

e-Tourism, Personal Technology Post-Adoption Behavior, and Sustainable Behavior Intention in Indonesia

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Abstract

e-tourism's behavior in minimizing the use of natural resources and costs gives birth to sustainable behavior in the form of environmentally friendly tourism and digital technology. This study aims to examine the effects of technology-based post-adoption behavior by tourists that lead to sustainable behavior. Predictors of technology usage using some of the UTAUT2 models. The survey was conducted in Indonesia on respondents in Manado, who obtained as many as 100 participants, which were then analyzed using path analysis. The research findings show that the UTAUT2 model, namely the relationship between hedonic motivation, price value, and habit, affects sustainable behavior mediated by behavior intention. These findings contribute to the development of technology-based marketing and tourism management.

Keywords: e-tourism, personal technology, post-adoption, sustainable behavior, hedonic motivation

1. INTRODUCTION

The tourism industry is currently one of the most important industries driving the global economy (Guerreiro, 2019). Despite being impacted by the COVID-19 pandemic in 2020 (Haryanto, 2020), the tourist sector began to recover slowly by the end of 2021 (UNWTO, 2021), and it is expected that when the pandemic is over, tourism will rebound and become the key driver of the global economy (Babii and Nadeem, 2021).

Changes in tourist tastes, the creation of a new middle class from the millennial and gen-z generations (Kurniawan et al., 2021), as well as technological advances, namely digital technology (Akhtar et al., 2021), have all contributed to the resurgence of the tourism sector following COVID-19 (Gretzel et al., 2020). E-tourism is a digital technology platform that contains large amounts of data about tourism, news, events, locations, and travel, as well as transportation and lodging, that can be personalized by travelers (Nugraheni and Nurhaeni, 2018).

The growth of e-tourism is aided by the development of sustainable behavior. Global consumer awareness of the need for environmentally friendly conduct has led to the rise of e-tourism based on sustainable behavior (Bergin-Seers and Mair,

2009). The topic of global climate challenges, notably the incidence of climate change and global warming, has prompted this ecologically responsible conduct (Friedman, 2017). Tourists, as tourist consumers, are becoming increasingly conscious that their actions influence the natural environment, particularly in terms of the products and services they buy, whether directly or indirectly.

This technology-based tourist knowledge and action for sustainable behavior may also be seen in poor nations, such as Indonesia (Mihanyar et al., 2015); (Nelson et al., 2021). The tourism profile and local wisdom of tourist destinations in Indonesia based on nature tourism or ecotourism are also supported by the sustainable conduct of visitors visiting tourist sites in Indonesia, both international and domestic (Burhanudin and Unnithan, 2021).

This study was based on Nanggong (2018) which examined the UTAUT2 model for post-technology adoption behavior with 162 respondents in a previous study. The findings reveal that hedonic incentives, price value, and habits impact technology adoption intentions, but perceived advantages have little effect on the link between deliberate conduct and long-term behavior. Nanggong and Rahmatia (2019) conducted a study on e-ticket consumers with 188 participants. The results reveal that perceived benefits and contextual factors influence long-term customer behavior when it comes to technology adoption. The focus on the tourist industry, namely the adoption of e-tourism technologies, is the key distinction between the two studies and this research.

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The fundamental goal of this study, as stated above, is to look at the post-technology adoption behavior of e-tourism in Indonesia. The UTAUT2 model is used in this study to look at the interaction between hedonic motivation (HM), price value (PV), and habit (H) on sustainable behavior (SB) with behavioral intention (BI) as a mediator, specifically in Indonesian e-tourism behavior.

2. LITERATURE REVIEW

2.1. e-Tourism

e-Tourism reflects the digitization of all processes and value chains in the tourism industry, such as travel agents, hospitality, and catering. Tactically, e-tourism includes e-commerce and uses information and communication technology (ICT) to maximize the efficiency and effectiveness of the tourism business (Jonathan and Tarigan, 2016). At a strategic level, E-Tourism revolutionizes all business processes, the entire value chain, and the strategic relationships of tourism organizations with all stakeholders.

Kotler and Bowen (2016) explain that e-tourism is a technology used for tourism activities and helps companies engaged in tourism services increase their business and improve the know-ledge-sharing process. E-Tourism utilizes several features of information technology in its development, namely: tourism information databases, user databases, electronic payments, and using the internet network as a means of shipping and service transactions (Zhang, 2009).

2.2. Technology Adoption

Technology adoption and diffusion behavior refer to the Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1972), which explains that what determines individual behavior is an individual's intention, which is jointly influenced by individual attitudes and subjective norms (Fishbein and Ajzen, 2015). Then came another refinement by Ajzen (1991), namely the Theory of Planned Behavior (TPB), which included perceived behavioral control as the third determinant of individual behavior when they wanted to use technology. In 1989, Davis (1989) adapted TRA to develop a technology acceptance model (TAM). This model defines perceived ease of use and perceived usefulness as two determinants of attitudes towards intentional behavior and use.

