Journal of Posthumanism
2025
Volume: 5, No: 6, pp. 3634-3648
ISSN: 2634-3576 (Print) | ISSN 2634-3584 (Online)
posthumanism.co.uk

DOI: https://doi.org/10.63332/joph.v5i6.2495

Factors Influencing the Intention to Use Touch and Go E-Wallet Among Malaysian Citizens

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Abstract

This study examines the factors influencing the intention to use the Touch n Go e-Wallet among Malaysian citizens, as online payment methods have gained popularity due to technological advancements. The research investigates the impact of individual variations on perceived ease of use, as well as the influence from features of mobile payment systems on perceived usefulness and perceived ease of use, all with regards to the intention to use the Touch n Go e-Wallet. The study gathered responses from 166 participants in Malaysia through a questionnaire distributed via social media platforms and analyzed the data using Statistical Package for Social Science (SPSS), structural equation modeling (SEM), and partial least squares (PLS) or SmartPLS 4.0 software. The findings reveal that individual variations have a negative effect on perceived ease of use, while the features of mobile payment systems have a positive impact on perceived usefulness and perceived ease of use, ultimately influencing the intention to use the Touch n Go e-Wallet. The study's results can benefit both users and the company, as users can conveniently utilize the service for transactions, and the company can improve its product innovation and services to meet customer needs and maintain competitiveness in the market.

Keywords: *Individual Variations, Features of Mobile Payment Systems, Perceived Ease of Use, Perceived Usefulness, Intention to Use Touch and Go E-Wallet.*

Introduction

Modern technology has replaced outdated technology, including consumer payment methods, leading to convenient online transactions through smartphones and laptops for purchasing products and services. This method streamlines consumer experience and time management by eliminating the need for physical purchases. (Azwa et al., 2022) confirm its effectiveness as an "e-wallet," a cashless payment method. Sellers can receive customer payments through their proprietary QR codes, enabling cashless transactions. Examples of cashless payment software include Shopee Pay, Grab Pay, Boost, Touch n Go E-wallet, Alipay, FavePay, and more (Soegoto et al., 2020). Each software has unique features and applications. However, Touch n Go leads in e-wallet usage with 73% of respondents, according to a survey by Oppotus (Low et al., 2022). Maybank QRPay follows with 37% and Boost with 36% for the 3rd quarter of 2022.

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Other than that, Touch n Go e- Wallet also has lots of advantages among other e-Wallet competitors that attract people of all ages, including Malaysian citizens. That is why this study is currently being conducted in order to rectify the factors influencing the intention to use Touch n Go e-Wallet among Malaysian citizens. According to (Kim et al., 2010), individual variations and features of mobile payment systems significantly influence perceived ease of use and perceived usefulness. These factors have been identified as key indicators of intention to use Touch n Go e-Wallets. This study aims to examine the relationship between individual variations, mobile payment system features, perceived ease of use, perceived usefulness, and intention to use Touch n Go e-Wallet. Here are the objectives in order to achieved this study. (1) To investigate the positive effect of individual variations on perceived ease of use towards the intention to use Touch n Go e-Wallet. (2) To investigate the positive effect of features of mobile payment systems on perceived usefulness towards the intention to use Touch n Go e-Wallet and (3) To investigate the positive effect of features of mobile payment systems on perceived ease of use towards the intention to use Touch n Go e-Wallet.

