

HOW MILLENNIAL TRAVELERS ARE FORCING INDONESIAN TOURISM TO GO DIGITAL

Vita Briliana
Tita Deitiana
Wasisto Ruswidiono

ABSTRACT

Millennials are familiar with digital technology and have a lot of influence on lifestyle changes, from communication, interacting through social networking, through to making transactions with creative new business models. Therefore, their creativity and knowledge can have a strong impact on Indonesia's future, especially in tourism. The purpose of this study was to determine the relationships between perceived ubiquity, perceived informativeness, perceived personalization and mobile app usefulness in Indonesia's tourism industry. The study used nonprobability sampling with purposive sampling and received 350 useful responses. The smart-PLS method was performed to test the proposed relationships. The paper found support for the positive effect of perceived ubiquity, perceived informativeness, perceived personalization, and mobile app usefulness. This paper is expected to support and enable marketing managers of tourism to develop a better focus on their efforts to identify millennial travelers.

Keywords: Perceived Ubiquity, Perceived Informativeness, Perceived Personalization, Mobile App Usefulness, Mobile App WOM

INTRODUCTION

Who are the millennials? Millennials are the people born between 1981 and 2000, and who are currently aged 19 to 38 years. Millennials (also known as the Millennial Generation or Generation Y) are the demographic group after Generation X, while Generation Z is the generation that was born after 2000. "Millennials are a uniquely technical [or 'interconnected'] generation." Smartphones, the internet, and social media networks have shaped their mindset, values, and behaviors. In short, millennials are "technology savvy."

A study conducted by Indonesia's Internet Service Provider Association (2018) on internet penetration found that 50.08% of the total population in Indonesia owns a smartphone, while PC/laptop ownership was found in 25.72% of the country's population. The development of the digital economy in Indonesia is largely supported by the millennial generation, because 98.2% of this generation are digital natives. On average, millennials use their smartphones up to 6 hours per day to chat, socialize, or to make purchases. The BPS statistics for 2015 show that the total population of Indonesia was 255,182,144, of whom 83,569,704 or 33% were aged 15–34 years. The portion of millennials in Indonesian is expected to reach 40% by 2020. This generation will inhabit the large cities, and most of them will live on the island of Java.

Increasingly advanced technologies have made modern life easier. Digital technology has transformed the structure of human life in a process known as *disruption*, which means a fundamental change in the way things are done. Disruption theory explains how innovations can change things by introducing simplicity, convenience, accessibility, and affordability (Christensen, 2015). One of these disruptions was the emergence of a technology that filled a void in human life. Digitalization is a technological revolution (especially in information) that has changed almost all aspects of life, including the order of effort.

Of course the most ubiquitous disruption is the smartphone. And smartphones need information provided in the form of apps—applications which further enrich human life. Apps are small programs that run on a mobile device to extend its capabilities by enabling users to perform particular tasks (Tan et al., 2017). Apps have been created to access a variety of services and resources without the need for a web browser. The current trend is that more and more young people are exploring tourist attractions and sharing them through applications, especially on social media and personal blogs.

Kim et al. (2013) stated that various applications are downloaded when consumers use their mobile devices to get real-time information and could make an online transaction from wherever they are. Because these benefits are enjoyed anytime and anywhere, there is increased usefulness of cellular features, which leads to a positive attitude towards cellular applications (Okasaki & Molina, 2012). An investigation into perceived ubiquity, perceived informativeness, and perceived personalization literature, however, showed that extant research has not yet modeled these factors together, to evaluate how they are interconnected and contribute to mobile app usefulness activity in the tourism industry in Indonesia. This study focus on Indonesian millennial travelers who using of a mobile app particularly GoJek (Gojek is an app for online transportation, food delivery, online payment, and daily services), Waze (Waze is an app provide routing and real-time traffic updates, travel times and also can report accidents, traffic jams, speed, and police traps, etc.), and Traveloka that provides airline ticketing and hotel booking services online, attraction tickets, activities, car rental, and restaurant vouchers.

LITERATURE REVIEW

Perceived ubiquity (PU) means the individual's perception of the extent to which a mobile device provides personalized and uninterrupted network connections and communications between individuals at any time and from anywhere (Roy, 2017).