Venkatesh et al. (2003) review and synthesize a framework that leads to a unified view of technology acceptance by comparing eight models that have similarities, namely Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), Combined (CTAM TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT), resulting in a formulation called the Unified Theory of Acceptance and Use of Technology (UTAUT) with four key predictors of technology use intention, namely performance, effort expectancy, social influence, and facilitating conditions.

2.3. Sustainable Behavior

Based on the view of ABC (attitude behavioral context), explains that behavior is the interactive result of personal attitudes and contextual factors (Kostadinova, 2016). Sustainable behavior as a study motivated by social and environmental considerations has become an important topic in public policy and consumer psychology (Luchs and Mooradian, 2012). According to Tapia Fonllem et al. (2013), sustainable behavior is an action that aims to protect the natural and social environment. The term sustainable behavior in practice has similarities with pro-environmental behavior.

Sustainable behavior in the psychological perspective is defined as a collection of actions aimed at protecting the socio-physical resources of this planet (Gifford, 2007). Although sustainable behavior has the same terms as pro-environmental behavior, the last term refers to efforts to protect the natural environment, while sustainable behavior is more specifically emphasized on efforts to protect both the natural environment and the human (social) environment (Tapia Fonllem et al., 2013).

2.4. Behavioral Intention

The term behavioral intention is widely used in the technology acceptance and use literature. Intentional behavior is interpreted as the perception of the possibility that someone will use technology. In another study, Bhattacharjee (2001) used continuance intention to understand IT acceptance and user behavior. This model describes when information technology adopters get satisfaction, and continuance intention will occur. However, according to Aria and Archer (2014), the constructs of continuance intention and behavioral intention have a commensurate meaning to test whether users continue to use technology for a long time. Based on these arguments, this study will use the term behavioral intention.

2.5. Hedonic Motivation

Hedonic motivation is the joy or pleasure obtained from using technology and plays an important role in determining the acceptance and use of technology (Brown and Venkatesh, 2005). Users expect pleasure and comfort when adopting a mobile phone to obtain information and services (Alwahaishi and Snasel, 2013). When these expectations are achieved, consumers will continue to use the technology. This hedonic motivation follows the explanation of the IT continuance model that there is satisfaction experienced by technology adopters resulting in continuance intention or, in other words, there is a desire to continue using the technology.

2.6. Price Value

Price value means costs and price structures that may significantly impact consumers using technology (Nguyen et al., 2014). Costs and prices will have an impact on the use of technology by consumers. The value of prices and costs in the context of consumer users (individuals) and organizations is different because consumers will usually bear the monetary costs of using technology (Venkates et al., 2012). Furthermore, the price will positively affect intentions when consumers feel the

benefits of using technology are more significant than the monetary costs incurred. Arenas-Gaitan et al. (2015) also show that the value of the price affects the intention of technology adoption. Therefore, the suitability of the price value will determine the behavior of a person’s intention to adopt the technology.

2.7. Habits

Previous studies of information systems in the use of technology, Kim and Malhotra (2005) view habit as past behavior. According to Ye and Potter (2011), habit affects future behavior only when the behavior has been accustomed to. Furthermore, he explained that habit formation requires a definite action to be performed frequently and repeatedly. Correspondingly, Venkates et al. (2012) argue that habit is a perceptual construct that reflects the results of previous experience. Several studies have also shown that habits impact technology adoption intentions Nguyen et al. (2014). Habits in the context of using technology will make an adopter continue their intention to use the technology.

3. RESEARCH METHODS

Data was collected in mid-2021 in Manado City, Indonesia. Respondents were invited to participate in this study using online social media such as Whatsapp, Facebook, and Instagram. The online survey was developed in Google Form. The sample that participated in this study consisted of 100 participants. The instruments in this study were built from Venkates et al. (2012) research for hedonic motivation, price value, habit, and behavioral intention variables, while the sustainable behavior variable uses instruments from the research of de Kerk and Manuel (2008).

Data were analyzed using path analysis to examine the mediating relationship between variables (Stage et al., 2004). Test necessary reliability instruments in the context of consistency across the parts of a measuring instrument (Taherdoost, 2016).

4. RESULT AND DISCUSSION

The image and table of the total path analysis findings show the outcomes of the prior structural equation analysis.

