

# Use Intention of Marketing-Based Android Application among Small and Medium Enterprises in Indonesia

Dona Angriani, Wayu Eko Yudiatmaja, Firman Firman

Department of Public Administration, Universitas Maritim Raja Ali Haji, Indonesia

#### ARTICLE INFORMATION

### Article History

Submitted: 1 January 2024 Revised: 20 April 2024 Accepted: 5 May 2024 Available online: 30 June 2024

Correspondence

Wayu Eko Yudiatmaja

Email: wayuguci@umrah.ac.id

#### **ABSTRACT**

Although several studies have employed the technology acceptance model to examine the effect of perceived usefulness, perceived ease of use, and attitude on behavioral intention, a limited number of research investigate the impact of personal attractiveness in this relationship. This research aims to extend TAM by analyzing the effect of personal attractiveness and attitude on behavioral intention. This research used a survey approach. The data were collected through questionnaires on 45 sellers affiliated with Dagin Hub Market of Tanjungpinang. We analyzed the data using partial least square-structural equation modeling (PLS-SEM). The results show that personal attractiveness does not affect attitude, while personal attractiveness significantly affects perceived usefulness. This study contributes to TAM by highlighting the crucial role of personal attractiveness in shaping perceived usefulness. The results are also helpful in enhancing the quality of SMEs' Android applications.

Keywords: Technology Acceptance Model; Personal Attractiveness; Attitude; Behavioral Intention; E-Marketing

This work is licensed under Creative Commons Attribution-ShareAlike 4.0 International License. © Inspire Kepri Publication, 2024



## Introduction

The development of an increasingly advanced era with a variety of increasingly sophisticated technologies that can facilitate all activities ranging from buying and selling transactions of a product to promoting products (Susanty et al., 2020). With increasingly advanced technology, this can attract the attention of large companies and small and medium enterprises (SMEs) to use this technology, which we often call e-commerce technology. Using the e-commerce platform as an alternative tool in marketing products for companies and SMEs can bring tremendous results or sales. Although the use of this technology is still low, SME businessmen see its use positively, which opens up opportunities for its future implementation (Haseeb et al., 2019).

SMEs play an important role in the Indonesian economy. SMEs reduce unemployment caused by a labor force not absorbed into the work environment. SMEs have been identified as a priority for Indonesia's economic development. When Indonesia experienced the economic crisis in 1998, SME showed tremendous strength. SMEs can operate in various industries, such as the culinary, fashion, and agriculture industries. The raw materials used by small and medium-sized industries come from natural resources in their environment (Qosasi et al., 2019).

The development of SMEs is crucial for economic growth and the survival of SMI enterprises. To achieve this, SME enterprises need the government's support and the local community's attention. There are two types of industrial understanding, namely macro and micro. The definition of industry in terms of micro is a collection of enterprises that produce goods and services, while macro industry is the ability to produce added value. Improving business efficiency, which will affect the increasing competitiveness of businesses, requires accuracy in choosing a technology (Susanty et al., 2020). The existence of a field engaged in the same industry from both large and medium-sized industries will potentially encourage small-scale industrial development efforts, which will have very strong competition. Such conditions may lead to competition for the market share of goods produced by both industries. In such competition, it is clear that large and medium industries will overcome small industries (Jadhav et al., 2023).

The Tanjungpinang City Department of Trade and Industry launched the Dagin Market Hub Application to enhance SMEs. It is an innovation in the government's efforts to support small and SMEs in digital marketing and help them market their goods. The launch of this application was implemented through Government Regulation No. 7 of 2021 on the facilitation, protection, and empowerment of cooperative SMEs. As a marketplace-based marketing channel, Dagin Market Hub aims to encourage SMEs in Tanjungpinang to go digital, provide convenience and business expansion for SMEs and cooperatives in Tanjungpinang in the procurement market of goods and services, and improve and develop SMEs in Tanjungpinang (Taiminen & Karjaluoto, 2015). Dagin Market Hub can be a promotional forum and marketing tool for Tanjungpinang SME products so that the wider community can recognize them without having an offline store.

Although numerous studies have assessed the effect of several predictors on attitude and behavioral intention using the technology acceptance model (TAM) (Hatamifar et al., 2021; Natarajan et al., 2018; Salameh, 2022), our knowledge is still incomplete in several areas. First, previous studies tend to examine the attitude and intention of the customer instead of the seller. Consequently, we have limited knowledge about seller response technology in the marketing system. Second, the research considers personal attractiveness as a factor affecting perceived usefulness, and attitude is rare. Personal attractiveness is crucial in understanding how individuals form perceptions and evaluations of technology, shaping their intention to adopt it (Munim & Noor, 2020).

This research aims to investigate the user intention of the Android-based SME application Dagin Market Hub by extending TAM by adding personal attractiveness to analyze the factors that influence the intention to use the Dagin Market Hub application. Thus, we examine the influence of personal attractiveness on perceived usefulness, how the influence of perceived ease of use on perceived usefulness, how the influence of perceived assertion attractiveness on attitude, how the influence of perceived ease of use on attitude, how the influence of attitude on behavioral intention. The current study has three purposes. First, we analyze the effect of personal attractiveness and perceived ease of use on perceived usefulness. Second, we examine the influence of perceived usefulness, personal attractiveness, and perceived ease of use on attitude. Lastly, we investigate the effect of attitude on behavioral intention.