Mobile Payment

Mobile payment, also known as "m-payment," is a convenient alternative method for purchasing goods, services, and bills using mobile devices such as smartphones (Kim et al., 2010). It eliminates the need for physical interaction and relies on online retail stores. To enable successful transactions, mobile devices and wireless technologies are required (Kim et al., 2010). The e-wallet system handles the flow of money and requires users to link their accounts for authentication and authorization (Antovski et al., 2003; Ding et al., 2003). Fintech News Malaysia reports that there are 53 e-wallets in the country, accounting for 19% of the fintech industry. Ipsos conducted a study showing that Touch n Go e-wallet is the preferred choice in Malaysia (Dzul et al., 2022). Other than that, The Technology Acceptance Model (TAM) is a widely used framework for studying users' acceptance of technology, including mobile payments. Introduced by Fred Davis over 25 years ago, TAM has been successful in examining factors that influence user acceptance. It is adaptable and compatible with the unique characteristics of mobile payments (Marangunić et al., 2015). The Technology Acceptance Model (TAM) suggests that users' attitudes and intentions towards system usage are influenced by their perceived ease of use and usefulness. TAM considers the complex relationship between system characteristics, users' attitudes, and actual system usage. Users' attitudes are impacted by perceived utility and convenience. Recent studies have shown that perceived ease of use plays a significant role in determining users' intention, either directly or indirectly through its influence on perceived usefulness (Agarwal et al., 1999; Davis et al., 1989; Venkatesh et al., 1996).

Literature Review

Individual Variations

Individual variations are recognized as the most important elements influencing both Information system for its success and failure and also interaction between technology (Agarwal et al., 1999; Chen et al., 2000; Dillon et al., 1996; Karahanna et al., 2002; Sun & Zhang, 2006; Zmud et al., 1979). From a mobile commerce standpoint, it seems that different people are anticipated to have different levels of engagement with mobile commerce. In order to determine what factors, influence people's willingness to engage in mobile commerce, previous research has developed a user-centric model (Bachfischer et al., 2004; Hassanein, 2002; Zmijewska et al., 2004). In the user behaviour studies of mobile payment, there is rising interest in individual variations.

Features of Mobile Payment Systems

Features of this system have the capacity to influence both the perceived ease of use and the perceived utility of the information system (Davis et al., 1989). Previous research has shown strong correlations between the system's qualities and the theoretical concepts of the Technology Acceptance Model (TAM) (Davis et al., 1993; Venkatesh et al., 1996). As mobile commerce and mobile payments become more relevant, it is crucial to identify specific features of the system and examine how they individually influence the perceived ease of use and usefulness of mobile payments. The term "mobile technology" refers to various innovations that facilitate real-time interaction and information sharing between people and machines in different locations (Lim et al., 2008).

Personal Innovativeness

An individual's willingness to try new information systems is known as personal innovativeness (Chang et al., 2005). This personal innovativeness significantly influences consumers' choices when it comes to selecting products during online shopping (Blake et al., 2003; Herrero et al., 2008). Research has shown that an individual's willingness to adopt new technology is well predicted by their personal innovativeness in specific domains (Yi et al., 2006). Innovative individuals are often described as talkative, curious, energetic, risk-taking, and seeking stimulation. They actively seek out new knowledge related to innovative ideas (Bhatti et al., 2007). In the context of mobile commerce, where many people are still unfamiliar with new mobile services, personal innovativeness becomes crucial in determining their likelihood to embrace new mobile technology.

H1: Personal innovativeness has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Mobile Payment Knowledge

This study aims to investigate the relationship between mobile payment knowledge and the desire to use Touch n Go e-Wallet as a mobile payment method. Previous research on mobile payment knowledge is limited, so this study aims to fill that gap. When it comes to websites, beginners tend to focus on basic and visually appealing aspects, while experts rely on their knowledge to simplify information processing and distinguish between important and irrelevant information (Rieh et al., 2004). The number of smartphone users has surpassed those using fixed Internet-connected lines, indicating the increasing importance of mobile devices (Dholakia et al., 2002). However, it is essential to understand whether consumers who already use certain mobile services and are comfortable sharing personal information with mobile vendors are open to making purchases through online transactions using their phones. This study aims to explore how mobile payment knowledge influences the perceived ease of use, which, in turn, affects consumers' desire to use Touch N Go e- Wallet.

