Indonesia also has several solutions regarding fin-tech and one of them is Paytren, which developed by PT. Veritra Sentosa Internasional. An Android based mobile application, it allows its user to make a different type of payments of bills, such as electricity, cell phone, gas, etc. Paytren may be seen as an emerging solution as it provides alternative to the current complex way of paying bills.

2.2. Technology Acceptance Model (TAM)

TAM was developed by Davis [5] and Davis, et al [6] based on Theory of Reasoned Action (TRA) [7]. This model added two constructs into TRA model, which is perceived usefulness and perceived ease of use. The first TAM model consists of six main constructs, which the first one is perceived ease of use. This construct is defined as a measure where the user in the future perceive a system is free from error [5], [8], [9]. The second construct is perceived ease of use, which could be measured through indicators of clear and easy to understand, also easy to master [10]–[12]. The third one is perceived usefulness. It is expressed as a measure where the use of a technology is believed to bring usefulness to the user who uses it. This construct can be measured with the indicators of productivity increase, effective and faster work [11], [12]. The fourth construct is attitude toward using. This construct is perceived as an attitude of the user in accepting or rejecting the use of a technology [8]. It is also could be explained as an acceptance of a user to an information technology. The fifth construct is behavior intention. This could be described as an intention of users to do a certain behavior. Several studies show that behavioral intention is a good predictive of the user's technology usage [5]. The last construct is actual use. This construct is defined as an external psychometric response that can be measured by a user based on an actual use [5].

TAM itself has been revised by Venkatesh and Davis [13], being referred as TAM2. The revised model did not include attitude towards using and added new variables such as experience and subjective norm.

3. Research Model and Hypotheses

The research model used in this study was adopted from the research conducted by Rigopoulos [10]. The model itself is a modified version of TAM. We have added a moderating effect and name it as age. This moderating variable is added to see the effect of different generations on adopting e-payment technology. The detail of our research model could be seen in Figure 1.

Download English Version:

<https://daneshyari.com/en/article/6901154>

Download Persian Version:

<https://daneshyari.com/article/6901154>

[Daneshyari.com](https://daneshyari.com)