## Theoretical Foundations

The technology acceptance model (TAM) is a concept used to identify various aspects that influence technology adoption. This theory was first introduced by Davis (1989). In the TAM, two main factors are used as the main determinants of whether technology is accepted, namely perceived usefulness and perceived ease of use (Alharbi et al., 2017). TAM is a research model commonly used to investigate the acceptance of information technology. This model suggests that applying information technology can increase work effectiveness and productivity. TAM assumes that two individual beliefs, namely perceived benefits and perceived ease of use, are determining factors in the acceptance and use of technology.

The TAM model more broadly explains that internet acceptance is influenced by certain dimensions that can facilitate user acceptance. This model determines the trust factor of user behavior through two main variables, namely perceived usefulness and perceived ease of use. The technology acceptance model also incorporates user attitudes in the workplace and actions taken. Predicting users' long-term acceptance of technology can be done by measuring the affective response of users to new technology. Davis (1985) developed a model that explains individual behavior in accepting information technology, known as TAM. Along with current technological developments, various innovations indirectly affect individuals' intention to use technology due to personal desire or external influences, such as recommendations from friends or colleagues.

This study uses TAM as a basic model to examine technology adoption behavior by extending to personal attractiveness. This extended model is consistent with previous studies that have integrated additional factors beyond the core TAM constructs to enhance the model's predictive power (Wilson et al., 2021). The results show that the proposed model explains a significant portion of the variance in technology adoption intention and behavior, emphasizing the importance of considering cognitive and affective factors in technology adoption research.

Based on the TAM and the findings from prior studies, we propose the following conceptual model for this study, as illustrated in Figure 1.

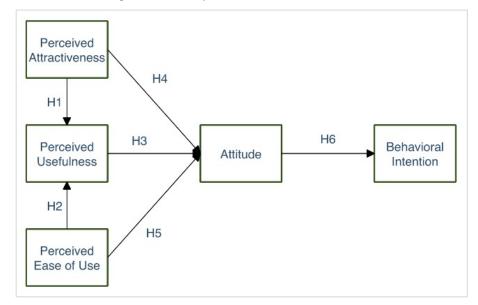


Figure 1. Conceptual Model of the Research

# **Hypothesis Development**

Personal Attractiveness and Perceived Usefulness

Personal attractiveness refers to the extent to which online customers or users perceive a product, service, or brand as attractive (Su & Chiu, 2021). Personal attractiveness includes various factors influencing a customer's decision to buy or interact with an online business. Some factors that influence personal attractiveness include website design and appearance, quality of product images and descriptions, competitive pricing, reviews and testimonials, ease of purchase and payment process, personalized customization and recommendations, customer service, rewards and discount programs, and branding and brand image. It is important to understand that in e-commerce, attractiveness is related to the product or service itself and the overall user experience on the website or e-commerce platform. By improving

personal attractiveness, businesses can increase conversion rates, retain customers, and build better long-term relationships.

Research conducted by Van der Heijden (2003) found that perceived attractiveness positively and significantly influences perceived usefulness. These findings successfully introduced the concept of visual attractiveness and empirically validated the model on website users. Similarly, other studies have shown that personal attractiveness positively and significantly influences perceived usefulness. According to research by Garcia II et al. (2023), personal attractiveness positively and significantly impacts Perceived Usefulness. Similar research by Ghapanchi et al. (2020) also found that personal attractiveness positively and significantly influences perceived usefulness. Based on the results of previous research, the hypotheses in this study can be formulated as follows:

H1: Personal attractiveness has a positive and significant effect on perceived usefulness.

# Perceived Ease of Use and Perceived Usefulness

Rogers (2003) states that the term perceived ease of use refers to the view that a new innovation is considered easier to use than existing methods. Davis (1989) explains that perceived ease of use is defined as the extent to which a person believes that using technology will free them from excessive effort. Zeithaml et al. (2002) added that perceived ease of use is related to how easily an innovation is understood or used. In general, perceived ease of use is a person's feeling about how easily they accept or use something. In situations where a person uses a demanding method in a context with multiple requests, they will not experience negative effects or excessive difficulty (Al-Gahtani, 2016; Davis, 1989; Gefen & Straub, 2000).

Research conducted by Shah and Attiq (2018) found that perceived ease of use positively and significantly affects perceived usefulness. This finding supports the previous understanding that individual intention to use technology is determined by its perceived ease of use and perceived usefulness. This study also confirms that perceived ease of use positively and significantly impacts perceived usefulness. Similar results were found in research by Peng et al. (2023), which also stated that perceived ease of use has a positive and significant effect on perceived usefulness. Based on the results of previous research, the hypothesis in this study can be formulated as follows:

H2: Perceived ease of use positively and significantly affects perceived usefulness.