H2: Mobile payment knowledge has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Reachability

Mobile device reachability refers to the ability for individuals to be contacted anytime and anywhere, with the option to limit accessibility to specific people or times (Au et al., 2008; Ng-Kruelle et al., 2002; Ondrus et al., 2006). This feature allows mobile payment service providers to communicate with their users. In the context of mobile payments, active participation from

service providers is necessary when a consumer wants to make a purchase using mobile payment. In certain situations, it may be important to contact the mobile payment user for clarification or updates. Financial service providers, for example, may need to reach out to m-payment consumers to provide information about recent mobile transactions or account balances.

H3a: Reachability has a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H3b: Reachability has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Mobility

Mobile technology's most significant aspect is mobility, which allows users to access services anywhere and anytime through wireless networks using various mobile devices like PDAs and mobile phones (Au & Kauffman, 2008; Clarke et al., 2001; Hassanein et al., 2002; Niina et al., 2007; Nohria & Leestma, 2001). Unlike traditional electronic commerce, where transactions are primarily conducted over wired Internet connections, mobile computing provides consumers with greater flexibility and value. It enables them to access time-sensitive information and services regardless of their location or the time of day (Anckar & D'Incau, 2002; May et al., 2001). The key features of mobility include the freedom of time and location, often referred to as "anytime and anyplace computing" (Au & Kauffman, 2008). By incorporating temporal and geographical elements, mobility enhances processing power and expands access to information, communication, and services at any time and in any location.

H4a: Mobility has a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H4b: Mobility has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Compatibility

Research has shown that mobile banking outperforms traditional banking methods. The attitudes towards adopting mobile services are positively influenced by their suitability to users' needs and lifestyles, as well as the opportunity to try out new services (N. Mallat et al., 2004; Xiaojun et al., 2004). Previous studies have found a correlation between perceived usefulness and ease of use in the Technology Acceptance Model (TAM) (Mallat & Dahlberg, 2005). It is reasonable to assume that perceived usefulness and ease of use are closely related and, along with compatibility, are the main predictors of adoption (N. Mallat et al., 2006). Therefore, compatibility has a significant impact on users' intention to use Touch N Go e-Wallet as their preferred method of mobile payment, through the perceived ease of use and perceived usefulness.

H5a: Compatibility has a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H5b: Compatibility has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Convenience

People believe in the benefits of technology when it improves their lives and makes daily tasks easier (O.O.Obe et al., 2007). Convenience is crucial for customer satisfaction, according to Amir et al., 2014) and emphasized in marketing and consumer behaviour literature. Convenience plays a significant role in the success of mobile commerce (Xu & Gutiérrez, 2006). Convenience is crucial in mobile commerce and marketing because it provides time and location usefulness to users (Clarke et al., 2001). The desire to use mobile services is influenced by factors like the availability of choices and time constraints (N. Mallat et al., 2006). Users find e-wallets useful, user-friendly, and easy to understand, leading to increased satisfaction (Nadhira et al., 2021).

H6a: Convenience have a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H6b: Convenience have a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Product Features

Product features are unique characteristics that differentiate a product from others. They play a vital role in helping buyers find the product that meets their needs, especially when multiple companies offer similar products. Having distinct product features is important as it alleviates the stress of choosing among various options. Additionally, (Ohri et al.,2021) simplified this idea by stating that product features provide consumers with reasons to choose a particular product or application from one seller over competitors. Buyers prefer digital payment methods, and this preference is strongly linked to their desire to use the Touch n Go e-Wallet (Dr. Yanto Ramli et al., 2020). The features of the e-Wallet, such as incentives (rewards and vouchers) and go+ services, also play a significant role in influencing users' intent to use the product. These features allow users to easily add money to their accounts and store funds directly from their bank. Users can make online transactions to transfer money and use it for purchases, with the funds automatically credited to their account. The Go+ service offers a bonus rate on the total balance, within the account's limit.