Jungles and Watson (2006) state that the ubiquity in electronic commerce, whose activities are facilitated through wireless technology, enables users to avoid limits in time and location in transactions. Zhou (2012) called ubiquity a significant advantage in mobile banking which, with the help of mobile terminals and networks, enables users access anytime from anywhere. In this study, PU refers to how mobile apps could help millennial travelers flexibly access an application anytime and anywhere to gather information about transportation through Waze, GoJek, and Traveloka.

Perceived informativeness (PI) is the consumer's overall perceptions based on factors such as timeliness, relevance, and completeness of information in order to evaluate the quality of a product or service (Zhou et al., 2017). Liu et al. (2019) revealed that in e-commerce, most consumers seek information from other members who publish their experiences when buying products or services from these sites. To support their decisions in the purchasing process, consumers are accustomed to gathering information (Bai et al., 2015). PI is the most important factor that drives the formation of consumer attitudes towards commercial websites (Gao & Koufaris, 2006). In the context of this study, PI focuses on how millennial travelers use information, starting with the process of searching, gathering information from reliable sources, and then utilizing this information to facilitate their travels.

Perceived personalization (PP) allows consumers, regardless of place and time, to access information that is tailored to their needs (Nyheim et al., 2015). Mobile apps have to enable to provide personal information that meets the needs of its users (Briliana and Prasetyo, 2018). Mobile applications are able to shorten customer queue times and improve the operational efficiency of service providers. This capability is recognized by users based on past experience, previous interactions, and also from other people's experiences. Personalizing the mobile application means that the information it provides can be customized match the individual's preferences and needs (Kang et al., 2019). In this study, PP is achieved when an app matches the individual traveler's interests, location, identity, activity, and time to help with the trip.

Mobile app usefulness (MAU) enables consumers to easily search for needed information such as flight availability and ticket prices so that they can buy online. Kim et al. (2016) explain that cellular applications can allow consumers to find the lowest prices among many stores, which increases shopping efficiency through shortened search time. Recently, research by Briliana and Prasetyo (2018) revealed the strongest influences solo tourist is MAU because of tourists need as much information as they can get to destinations they have not yet seen. Islam et al. (2013) state that the perception and evaluation of a mobile application are based on experience. This explains why the benefits of mobile applications are greater than visiting websites. In the context of this study, mobile app usefulness means it is a convenient tool for finding relevant information, buying tickets, reserving hotel rooms, and learning about destinations when embarking on trips.

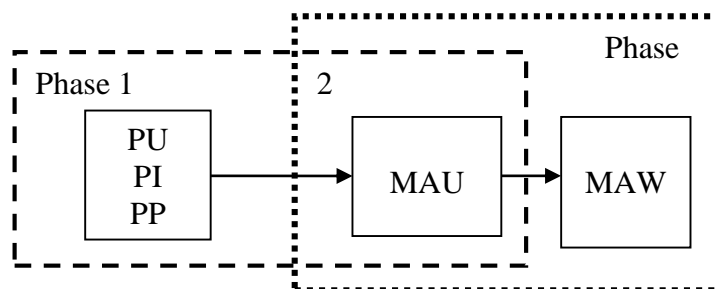
Mobile app WOM (MAW) is an activity carried out by anyone interested in exploring tourist attractions and sharing them through applications such as social media (Schaffer, 2013). This results in many tourists showing up at sites because they were attracted by the stories, reviews, or photos shared. Using a mobile app as a platform for business has become a necessity. Small businesses succeed when good customer relations can be communicated through social media. Experience shows the importance of sharing positive information through social media (Yi & Gong, 2013). In the context of this study, MAW relates to a person's attitude to engaging in word-of-mouth communication about his or her experience utilizing apps with other consumers, especially the usefulness of the app in the context of the Indonesian tourism industry.