# Perceived Usefulness and Attitude

Perceived usefulness is a person's belief that their job performance will improve when using a particular information technology system (Davis, 1989). In the TAM framework, Perceived usefulness is hypothesized to indicate behavioral intentions to use technologies considered attractive in the technology measurement model (Al-Swidi et al., 2014). Perceived usefulness also reflects the technology's benefits, such as branded applications (Davis et al., 1992). According to other studies, perceived usefulness is a person's level of belief that applying the right procedures will improve their job performance and can result in benefits such as promotions, bonuses, and awards (Salancik & Pfeffer, 1978; Schein, 1984; Vroom, 1964).

Di Stefano et al. (2023) found that perceived usefulness has a positive and significant effect on attitude. This finding confirms that among all tested behavioral antecedents, perceived usefulness, and attitude towards the influence of social media (SNS) on business are the best predictors of intention to use (or continue to use) SNS for business activities. Other research by Raza et al. (2017) and Fu et al. (2022) also found that perceived usefulness positively and significantly influences attitude. Based on the results of previous research, the hypothesis in this study can be formulated as follows:

H3: Perceived usefulness has a positive and significant effect on attitude.

#### Personal Attractiveness and Attitude

Attitude is a person's relatively consistent perception and tendency to react or respond to a particular object or situation (Ming & Jais, 2022). The object or attitude can be various things, such as objects, events,

people, phenomena, etc. Attitude determines whether someone likes or dislikes (favorable-unfavorable) something. In planned behavior theory, attitude is divided into two components, namely behavioral belief and evaluation outcome. Behavioral beliefs are a person's beliefs about things or consequences that may result from their behavior. Meanwhile, evaluation outcome is the evaluation of these consequences, which can be positive or negative, favorable or unfavorable.

Kim et al. (2015) found that personal attractiveness positively and significantly affects attitude. This finding suggests that the visual characteristics of digital devices, such as screen size and curvature, can have a positive psychological effect by enhancing the quality of an effective and enjoyable experience, especially when using mobile devices. Similar results were also obtained in a study by Su and Chiu (2021), which stated that personal attractiveness has a positive and significant impact on attitude. Based on the results of previous research, the hypotheses proposed in this study are as follows:

H4: Personal attractiveness has a positive and significant impact on attitude.

# Perceived Ease of Use and Attitude

Rogers (1983) defined perceived ease of use as the view that a new innovation is considered easier to use than existing methods. Davis (1989) explains that perceived ease of use is a person's belief that using certain technologies will require little effort. Zeithaml et al. (2002) emphasized that perceived ease of use includes how easily an innovation can be understood or used. In general, perceived ease of use reflects a person's perception of the ease of using something. In a context where a person has to use a demanding method with multiple requests, this perception of ease can reduce the likelihood of resistance or negative effects on the use of the technology.

Previous studies have shown that perceived ease of use has a positive effect on attitude. For example, research by Kanchanatanee et al. (2014) found that perceived ease of use has a positive and significant influence at a high level. The results of this study indicate that for SME owners in the three southern border provinces of Thailand, attitude towards the use of e-marketing is the most influential factor in the intention to use e-marketing. Another study by Suki and Suki (2011) also supports these findings, showing that perceived ease of use has a positive and significant effect on attitude. Thus, the next hypothesis in this study can be formulated as follows:

H5: Perceived ease of use has a positive and significant effect on attitude.

# Attitude and Behavioral Intention

According to Fu et al. (2022), behavioral intention is a condition in which consumers have a desire or attitude of loyalty to a product or service and voluntarily recommend the advantages of the product or service to others. Ajzen (2020) defines behavioral intention as consumer behavior or attitudes that reflect the desire to continue using a particular product or service, also known as action intentions. Saha and Theingi (2009) add that behavioral intention includes the possibility of customers performing certain behaviors, such as giving positive recommendations (word of mouth) about a product or service provider to others, having the intention to make repeat purchases, and showing loyalty to the product or service provider.

Several previous studies have found that attitude has a positive effect on behavioral intention. Research by Kanchanatanee et al. (2014) shows that attitudes towards the use of e-marketing have a positive and significant influence on the intention to use E-Marketing in SMEs in the three southern border provinces of Thailand. Another study by Shanmugam et al. (2014) also found a positive and significant effect of attitude on behavioral intention. Sondakh's (2017) study supports these findings by finding a positive and significant effect of attitude on behavioral intention. This study identifies the determinants of user acceptance of e-government services in Indonesia, proving that attitude has a positive influence on behavioral intention. All the findings of previous research are in line with the views expressed by Azjen

(1985), Davis et al. (1989), and Hung et al. (2006). Based on the results of previous research, the hypotheses that can be formulated in this study are:

H6: Attitude has a positive and significant effect on behavioral intention.

#### Methods

This study used a quantitative approach to test previously developed theories and hypotheses by making quantitative predictions about the influence of variables. The purpose of the design is to determine how exogenous variables affect endogenous variables (Hair et al., 2021). The data were collected through an online survey using Google Forms to the sellers of the Dagin Market Hub application. Online surveys were useful to collect the data efficiently and quickly (Yudiatmaja et al., 2021, 2022). Forty-five respondents have participated in this study. We employed partial least squares structural equation modeling (PLS-SEM) to analyze the data. Partial least squares structural equation modeling has emerged as a powerful analytical technique for researchers in various fields, including operations management, marketing, and information systems (Roy et al., 2020). This approach offers a comprehensive framework for exploring complex relationships between latent variables, overcoming the limitations of traditional covariance-based structural equation modeling techniques (Zhao et al., 2022).