H7a: Product features have a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H7b: Product features have a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Perceived Trust

A digital wallet, also known as an e-wallet, allows for electronic money transfers without the need for physical currency. These transfers can be made between devices like mobile phones or retail machines (Mallik & Gupta, 2020). With the increasing popularity of mobile payment methods and advancements in technology, e-wallets are becoming more common. As a result, there is a growing interest among consumers to use these digital wallets in order to enjoy their benefits. Additionally, due to the rapid pace of technological advancements, UPI-based payment apps like BHIM, Phone-Pe, and Google Pay are gradually replacing e-wallets, but the reasons behind this shift are not yet fully understood. Mobile payments raise concerns about the vulnerability of personal information to hackers. It is crucial for e-wallets to prioritize the protection of customers' financial information to maintain their trust. Touch N Go e-Wallet ensures the highest level of security, which helps build trust among customers.

H8a: Perceived trust has a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H8b: Perceived trust has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Social Influence

Social influence plays a significant role in shaping consumers' intentions to use e-wallets for online transactions. It refers to how people perceive others' influence on their purchasing decisions using mobile technology. Factors such as family, friends, colleagues, and neighbours can impact individuals' choices to use an e-wallet (P.Sarika et al., 2019). Social influence reflects the environmental conditions that motivate customers to adopt new products or services (Venkatesh et al., 2012). Studies have shown that subjective norms and social factors can influence users' intentions to utilize internet services and adopt new technology-based products (Chaouali et al., 2016; Martins et al., 2014). Measuring social influence can help assess its impact on behaviour and plans to use e-money, using models such as UTAUT based on TAM.

H9a: Social influence has a significant effect towards perceived usefulness for the intention to use Touch n Go e-Wallet.

H9b: Social influence has a significant effect towards perceived ease of use for the intention to use Touch n Go e-Wallet.

Perceived usefulness

Perceived usefulness (PU) refers to the belief that using a system or technology will improve work performance. It is the idea that consumers hold, based on their cognitive anticipation, that utilizing certain technology can enhance the quality of their work and help them achieve financial and lifestyle goals (Tahar et al., 2020; Yang et al., 2021). Consumers perceive that using a futuristic system can make their transactions more efficient and contribute to their overall productivity. Research has indicated that perceived usefulness has a positive influence on the intention to use mobile payments (Gia-Shie & Pham Tan, 2016).

Perceived ease of use

Perceived ease of use refers to a potential user's expectation of how effortless it will be to use a particular system or technology (Davis et al., 1989). It is an important factor influencing user attitudes, behaviours, and intentions to adopt and utilize a technology (Chawla & Joshi, 2020). Research suggests that perceived ease of use plays a crucial role in consumers' decision-making when purchasing a product, such as an e-wallet. Consumers seek to benefit from the convenience and functionality of the system to meet their needs and make purchases. Additionally, a consumer's past purchasing experiences may influence their perception of using e-wallets.