RESEARCH METHODOLOGY

Testing hypotheses in this study was carried out using the smartPLS 3 methods. The reason for using PLS is because of our interest in predicting the key target constructs and identifying their key drivers (Hair et al., 2017). Based on Anderson and Gerbing (1988) and Briliana and Mursito (2017) fulfill the first phase. SmartPLS 3 was used to assess the model in two phases:

1. PU, PI, and PP are suggested as antecedents of MAU in phase one of the model, covering H1, H2, and H3; and
2. The second phase of the model considered the effect of MAU is suggested to impact MAW, covering H4.

Figure 1 Research Framework



Hypotheses Development

- H1: Perceived ubiquity have a positive impact on mobile app usefulness.
- H2: Perceived informativeness have a positive impact on mobile app usefulness.
- H3: Perceived personalization have a positive impact on mobile app usefulness.
- H4: Mobile app usefulness have a positive impact on mobile app WOM.

Sample and Data Collection

In this study, 350 college students studying in Jakarta, Indonesia, were selected through an online Google survey forwarded via WhatsApp according to pre-determined criteria, namely: the subjects routinely went on tours both domestically and abroad, and had traveled solo without travel agents. They bought flight tickets online from Traveloka, routinely used Gojek for transportation, ordered food for delivery, and used Google Maps or Waze.

Table 1 Measurement items of the Construct

Constructs	items	Adapted from
Perceived ubiquity (PU)	PU1: The mobile app from anywhere. PU2: The mobile app from anytime. PU3: When I need information or buy tickets online, usually I using mobile apps at any time from anywhere.	Zhou(2011)
Perceived informativeness (PI)	PI1: The information that I need is provided by the mobile application PI2: Providing good source such as real-time information can be obtained from this mobile apps PI3: The mobile app has relevant information about hotel booking services online, food delivery, online transportation, etc. PI4: The mobile app has complete information about food delivery, payment, and daily services, etc. PI5: The mobile app has timely information about routing and real-time traffic updates, travel times and also can report accidents, traffic jams, etc.	Liu et al.,(2019) and Kim et al., (2016).
Perceived personalization (PP)	PP1 : Using mobile apps makes purchasing a ticket online, delivering foods, or everything my needs fulfilled. PP2 : The mobile app allows me to order tickets online, hotel or order food made especially for me. PP3: Overall, this application allows me to get the information needed and tailored the situation that is happening PP4: I feel becoming a unique customer while using a mobile app PP5: I believe that information personalized on this mobile app is tailored to my needs	(Nyheim et al., 2015)); Briliana and Prasetio(2018).
Mobile app usefulness (MAU)	MAU1: This mobile app allows me to accomplish my ordering goods or buying tickets online more quickly. MAU2: This mobile app allows me to buy a ticket online or making reservation hotel easier. MAU3: Basically, the mobile app is useful.	Kim et al., (2016); Briliana and Prasetio (2018).
Mobile app WOM (MAW)	MAW1 : The positive things about this mobile application I will discuss it with others MAW2 : I recommended the positive things about this mobile app to others MAW3 : Because of the positive things about this mobile app, I encouraged friends and relatives to use it.	Yi and Gong (2013)

RESULTS AND DISCUSSION

Based on the data from the questionnaires that processed through statistical tools, the respondent characteristic is showne table below:

Table 2 Characteristics Sample

		Frequency	%
Gender	Male	237	68
	Female	113	32
Age	19-21 years old	209	60
	22-24 years old	139	40
	25-27 years old	2	1
Occupation	Student	261	75
	Student also employee	89	25
Frequency of travelling solo with out travel agent	1 time per year	124	35
	2-3 times per year	149	43
	≥ 4 times per year	77	22

Based on the respondents' profiles, the study found the majority (68%) is male. They were in the 19 to 21 year age group (60%), and they are students (75%). Most of them (43%) admitted that they solo traveling 2-3 times per year.