### Results

# Descriptive Results

Table 1. shows the demographic characteristics of the respondents. Based on the data, the majority of the respondents were female, accounting for 80% (N = 36) of the sample, while 20% (N = 9) were male. This suggests a predominantly female participant group in the study.

Characteristics	Amount	Percentage	
Sex			
Male	9	20	
Female	36	80	
Age			
15-20 year	0	0	
21-30 year	13	28.8	
31-40 year	14	31.1	
41-50 year	12	26.6	
>50 year	6	13.3	
Selling items			
Culinary	26	57.7	
Wet and dry cakes	17	37.7	
Fashion and herbal	1	2.2	
Handicraft	1	2.2	
Education			
Graduates	0	0	
Bachelor	18	40	
Senior high school	20	44.4	
Junior high school	3	6.6	
Elementary school	4	8.8	

Table 1. Demographic Profiles of the Respondent

The age distribution of the respondents shows that 31.1% (N = 14) were between 31-40 years old, making it the most represented age group. This was followed by the 21-30 years age group, which accounted for 28.8% (N = 13) of the respondents. The 41-50 years age group comprised 26.6% (N = 12), and 13.3% (N = 6) of the respondents were over 50 years old. There were no respondents in the 15-20 years age group. In terms of the items sold by the respondents, the majority (57.7%, N = 26) were involved in selling culinary products. This was followed by those selling wet and dry cakes, representing 37.7% (N = 17). A small proportion of respondents (2.2%, N = 1 each) sold fashion and herbal products or handicrafts. The education levels of the respondents varied, with the largest group (44.4%, N = 20) having completed senior high school. A further 40% (N = 18) held a bachelor's degree, while 8.8% (N = 4) had completed elementary school. A small proportion, 6.6% (N = 3), had only junior high school education. There were no respondents with graduate-level education. In sum, the respondents' demographic profiles reveal a predominantly female sample, mainly aged between 21 and 50 years. Most respondents are engaged in selling culinary products or wet and dry cakes, and a significant proportion have completed high school or bachelor's degree-level education. This demographic composition provides insight into the characteristics of the study participants and suggests potential areas for targeted interventions or marketing strategies.

Table 2. Validity and Reliability Analysis

Constructs	Indicators	Loading Factors	AVE	CR	Cronbach $\alpha$
Personal Attractiveness	PA 1	0.950	0.907	0,951	0,898
	PA 2	0.958			
	PA 3	0.916			
Perceived Usefulness	PU 1	0.905	0.863	0,958	0,913
	PU 2	0.958			
	PU 3	0.922			
Perceived Ease of Use	PEU 1	0.893	0.920	0,927	0,842
	PEU 2	0.925			
	PEU 3	0.870			
Attitude	AT 1	0.937	0.887	0,959	0,936
	AT 2	0.905			
	AT 3	0.903			
	AT 4	0.808			
Behavioral Intention	BI 1	0.911	0.900	0,964	0,944
	BI 2	0.956			
	BI 3	0.976			

## Assessment of Measurement Model

Measurement model assessment is a crucial step in PLS-SEM analysis, where the reliability and validity of the constructs are evaluated (Yudiatmaja, 2021). In this study, we evaluated measurement model properties, including internal consistency, indicator reliability, convergent validity, and discriminant validity, to ensure the robustness of the proposed model. Table 2 summarizes the result of the validity and reliability of the measurement model. The results show that all constructs exhibit adequate internal consistency, with composite reliability values exceeding the recommended threshold of 0.70. Furthermore, the average variance extracted values for all constructs are above the recommended level of 0.50, indicating sufficient convergent validity. The loading factors of the indicators are also above the recommended level of 0.70, supporting the indicator's reliability. Cronbach alpha coefficients for all

constructs exceed the recommended threshold of 0.70, further confirming the internal consistency of the measurement model (Hair et al., 2019).

We checked discriminant validity using the Fornell-Larcker criterion and Heterotrait-Monotrait Rasio (HTMT) of correlations (Fornell & Larcker, 1981). The results indicate that the constructs are distinct from each other, demonstrating adequate discriminant validity.

Table 3. Fornell-Larcker Criterion

Constructs	1	2	3	4	5
(1) Attitude	0.942				
(2) Behavioral Intention	0.698	0.948			
(3) Personal Attractiveness	0.684	0.685	0.952		
(4) Perceived Ease of Use	0.668	0.662	0.731	0.929	
(5) Perceived Usefulness	0.735	0.696	0.927	0.776	0.959

We also assessed discriminant validity using HTMT. All construct correlations are lower than the square root of the AVE for the corresponding construct, and the HTMT ratios are below the 0.85 threshold, confirming discriminant validity (Ringle et al., 2023). The results of the Fornell-Larcker test and HTMT of correlation are presented in Table 3 and Table 4, respectively.

