

The Effect of Digital Literacy to Behavioral Intention With ICT Self-Efficacy as Variable Moderation (Studies in GoPay Users in Malang)

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ABSTRACT

This paper proposes that digital literacy affects behavioral intention with information communication technology self efficacy (ICT self efficacy) as a moderating variable. Population used in this research is GoPay user located in Malang . This research applies quantitative methods. Data was collected through questionnaires, while sampling technique was performed as nonprobability sampling . This research employs SEM PLS method supported by SmartPLS software.

Keywords: *behavioral intention, digital literacy, self-efficacy*

1. INTRODUCTION

Business activities are influenced by rapid development of technology. The 4.0 industrial business revolution allows manufacturing, services, health to be performed in easy, fast, effective, and efficient way, while requiring lower cost with the application of technology, e.g. daily payment system. Currently, many non-cash payments are used by the public for various transactions. Such emerging payment trends have been employed by many large companies, such as digital wallet (e-wallet).

Mobile payment services are increasingly popular and competition in digital wallets (e-wallet) is getting tougher. E-wallet applications provide various features which allow cardless transactions. Local e-wallet applications in Indonesian fintech industry provide the best option for cashless solutions in Indonesia. E-wallet players are increasingly aggressive in acquiring customers. E-commerce payment, public transportation, and physical retail appear as three main services owned by almost all e-wallet applications. E-wallet transactions in Indonesia has achieved USD 1.5 billion in 2018 and are estimated to increase to USD 25 billion in 2023 [1].

I Price Group has collaborated with a trusted data analysis company (App Annie) to summarize better data processing on the most popular e-wallet applications in Indonesia. I Price Group and App Annie's research employs data on the number of monthly application downloads and active users. The research [2] presents more concrete statistics regarding the most popular e-wallet application in Indonesia. I Price Group and App Annie's research

released on August 12, 2019, in second quarter of 2019 shows that Gopay and OVO continue to dominate.

Although e-wallet trend is developing, there is a problem along with popularity of cashless business. According to [2] True Money Indonesia Director, Rio da Cunha, people still find it odd to keep their money on devices such as mobile phones. Therefore, some banking industries have not seriously developed e-wallet applications. E-wallet services are still limited and prone to data theft. It requires patience to educate people to use electronic money. Cashback system has been launched by a number of electronic money companies as part of their attempt to educate people, which unexpectedly driven unfaithful e-wallet users. Some e-wallet users merely took advantage on programs offered by e-money companies.

Nowadays, GoPay and OVO dominate the market by providing massive discounts, speeding penetration into the regions, and facilitating broad service ecosystem. This does not mean that the dominance of GoPay and OVO will be absolute. The capital and maneuvering of Dana and LinkAja are quite an evidence, proving that competition between e-wallet players is smoldering. The space for competition in the digital payment market in Indonesia is still wide open. Morgan Stanley reports estimates that the number of digital payment transactions in Indonesia will reach \$ 50 billion or around IDR 700 trillion in 2027 [3]. Bank Indonesia data shows number of transactions during 2018 is still in the range of IDR 47 trillion [3].

Despite its success, there is a potential threat that might impede sustainability of GoPay as the leader of the e-wallet market in Indonesia. Therefore, behavioral intention is needed to maintain Gopay position as e-wallet market leader. Perception of service quality in the form of

consumer behavioral intention can be seen as a signal of success or failure of a company to retain its customers. Behavioral intention is treated as a construct of major consequence [4], [5].

Technological advances combined with intelligence in using modern technological devices will adversely affect human civilization. Literacy is a topic that is widely discussed today. Literacy was initially referred to the ability to read and write texts and to interpret [6]. However, this interpretation concept is now developed and divided into several forms of literacy, one of which is digital literacy. Such digital literacy concept has emerged since 1990, and defined as an ability to understand and use information from various digital sources [7]. The process of thinking critically in evaluating information through digital media requires literacy.

Studies on digital literacy have been conducted by several experts in international sphere such as America, Europe, Australia, Asia and Africa. Some researchers who have researched about digital literacy include David Bawden, Gloria E. Jacobs, Sonia Livingstone, Guy Merchant, and Ezter Hargittai [8]. Rapid development is shown from year to year, as reflected on the results of research which states that there are 843 articles on digital literacy studies and around 661 articles, 3 of which are written in English [8], have been published. The writing was performed through collaboration of several authors. This indicates that digital literacy is quite interesting, and encourages experts to collaborate to one another in developing studies on digital literacy. Based on this phenomenon, it can be seen that digital literacy has been widely used as a research topic by international experts as an attempt to discover literacy ability of particular community group in relation to its interaction with developing digital media. In contrast with America and Europe, Asia contributes not more than 8% in writing studies on digital literacy [8]. Research examining digital literacy has not been studied in Indonesia.

There are seven important elements related to digital literacy, including information literacy, digital scholarship, learning skills, ICT literacy, career and identity management, communication and collaboration, and media literacy [9]. ICT literacy or information and communication technology literacy focuses on how to adopt, adapt, and use digital devices in both applications and services. Perceived usefulness, ease of use, digital literacy, anxiety, and teaching self-efficacy are important factors in lecturers' behavioral intentions to use mobile learning [10]. Perception of users on digital literacy has consistently been reported to have positive relationship with adoption of new technologies [11].

A new model examines the impact of digital literacy, ICT anxiety, and ICT teaching self-efficacy on lecturer acceptance of mobile learning [10]. The research found that perceived usefulness, ease of use, digital literacy,

anxiety, and teaching self-efficacy are important factors in behavioral intention of educators to use mobile learning. Results of this study indicate the importance of these factors in acceptance. Educators may identify and develop strategies to support successful introduction of mobile technology in educational environment.