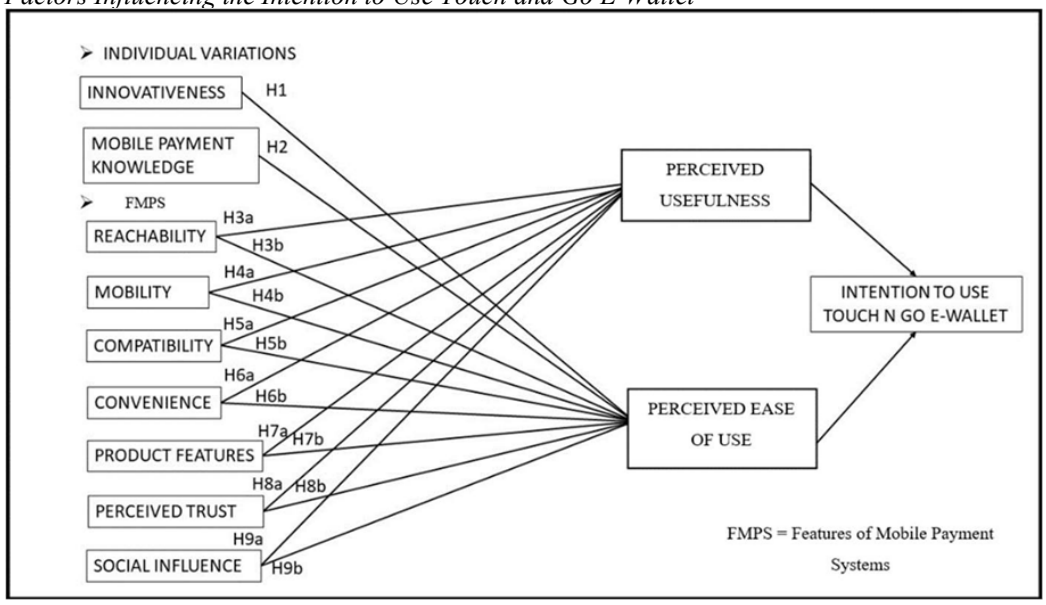

Figure 1: Research Framework

Research Methodology

Convenience sampling is used in this research to collect data from the Malaysian population. It involves selecting individuals who are easily accessible or meet specific criteria (Ilker et al., 2016). The target population for this study is approximately 420 subjects, and a minimum sample size of 201 respondents is suggested according to the table by Krejcie and Morgan (1970). The researchers used an online questionnaire, specifically a Google Form, which allows for easy distribution through online platforms such as WhatsApp, Telegram, Instagram, and Facebook. The questionnaire consists of three sections: demographic profile, individual variations, and features of mobile payment systems. The questions in sections B and C use a five-point Likert scale ranging from strongly disagreeing (1) to strongly agreeing (5).

Findings and Results

Demographic Profile of Respondents

In this study, the researcher only gained 166 out of 201 target respondents from the questionnaire. This indicates that 83% response rate gained. (Booker et al., 2021) stated that if a response rate is 80% or higher, it is considered as excellent. Based on table 1, the respondents were almost evenly split between males (49.4%) and females (50.6%). The majority of respondents were aged 18-25 years (56%), with smaller proportions in the age groups of 26-35 years (15.7%), 46-55 years (12.7%), 36-45 years (8.4%), and 56 years or older (7.2%). Most respondents were college or university students (82.5%), followed by Master's students (10.8%), senior high school students (3.6%), secondary school students or below (2.4%), and Ph.D. students (0.6%). The largest occupational group was students (48.8%), followed by company employees (20.5%), self-employed and employees in public institutions (8.4% each), retired individuals (6%), state civil servants (4.8%), and others (3%). The majority of respondents belonged to the B40 income category (57.2%), followed by M40 (30.7%) and T20 (12%). 84.9% of respondents used the Touch N Go e-Wallet for online payments, while 12.7% did not use it.

The most common usage frequency was 3 times a month (44%), followed by various other frequencies (22.8%), 6 times a month (18.7%), and 9 times a month (16.3%). The majority (42.8%) had been using the Touch N Go e-Wallet for 1 year, followed by 3 months (20.5%), 6 months (9.6%), and 9 months (3.6%). Convenience was the main reason for using the Touch N Go e-Wallet (56.6%), followed by user mobility (23.5%) and user-friendliness (12%). Some respondents provided other reasons or additional comments (7.8%).

Variable	Descriptions	Frequency	Percentage (%)	Variable	Descriptions	Frequency	Percentage (%)
1) Gender	Female	84	50.6	5) Monthly income	T20	20	12
					M40	51	30.7
	Male	82	49.4		B40	95	57.2
					Total	**166**	**100**
	Total	**166**	**100**	6) Likeliness of using Touch n Go e-Wallet	Yes	141	84.9
2) Age	17 or below	0	0		No	21	12.7
	18 - 25	93	56		Others	4	2.4
	26 - 35	26	15.7		**Total**	**166**	**100**
	36 - 45	14	8.4	7) Tng e-Wallet use frequency per month	3 Times	73	44
	46 - 55	21	12.7		6 Times	31	18.7
	56 or over	12	7.2		9 Times	27	16.3
	Total	**166**	**100**		Others	35	22.8
3) Educational level	Secondary school or below	4	2.4		**Total**	**166**	**100**
	Senior High School (STPM)	6	3.6	8) Period of Tng e-Wallet use	3 Month	34	20.5
	College/University	137	82.5		6 Month	16	9.6
	Master	18	10.8				
	Ph.D.	1	0.6		9 Month	6	3.6
	Total	**166**	**100**				
4) Occupational level	Student	81	48.8		1 Year	71	42.8
	Company Employee	34	20.5		Others	39	23.4
	State civil servant	8	4.8		**Total**	**166**	**100**
	Self-employed	14	8.4	9) Reason for using Tng e-Wallet	Convenience	94	56.6
	Employee in Public Institutions	14	8.4		User Friendly	20	12
	Retired	10	6		Mobility	39	23.5
	Others	5	3		Others	13	7.8
	Total	**166**	**100**		**Total**	**166**	**100**