Table 4. Haterotrait-Monotrait Ratio

Constructs	1	2	3	4	5
(1) Attitude	0.942				
(2) Behavioral Intention	0.698	0.948			
(3) Personal Attractiveness	0.684	0.685	0.952		
(4) Perceived Ease of Use	0.668	0.662	0.731	0.929	
(5) Perceived Usefulness	0.735	0.696	0.927	0.776	0.959

# Assessment of Structural Model

The structural model was evaluated by examining the coefficient of determination and the significance of the structural path coefficients. The R-squared values for the endogenous constructs exceeded the recommended threshold of 0.25, indicating substantial explanatory power of the model. Further, the path coefficients were significant at the *p*-value 0.05 level, providing support for the hypothesized relationships (Yudiatmaja et al., 2023). The findings of this study demonstrate the suitability and robustness of the PLS-SEM approach in exploring complex relationships among latent variables, making it a valuable tool for researchers in various disciplines.

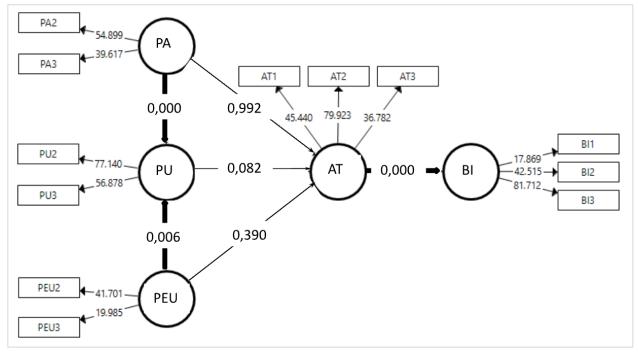


Figure 2. Structural Model

The results of structural model analysis are presented in Figure 2 and Table 5. The study demonstrates that personal attractiveness ( $\beta$  = 0. 0.771, t = 11.519, p = 0.000) and perceived ease of use significantly impacts perceived usefulness ( $\beta$  = 0.213, t = 6. 2.738, p = 0.006). Therefore, H1 and H2 were supported by the data. Unfortunately, personal attractiveness ( $\beta$  = -0.003, t = 0.010, p = 0.992), perceived ease of use ( $\beta$  = 0.244, t = 0.860, p = 0.390) and perceived usefulness do not significantly affect attitude ( $\beta$  = 0.549, t = 1.742, p = 0.082) in this context. Consequently, H3, H4 and H5 were rejected. H1 was rejected. Additionally, Attitude significantly influences behavioral intention ( $\beta$  = 0.698, t = 6.460, p = 0.000), that confirms H6. These findings offer insights into the factors that drive user perceptions and behavioral intentions when using the Dagin Market Hub application.

Coefficient Relationships *t*-Statistics *p*-Values Decision H1: Personal Attractiveness → Perceived Usefulness 0.771 11.519 0.000 Accepted H2: Perceived Ease of Use → Perceived Usefulness 0.213 2.738 0.006 Accepted H3: Perceived Usefulness → Attitude 0.549 0.082 Rejected 1.742 H4: Personal Attractiveness → Attitude -0.0030.010 0.992 Rejected H5: Perceived Ease of Use  $\rightarrow$  Attitude 0.244 0.860 0.390 Rejected 0.000 H6: Attitude → Behavioral Intention 0.698 6.460 Accepted

Table 5. Hypotheses Testing

# Discussion

This study found that attitudes significantly affect behavioral intention. The results of this study are in line with previous research, which shows that attitudes play an important role in influencing behavioral intentions, both in the context of e-marketing and financial technology such as mobile banking (Kanchanatanee et al., 2014; Shanmugam et al., 2014). This study proves that attitude has a positive influence on behavioral intention, and this result is consistent with the opinions of Ajzen (1985), Davis et al. (1989), and Hung et al. (2006). This finding is one of the important contributions of this study, which strengthens the theory and previous research on the role of attitude in influencing behavioral intention.

Thus, this study adds empirical evidence about the relationship between attitudes and behavioral intentions in various contexts while supporting the theory that has been proposed by previous researchers.

This study shows that attitude has a positive and significant influence on behavioral intention. This result is in line with previous studies such as those conducted by Kanchanatanee et al. (2014), Shanmugam et al. (2014), and Sondakh (Sondakh, 2017), which also explain that attitude has a positive relationship to behavioral intention. In this finding, attitude acts as the most influential factor in the intention to use the Dagin Market Hub application. This shows that the more positive the users' attitude towards the application, the greater their intention to use it. These findings strengthen the evidence that user attitudes play an important role in shaping behavioral intentions, especially in the context of using new technologies such as the Dagin Market Hub app.