2. LITERATURE REVIEW

2.1. Digital Literacy

Having access is not enough to ensure that technology will enable individuals to achieve socioeconomic goals, since certain foundational skills are needed for IT to be effectively used [12]. Digital literacy is a skill related to the mastery of digital sources and devices [13]. Digital literacy is often referred to as various names, such as computer literacy, internet literacy, information technology literacy, and ICT literacy or e-literacy. Digital literacy is defined as the ability to understand and use various forms of information, from a very wide variety of sources that are accessed through computer devices [7]. The researcher offers a new understanding of digital literacy that is rooted in computer literacy and information literacy [14]. Digital literacy, skills and knowledge using digital media such as communication form, communication tools wisely, well, smartly, carefully with the aim of fostering interaction and communication in everyday life [15].

2.2. Behavioral Intention

Developing products or services according to the needs and desires of consumers can be performed through understanding consumer behavior, possible actions to carry through basic desires of consumers behavior. Thus, consumers may form the desire to find information, share others about their experience with certain products, buy certain products or services, or dispose a product in a certain way.

According to [18], behavioral intention is frequency of purchases or proportion of total purchases from buyers who are loyal to a particular brand. Behavioral intention is a measure or level of intensity of an individual's intention to take a specific action [19]. Factors such as perceived expectancy, effort expectancy, perceived risk, social influence, price, trust, and the like are used to measure behavioral intention towards the adoption of technology [20], [21], [22]. The concept of behavioral intentions refers to the possibility of customers returning to the company services they have used, or sharing positive information about the company to family and friends [23], [24]. This

action results from customer satisfaction [23]. Whereas, dissatisfaction creates negative influence on behavioral intentions [25]. Several studies [26], found that the value of experience encourages positive behavioral intentions, while integration of constructing experiences will influence positive behavioral intentions.

2.3. ICT Self Efficacy

A key determinant for level of effort or perseverance is self-efficacy that a person demonstrates with regard to investing in performing the behavior [27]. It also has its origins in level of ICT self-efficacy [28]. ICT self-efficacy is an element of self-efficacy which has been characterized as an individual's human perception in using ICT [24]. Research has shown that a positive attitude to technology and skills to use technology in the classroom are important and measurable factors within level of integration of technology into their teaching [29].

2.4. Digital Literacy, ICT Self Efficacy, and Business Intention

Research [11] found that digital literacy, ICT anxiety, teaching self-efficacy, and perceived convenience and usefulness act as critical factors for lecturers' behavior intentions to implement mobile learning, by not revising any of current designations. Greater self-efficacy to use ICT applications is likely to lead higher levels of behavioral intentions and actual usage in practice [30]. Self efficacy has appeared as an important construct in measuring students' motivation and learning [31]. Former studies established the relationship between self-efficacy and academic performance of students [32, [33], [34], [35].

3. RESEARCH HYPOTHESIS

3.1. Relationship of Digital Literacy and Behavioral Intention

Users' perception on digital literacy has been reported consistently in the literature as having positive relationship with adoption of new technology [11]. A digitally literate person is able to search and understand desired information, express and share opinions or thoughts freely, and attains better understanding on others [16]. Digital literacy is defined as an ability to produce and share own knowledge, and to sympathize with the knowledge of others [17]. Therefore the following are hypothesized:

H1: Digital literacy generates positive effect on behavioral intention.

3.2. Relationship of Digital Literacy and Behavioral Intention with ICT Self Efficacy as Moderation

Digital literacy will generally play a role in adoption of new technology. The study [10] highlighted that digital literacy has a distinct role on acceptance. Specifically, basic ICT literacy and advanced mobile literacy each play a separate but vital role of acceptance. The findings also distinguished between digital literacy and the ability to use technology. The study highlights the idea that lecturers are required to be digitally literate and be able to implement the technology [10]. Therefore the following are hypothesized:

H2: Digital literacy generates positive effect on behavioral intention with ITC self efficacy as variable moderation.

Based on former studies as previously described, the proposed theoretical framework that integrates digital literacy, behavioral intention, and ICT self efficacy describes the relation of digital literacy on behavioral intention, as shown in Figure 1 below.

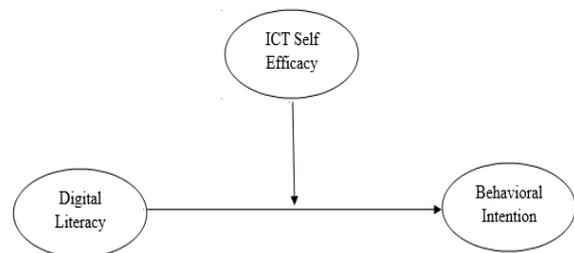


Figure 1. Proposed Theoretical Framework

4. METHODOLOGY

This research applies quantitative method, and employs explanatory research. The sampling technique is non-probability sampling with a purposive sampling approach. This technique applies determined sample instead of random sample, which objective is to , acquire proper respondent to answer the questionnaire. The criteria of the sample are GoPay users in Malang, aged 17- 50 years, and have been using GoPay for two month or more. Research respondent number was determined based on the rule of thumb stated by [36]. Based on the rule of thumb, this research determined the number of samples as equal to the number of research indicator multiplied by 10.

Data collection techniques in this study was conducted using questionnaire given directly to respondents, while

measurement scale was performed using Likert Scale (range from 1 to 5). Questionnaire collected from respondents was analyzed using Structural Equation Modeling supported by SmartPLS Applications 3.0, while hypotheses test regarding the influence of a direct relationship was performed by examining coefficient (standardized) and significance of each variable on direct effect. Hypothesis test on the relationship mediation conducted with Sobel test.

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