Table 1: The Respondent's Demographic Data

Assessment of Measurement Model

The researcher used Smart-PLS 4.0 Software to assess the measurement of reflective constructs. Four criteria were considered: indicator reliability, internal consistency, convergent validity, and discriminant validity (Hair et al., 2011; Oliver Gotz et al., 2010). Indicator reliability determines if an indicator's variation can be explained by its construct (Hair et al., 2011; Oliver et al., 2010). Outer loadings were used to test the indicator's dependability. Figure 2 shows the results of outer loadings after calculating pls-Sem algorithm. Table 2 meanwhile shows the analysis that most outer loadings were above 0.7, indicating satisfactory indicator reliability. Two indicators, PI 1 and PI 2, had slightly lower loadings (0.613 and 0.657 respectively), but they were still close to the acceptable threshold. Overall, the results provided evidence of achieved indicator reliability for all constructs.

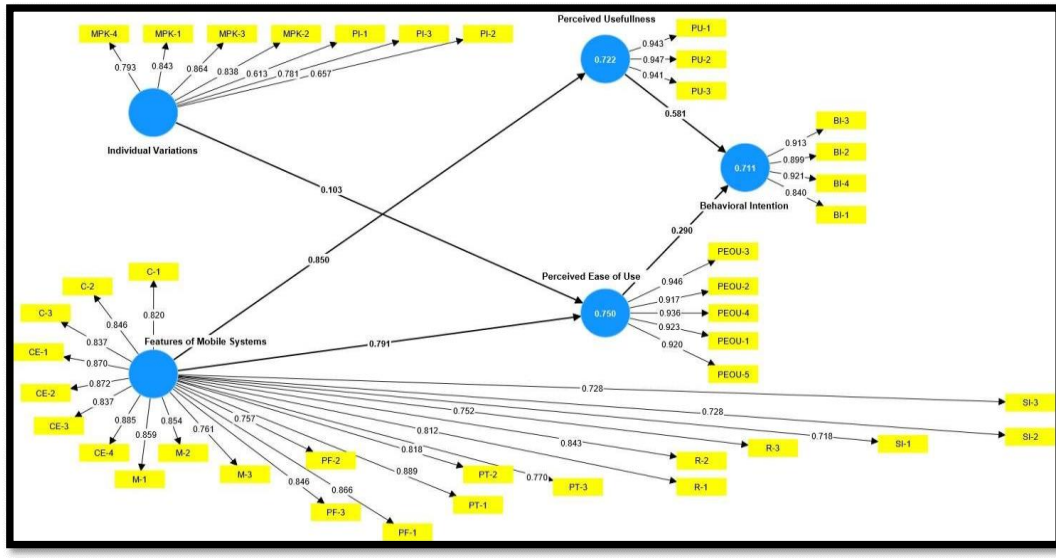

Figure 2: Results After Calculating Pls-Sem Algorithm (Outer Loadings And R- Sqaured)

The average variance extracted (AVE), where a value greater than 0.5 indicates satisfactory convergent validity (Hair et al., 2011). The findings in table 3 demonstrate that all AVE values exceed 0.5, indicating achieved convergent validity for the reflective constructs.