Personal attractiveness has a negative and insignificant effect on attitude. This means that changes in the value of personal attractiveness are not directly proportional to changes in attitude. In other words, if there is an increase in personal attractiveness, it will be followed by a decrease in the level of attitude. However, statistically, the effect is not significant, so this relationship is not strong enough to be considered meaningful in the context of this study. Considering previous results, personal attractiveness was found to have an influence on attitude. For example, research by Kim et al. (2015) showed a positive and significant influence. The study implied that display characteristics of digital devices, such as screen size and curvature, exert positive psychological effects by triggering affective and hedonic qualities, especially in the mobile context. However, in this study, personal attractiveness had a negative and insignificant influence on attitude. This is due to the less attractive appearance of the Dagin Market Hub App, which may not provide enough visual appeal to increase users' positive attitudes towards the app. These findings highlight that personal attractiveness aspects of apps, such as visual appearance and design, play an important role in influencing user attitudes. However, in the context of the Dagin Market Hub App, a less attractive appearance appears to have a negative impact on user attitudes, although this effect is not statistically significant.

Personal attractiveness has a positive and significant influence on perceived usefulness. This shows that the more attractive the appearance or visual appeal of an application, the greater the user's perception of the application's usefulness. In other words, the attractive design of the application can increase users' perception that the application is useful in meeting their needs.

This result confirms the importance of visual and aesthetic aspects in influencing the perceived usefulness of an app, as shown by the positive and significant effect of personal attractiveness on perceived usefulness. These findings confirm the results of several previous studies that found that personal attractiveness has an influence on perceived usefulness. Research by Van der Heijden (2003) found a positive and significant effect, where the study successfully introduced the concept of visual appeal and empirically validated the model with website users. In this study, personal attractiveness also has a positive and significant influence on perceived usefulness, which is in line with Van der Heijden's (2003) findings, which explain that personal attractiveness has a positive relationship with perceived usefulness.

In this finding, the visual attractiveness of the Dagin Market Hub App plays an important role in increasing the perceived usefulness of the application. This suggests that users' attractiveness towards the app greatly influences their perception of the app's usefulness. This finding further reinforces the importance of personal attractiveness in creating perceived usefulness in digital applications, especially the Dagin Market Hub App.

Perceived ease of use has a positive but insignificant influence on attitude. This suggests that although perceived ease of use of the app has a positive relationship with user attitude, the influence is not strong enough or statistically significant in this study. In other words, an increase in perceived ease of use will not necessarily be followed by a significant change in attitude towards the app. This statement shows that despite the positive trend, Perceived ease of use has not been a significant factor in influencing users' attitude towards the app in the context of this study. This finding is in contrast to previous studies. For

example, Kanchanatanee et al. (2014) showed a large positive and significant effect. In the study, for SME owners in three southern border provinces of Thailand, attitude towards using e-marketing was the most influential factor in intention to use E-Marketing. However, the results of this study show different findings, where perceived ease of use has a positive but insignificant influence on attitude. This is because most users are not interested in using the Dagin Market Hub application, so the perceived ease of use does not have a significant impact on their attitude.

The last findings of this study show that perceived ease of use has a positive and significant influence on perceived usefulness. This means that the easier an app is to use, the higher the user's perception of its usefulness. In other words, the ease of use of the Dagin Market Hub application contributes significantly to increasing users' perceptions that the application is useful. This finding confirms that ease of use plays an important role in shaping the perceived usefulness of applications, which is in line with theories that have been widely recognized in previous literature. The findings of this study support the results of similar research. For example, Shah and Attiq (2018) stated that individuals' intention to use technology is determined by perceived ease of use and perceived usefulness. In this study, perceived ease of use has a positive and significant influence on perceived usefulness, which is in line with the findings of Shah & Attiq (2018), which explain that perceived ease of use has a positive relationship with perceived usefulness. This finding shows that perceived ease of use plays an important role in influencing perceived usefulness. This is due to the ease of understanding in using the Dagin Market Hub Application, which encourages users to be more interested in using it. Therefore, the perceived ease of use variable is proven to have a significant effect on perceived usefulness in the context of this application.

## Conclusion

This study aims to explore the influence of several factors, namely personal attractiveness, perceived ease of use, and perceived usefulness, on attitude and behavioral intention in the context of using the Dagin Market Hub application. Personal attractiveness has a positive and significant influence on perceived usefulness, suggesting that the visual appeal aspect of this app plays an important role in users' perceived usefulness. However, personal attractiveness did not have a significant influence on attitude, which is likely due to the app's less appealing appearance to most users. Perceived ease of use has a positive and significant influence on perceived usefulness, which is in line with previous research findings, which show that the easier an app is to use, the higher the perceived usefulness perceived by users. Although perceived ease of use has a positive influence on attitude, this influence is not significant. This indicates that the ease of use of the application is not strong enough to significantly influence user attitudes. Attitude is proven to have a positive and significant influence on behavioral intention, supporting the findings of previous research, which states that a positive attitude towards technology will increase behavioral intention to use it. Overall, this study confirms that aspects of ease of use and visual appeal of an app play an important role in shaping its perceived usefulness. However, in the context of the Dagin Market Hub App, these factors are not strong enough to fully influence user attitudes. These results contribute to the existing literature and offer important insights for app developers on the importance of visual elements and ease of use in influencing user perceptions and intentions.

#### How to cite:

Anggriani, D., Yudiatmaja, W. E., & Firman, F. (2024). Use Intention of Marketing-Based Android Application among Small and Medium Enterprises in Indonesia. *Policy and Social Review*, 4(1), pp. 11-24.