Based on the hypothesis testing results, the variable hedonic motivation (X₁) has a significant relationship with behavior intention (Z). This result can be seen from the significant value of X₁ to Z, which is positive and significant. Then there is a direct influence of hedonistic motivation (X₁) which has a significant relationship with behavior intention (Z).

Based on the hypothesis testing results, the variable price value (X₂) has a significant relationship with behavior intention (Z). This result can be seen from the significant value of X₁ to Z, which is positive and significant. Then there is a direct influence of price value (X₂) which has a significant relationship with behavior intention (Z). Based on the hypothesis testing results, the variable habit (X₃) has a significant relationship with behavior intention (Z). This result can be seen from the significant value of X₁ to Z, which is positive and significant. Then

Table 1: SEM Result

Variables	Effect			
	Path Coeff	Direct	Indirect	Total
X ₁ to Z	0.164	0.164	-	0.164
X ₂ to Z	0.147	0.147	-	0.147
X ₃ to Z	0.56	0.56	-	0.56
X ₁ to Y	0.189	0.189	0.164 x 0.306 = 0.050	0.239
X ₂ to Y	0.145	0.145	0.147 x 0.306 = 0.044	0.189
X ₃ to Y	0.416	0.416	0,560 x 0,306 = 0,171	0.587
Z to Y	0.306	0.306	-	0.306
ε ₁	0.8	0.8	-	0.8
ε ₂	0.576	0.576	-	0.576

Source: Data Processed (2021)

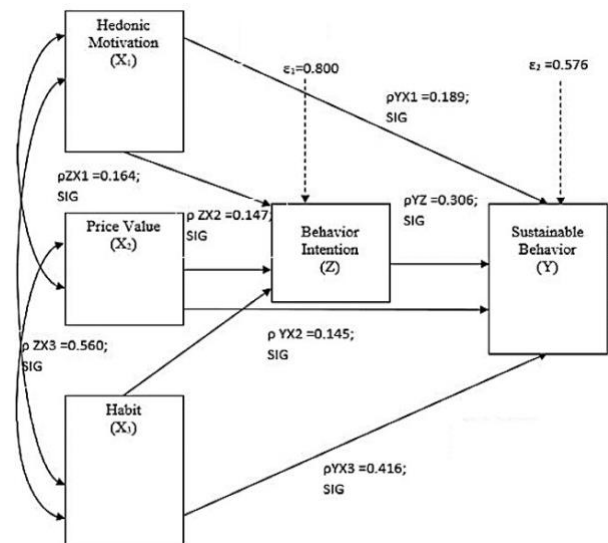


Figure 1: Path Analysis Result

there is a direct influence of habit (X_3) which has a significant relationship with behavior intention (Z).

Based on the results of hypothesis testing, it shows that the behavior intention (Z) variable has a significant relationship with sustainable behavior (Y). This result can be seen from the significant value of Z to Y , which is positive and significant. Then there is a direct influence of behavior intention (Z) which has a significant relationship with sustainable behavior (Y). Based on the results of hypothesis testing, it shows that the hedonic motivation (X_1) variable has a significant relationship with sustainable behavior (Y) mediated by behavior intention (Z). Based on the results of hypothesis testing, the variable price value (X_1) has a significant relationship with sustainable behavior (Y) mediated by behavior intention (Z). Based on the results of hypothesis testing, it shows that the habit variable (X_3) has a significant relationship with sustainable behavior (Y) mediated by behavior intention (Z).

5. CONCLUSION

As predicted by this study, hedonic motivation has an impact on technology adoption intentions, as predicted by this study. The findings show that a person's pleasure or satisfaction in using technology will inspire them to adopt it.

Consumers' usage of technology is influenced by expenses and pricing, according to the findings of this study. In the context of consumer users (individuals) and businesses, the value of pricing and costs differ since consumers often face the monetary expenses of adopting technology. A person's intention to accept technology is determined by the availability of a price match (price value).

Furthermore, the findings of the study show that habits have a large and dominant impact on technology adoption. It is simpler for someone to absorb technology if they adopt the behavior that they are used to. Furthermore, habit development necessitates the doing of a certain action on a regular and consistent basis. Habit is a perceptual construct that represents the outcomes of prior experience. As a result, it is simpler for someone who is used to and frequently utilizes technological equipment to adapt the technology.

The findings of this study provide essential contributions, both theoretically and practically, especially in the technology adoption process. The research contribution proves that voluntary consumers' technology adoption behavior, such as hedonic motivation, price value, and habits are essential factors influencing technology adoption intention behavior. This result further strengthens the unified theory of acceptance and use of technology 2 (UTAUT2) model, which focuses on the mechanism of technology adoption by individuals. Furthermore, to improve sustainable behavior in the use of technology, the effect of perceived benefits needs to be reviewed for its role in consumer behavior.

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