Construct	AVE	Composite Reliability (rho _ a)	Cronbach's Alphas
Behavioral Intention	0.799	0.922	0.916
Individual Variations	0.601	0.898	0.886
Perceived Ease of use	0.862	0.960	0.960
Perceived Usefulness	0.891	0.939	0.939
Features of Mobile Systems	0.670	0.978	0.976

Table 3: Quality Criteria of Measurement Models

Assessment of Structural Model

The study used SMARTPLS 4.0 Software to analyze the structural model. The analysis focused on the significance of the structural paths, predictive relevance, and predictive power. The researcher performed Bootstrapping with 5000 samples and 166 cases, figure 3 shows the results

outer loadings of P-Value and R-sqaured after calculating bootstrapping. The results in table 4 showed that five relationships were significant at a 5% level. The predictive relevance (Q-Squared) analysis in table 5 indicated that the model could accurately predict the endogenous construct indicators, as all Q-Squared values were greater than zero. The R-Squared value in table 5 also revealed that the independent variables accounted for 71% of the variation in behavior intention, while the remaining 29% was attributed to other factors. This shows that independent variables have a significant effect towards dependent variable, only few that doesn't have the effect towards each other.

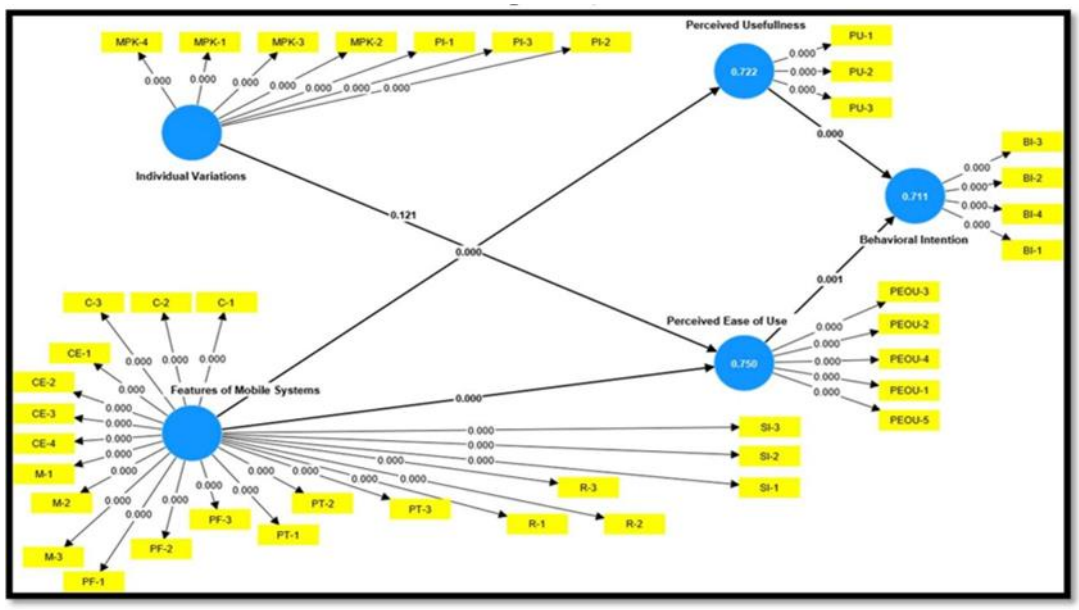

Figure 3: Results After Calculating Bootstrapping (Outer Loadings Of P-Value And R- Sqaured)

Relation	Path Coefficient (absolute t-statistics)			
	Original Sample (O)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values, Supported?
FOMS -> PEOU	0.791	0.059	13.432	0.00, Yes
FOMS -> PU	0.850	0.043	19.633	0.00, Yes
IV-> PEOU	-0.103	0.066	1.551	0.121, No
PEOU -> BI	0.290	0.091	3.204	0.001, Yes
PU -> BI	0.581	0.101	5.749	0.00, Yes

Significant at 5%/0.05 (1.96)

(Two-tailed)

Table 4: Structural Model Results

Endogenous Variable	R-Squared	Q-Squared (1-SSE/SSO)
BI	0.711	0.687
PEOU	0.750	0.739
PU	0.722	0.714

Table 5: R-squared and Q-squared Table

Discussions

For the research question 1, the research hypothesis for this question is unsupported due to the value of the path coefficient of p value which is 0.121, this value is greater than the indicator of the significant level of 5% (0.05). This means that the individual variations such as personal innovativeness and mobile payment knowledge have a negative effect towards perceived ease of use for the intention to use Touch n go e-Wallet.