Table 3 Summary result of the measurement model and convergent validity

Variables	Items	Loadings	AVE	R Square	Composite Reliability
PU	PU 1	.828	.639		.841
	PU 2	.749			
	PU 3	.817			
PI	PI1	.791	.661		.907
	PI2	.780			
	PI3	.828			
	PI4	.848			
	PI5	.815			
PP	PP1	.636	.554		.861
	PP2	.752			
	PP3	.807			
	PP4	.743			
	PP5	.773			
MAU	MAU 1	.626	.578	.564	.802
MAU 2	.837				
MAU 3	.800				
MAW	MAW 1	.779	.662	.477	.854
	MAW 2	.831			
	MAW 3	.829			

Figure 2 Structural model: path coefficients

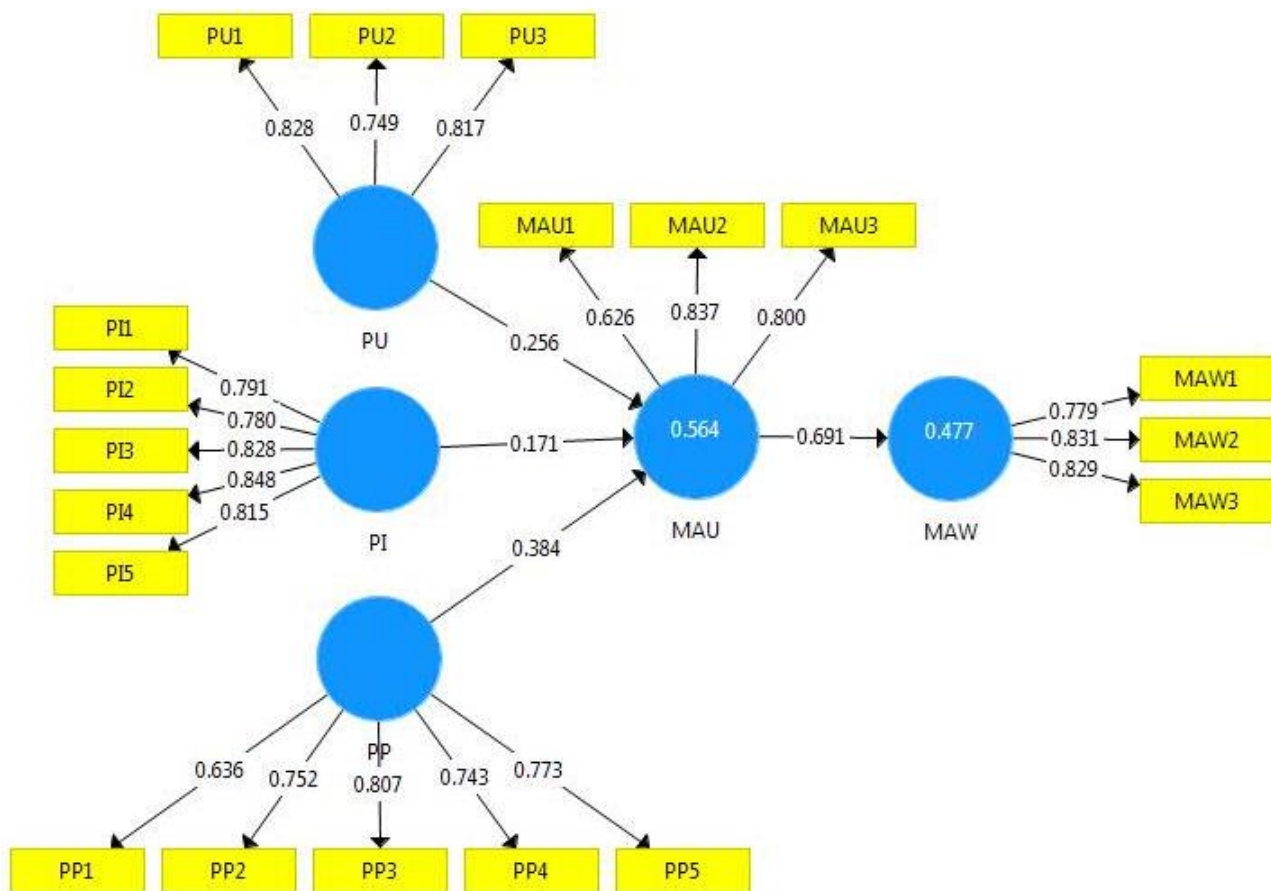


Table 4 Discriminant Validity

	MAU	MAW	PI	PP	PU
MAU	.760				
MAW	.691	.813			
PI	.697	.749	.813		
PP	.718	.808	.873	.744	
PU	.660	.692	.742	.722	.799

Table 5 Summary of Structural Model

Path		Beta	Standard error	t value	P values	Supported
H1	PU → MAU	.256	.060	4.275	.000	YES
H2	PI → MAU	.171	.095	1.999	.001	YES
H3	PP → MAU	.384	.095	4.036	.000	YES
H4	MAU → MAW	.691	.035	19.519	.000	YES