# References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11–39). Springer.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. https://doi.org/10.1002/hbe2.195
- Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. *Applied Computing and Informatics*, 12(1), 27–50.
- Al-Swidi, A., Huque, S. M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). The role of subjective norms in the theory of planned behavior in the context of organic food consumption. *British Food Journal*, *116*(10), 1561–1580.
- Alharbi, N., Papadaki, M., & Dowland, P. (2017). The impact of security and its antecedents in behaviour intention of using e-government services. *Behaviour & Information Technology*, *36*(6), 620–636.
- Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results [Ph.D Thesis Massachusetts Institute of Technology]. https://doi.org/10.1126/science.146.3652.1648
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–339.
- Davis, F. D. ., Bagozzi, R. P. ., & Warshaw, P. R. . (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*(8), 982–1003.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*, 22(14), 1111–1132. https://doi.org/10.1111/j.1559-1816.1992.tb00945.x
- Di Stefano, G., Ruggieri, S., Bonfanti, R. C., & Faraci, P. (2023). Entrepreneurship on social networking sites: The roles of attitude and perceived usefulness. *Behavioral Sciences*, *13*(4), 323. https://doi.org/10.3390/bs13040323
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://www.jstor.org/stable/3151312
- Fu, H., Mensah, I. K., Wang, R., Gui, L., Wang, J., & Xiao, Z. (2022). The predictors of mobile government services adoption through social media: A case of Chinese citizens. *Information Development*, 2. https://doi.org/10.1177/02666669221114649
- Garcia II, J. M. S., Himang, M. M., Himang, C. M., Densing, G. R. R., Alit, M. J. B., Burgos, N. P., Bongo, M. F., & Ocampo, L. A. (2023). An extended technology adoption model with perceived visual attractiveness to assess academic web portals. *Trends in Higher Education*, *2*(1), 152–167. https://doi.org/10.3390/higheredu2010010
- Gefen, D., & Straub, D. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the Association for Information Systems*, 1(1), 1–30.
- Ghapanchi, A. H., Purarjomandlangrudi, A., McAndrew, A., & Miao, Y. (2020). Investigating the impact of space design, visual attractiveness and perceived instructor presence on student adoption of learning management systems. *Education and Information Technologies*, *25*(6), 5053–5066. https://doi.org/10.1007/s10639-020-10204-5
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th Ed.). Cengage. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer. https://doi.org/10.1080/10705511.2022.2108813
- Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business

- performance. Sustainability (Switzerland), 11(14), 1-23. https://doi.org/10.3390/su11143811
- Hatamifar, P., Ghader, Z., & Nikjoo, A. (2021). Factors affecting international tourists' intention to use local mobile apps in online purchase. *Asia Pacific Journal of Tourism Research*, 26(12), 1285–1301. https://doi.org/10.1080/10941665.2021.1983626
- Hung, S. Y., Chang, C. M., & Yu, T. J. (2006). Determinants of user acceptance of the e-Government services: The case of online tax filing and payment system. *Government Information Quarterly*, 23(1), 97–122. https://doi.org/10.1016/j.giq.2005.11.005
- Jadhav, G. G., Gaikwad, S. V., & Bapat, D. (2023). A systematic literature review: digital marketing and its impact on SMEs. *Journal of Indian Business Research*, 15(1), 76–91. https://doi.org/10.1108/JIBR-05-2022-0129
- Kanchanatanee, K., Suwanno, N., & Jarernvongrayab, A. (2014). Effects of attitude toward using, perceived usefulness, perceived ease of use and perceived compatibility on intention to use e-marketing. *Journal of Management Research*, 6(3), 1–13. https://doi.org/10.5296/jmr.v6i3.5573
- Kim, K. J., Shin, D. H., & Park, E. (2015). Can coolness predict technology adoption? Effects of perceived coolness on user acceptance of smartphones with curved screens. *Cyberpsychology, Behavior, and Social Networking*, *18*(9), 528–533. https://doi.org/10.1089/cyber.2014.0675
- Ming, K. L. Y., & Jais, M. (2022). Factors Affecting the Intention to Use E-Wallets During the COVID-19 Pandemic. *Gadjah Mada International Journal of Business*, 24(1), 82–100. https://doi.org/10.22146/gamaijb.64708
- Munim, Z. H., & Noor, T. (2020). Young people's perceived service quality and environmental performance of hybrid electric bus service. *Travel Behaviour and Society*, *20*, 133–143.
- Natarajan, T., Balasubramanian, S. A., & Kasilingam, D. L. (2018). The moderating role of device type and age of users on the intention to use mobile shopping applications. *Technology in Society*, *53*, 79–90. https://doi.org/10.1016/j.techsoc.2018.01.003
- Peng, M. Y. P., Xu, Y., & Xu, C. (2023). Enhancing students' English language learning via M-learning: Integrating technology acceptance model and S-O-R model. *Heliyon*, *9*(2), e13302. https://doi.org/10.1016/j.heliyon.2023.e13302
- Qosasi, A., Permana, E., Muftiadi, A., Purnomo, M., & Maulina, E. (2019). Building SMEs' competitive advantage and the organizational agility of apparel retailers in indonesia: The role of ICT as an initial trigger. *Gadjah Mada International Journal of Business*, 21(1), 69–90. https://doi.org/10.22146/gamaijb.39001
- Raza, S. A., Umer, A., & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. *International Journal of Electronic Customer Relationship Management*, 11(1), 44–65. https://doi.org/10.1504/ijecrm.2017.10007744
- Ringle, C. M., Sarstedt, M., Sinkovics, N., & Sinkovics, R. R. (2023). A perspective on using partial least squares structural equation modelling in data articles. *Data in Brief, 48*. https://doi.org/10.1016/j.dib.2023.109074
- Rogers, E. M. (1983). Diffusion of innovations (3rd Ed.). The Free Press.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th Ed.). The Free Press.
- Roy, S. K., Balaji, M. S., & Nguyen, B. (2020). Consumer-computer interaction and in-store smart technology (IST) in the retail industry: The role of motivation, opportunity, and ability. *Journal of Marketing Management*, *36*(3–4), 299–333.
- Salameh, A. A. (2022). An intention to use mobile applications for medical supplies and equipment ordering in clinics. *Frontiers in Public Health*, 10. https://doi.org/10.3389/fpubh.2022.1021291
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224–253.
- Schein, E. H. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review*, 25(2), 3–16.

- Shah, H. J., & Attiq, S. (2018). Impact of technology quality, perceived ease of use and perceived usefulness in the formation of consumer's satisfaction in the context of e-learning. *Abasyn Journal of Social Sciences*, *9*(1), 124–140.
- Shanmugam, A., Savarimuthu, M. T., & Wen, T. C. (2014). Factors affecting Malaysian behavioral intention to use mobile banking with mediating effects of attitude. *Academic Research International*, *5*(2), 236–253.
- Sondakh, J. J. (2017). Behavioral intention to use e-tax service system: An application of technology acceptance model. *European Research Studies Journal*, 20(2), 48–64.
- Su, C. Y., & Chiu, C. H. (2021). Perceived enjoyment and attractiveness influence Taiwanese elementary school students' intention to use interactive video learning. *International Journal of Human-Computer Interaction*, *37*(6), 574–583. https://doi.org/10.1080/10447318.2020.1841423
- Suki, N. M., & Suki, N. M. (2011). Exploring the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscribers' intention towards using 3G mobile services. *Journal of Information Technology Management*, 22(1), 1–7.
- Susanty, A., Handoko, A., & Puspitasari, N. B. (2020). Push-pull-mooring framework for e-commerce adoption in small and medium enterprises. *Journal of Enterprise Information Management*, 33(2), 381–406. https://doi.org/10.1108/JEIM-08-2019-0227
- Taiminen, H. M., & Karjaluoto, H. (2015). The usage of digital marketing channels in SMEs. *Journal of Small Business and Enterprise Development*, 22(4), 633–651. https://doi.org/10.1108/JSBED-05-2013-0073
- Van der Heijden, H. (2003). Factors influencing the usage of websites: The case of a generic portal in The Netherlands. *Information & Management*, 40(6), 541–549.
- Vroom, V. H. (1964). Work and motivation. Wiley.
- Wilson, N., Keni, K., & Tan, P. H. P. (2021). The role of perceived usefulness and perceived ease-of-use toward satisfaction and trust which influence computer consumers' loyalty in china. *Gadjah Mada International Journal of Business*, 23(3), 262–294. https://doi.org/10.22146/gamaijb.32106
- Yudiatmaja, W. E. (2021). Public service motivation and service quality of local government employees: A moderated mediation analysis. *Policy & Governance Review*, *5*(1), 33–49.
- Yudiatmaja, W. E., Salomo, R. V., & Prasojo, E. (2021). Smart Technologies, Artificial Intelligence, Robotics, and Algorithms (STARA) competencies during COVID-19: A confirmatory factor analysis using SEM approach. *Journal of Physics: Conference Series, 2049*(1), 012014. https://doi.org/10.1088/1742-6596/2049/1/012014
- Yudiatmaja, W. E., Salomo, R. V., & Prasojo, E. (2023). Fostering innovative behavior of millennial public employee through leadership styles and organizational trust. *SAGE Open*, *13*(2), 1–17. https://doi.org/10.1177/21582440231178545
- Yudiatmaja, W. E., Yoserizal, Y., Edison, E., Kristanti, D., Tovalini, K., Samnuzulsari, T., & Malek, J. A. (2022). Adoption of online learning in Indonesian higher education during the COVID-19 pandemic. *The Journal of Behavioral Science*, *17*(2), 73–89. https://so06.tci-thaijo.org/index.php/IJBS/article/view/255171
- Zeithaml, V. A. (2002). Service excellence in electronic channels. *Managing Service Quality*, *12*(3), 135–139. Zhao, H., Peng, H., & Li, W. (2022). Analysis of factors affecting individuals' online consumer credit behavior: Evidence from China. *Frontiers in Psychology*, *13*, 1–14. https://doi.org/10.3389/fpsyg.2022.922571