Hypothesis 1 is supported, as PU was found to be positively impacted to MAU ($\beta = .256$; t-value 4.275; p value .000). The findings of this study are consistent with previous research (Zhou, 2011; Roy 2017). Perceived ubiquity has influenced the perceived value of mobile app users from their experience using these technologies. Mobile apps enhance PU, allowing users to interact easily and flexibly in finding information. The findings in Hypothesis 2 examines the effects of PI on MAU ($\beta = .171$; t-value 1.999; p value .001), which supports previous findings Liu et al., (2019); Kim et al., (2016); Briliana and Prasetyo (2018). Personalized information will reduce risk and eliminate irrelevant messages that further enhance the usefulness of mobile applications. In the same way, the study supports Hypothesis 3 since PP related positively to MAU ($\beta = .384$; t-value 4.036 ; p value .000). These findings are consistent with previous studies by Nyheim et al.,2015 revealed that PP was a strong driver of mobile app usefulness. Meanwhile, the finding supports Hypothesis 4 as MAU was positively related to MAW ($\beta = .781$; t-value 5.087; p value .000). The findings in this study about examining the effects of MAU on MAW consistent with previous studies from Kim et al. (2016); Yi and Gong (2013); Briliana and Prasetyo (2018), in which customer adopting new technology might enhance their needs and will share positive WOM to others.

Overall, the results are consistent with the assumptions. This research highlights the role of perceived ubiquity, perceived informativeness, and perceived personalization in explaining mobile app usefulness by Indonesian millennial travelers. This study surveyed millennial travelers who had used a mobile app when embarking on a solo trip without a travel agent.

We found a significant effect of usefulness on mobile app WOM for millennial travelers, because this generation actively uses social media (e.g. Facebook and Instagram). This is what can speed up Indonesian tourism. Promotion through social media is very fast and effective. Besides, those promoters are credible because they are tourists as well.

The results indicate a significant effect of perceived ubiquity when searching and collecting information provided through a mobile application. Current travel activities are almost inseparable from cellular devices.

Perceived personalization also had an effect on millennials' assessment of mobile app usefulness. This reflects the users' assessment of how an app meets their present expectations. The use of smartphones and internet apps by Indonesian travelers has led to disruption in the tourism sector. The change is fundamental. For example, apps for marketing hotel rooms has made lodging and hotel entrepreneurs sit up and take notice. They must immediately change to a digital format to meet the needs of the millennial generation as a new market.

The research findings have also shown the need for the tourism industry to create an infrastructure related to mobile apps in addition to preparing hotels, restaurants, and service providers in tourist locations. If you want to win the market, you must entice the millennial generation, and the strategy to attract millennials is digital. Like it or not, everything has to become digital. If the tourism people cannot be found on the internet, then they might as well be invisible.

This study has a number of limitations. First, the sample of millennials traveling alone may not represent the larger population. One direction for further research is to replicate the model in other samples, not just millennial tourists, to improve the generalization of the results. Therefore, future research is needed to test the generalization and robustness of the proposed model within a broader range of product and service categories.

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Vita Briliana

Trisakti School of Management

Jl. Kyai Tapa No.20 Jakarta, Indonesia

Email: vita@stietrisakti.ac.id

Tita Deitiana

Trisakti School of Management

Jl. Kyai Tapa No.20 Jakarta, Indonesia

Email: tita@stietrisakti.ac.id

Wasisto Ruswidiono

Trisakti School of Management

Jl. Kyai Tapa No.20 Jakarta, Indonesia

Email: wasisto@stietrisakti.ac.id.