For the research question 2, the research hypothesis for this question is well supported with the value of path coefficient of p value gaining around 0.00, this value is less than the indicator of the significant level of 5% (0.05). This means that the features of mobile payment systems such as reachability, mobility, compatibility, convenience, product features, perceived trust and social influence have a positive effect towards perceived usefulness for the intention to use Touch n go e-Wallet.

For the research question 3, the research hypothesis for this question is well supported with the value of path coefficient of p value gaining around 0.00, this value is less than the indicator of the significant level of 5% (0.05). This means that the features of mobile payment systems such as reachability, mobility, compatibility, convenience, product features, perceived trust and social influence have a positive effect towards perceived ease of use for the intention to use Touch n go e-Wallet.

Conclusion

The study found that mobile payment systems have practical implications for both the community and companies in the market. For the community, these systems offer accessibility and convenience, making payments quick and easy. This can save time and effort compared to traditional methods. For companies, implementing mobile payment systems can increase sales and revenue by providing a convenient payment option that improves the overall customer experience. It also allows companies to analyze customer behavior and make data-driven decisions. In summary, mobile payment systems benefit both the community and companies by offering convenience and improving the payment experience. Limitation of this study is the respondents gained. In this study, the researcher targeted around 201 questionnaires to be distributed, but due to time constraints, only 166 respondents were included. The questionnaires were distributed through social media platforms, word of mouth, and among close friends, family, and university community members. Another limitation is that there may be additional individual variations and features of mobile payment systems that could influence the intention to use the Touch 'n Go e-Wallet. Future studies could explore factors such as cognitive activity, self-efficacy, localization, accessibility, personalization, and ubiquity in relation to mobile payment systems. For future researchers, they can widen the scope of the study to include

foreigners residing in Malaysia who use e-wallet. This broader perspective would provide insights into the usage intention among a more diverse population. Other than that, Increasing the sample size to enhance the study's reliability and statistical analysis. This can be achieved by collecting data from a larger number of respondents over an extended period, leading to improved statistics and more robust conclusions. Lastly, exploring other individual variations and features of mobile payment systems that have been previously studied. This allows for addressing research gaps and providing fresh perspectives on other applications or software utilizing online payment processes.

References

Agarwal, R., & Prasad, J. (1999). Are Individual Differences Germane to the Acceptance of New Information Technologies? Decision Sciences, 30(2), 361-391. doi:https://doi.org/10.1111/j.1540-5915.1999.tb01614.x

Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. Cogent Business & Management, 7(1), 1804181. doi:10.1080/23311975.2020.1804181

Amir Khazaei, H. M., Ebrahim Samiey, Hossein Najafi. (2014). The Effect of Service Convenience on Customer Satisfaction and Behavioral Responses in Bank Industry. International Journal of Basic Sciences & Applied Research, 3 (1), 16-23.

Anckar, B., & D'Incau, D. (2002). VALUE CREATION IN MOBILE COMMERCE: FINDINGS FROM A CONSUMER SURVEY. The Journal of Information Technology Theory and Application, 4, 43-65.

Andrew, J. V., Ambad, S. N. A., & Tan, K. E. (2020). A Model of Factors Influencing Consumersâ€™ Intention to Use e-Wallet System in Malaysia: A Systematic Review. Malaysian Journal of Business and Economics (MJBE), 6(2), 53. doi:10.51200/mjbe.v0i0.2172

Antovski, L., & Gusev, M. (2003, 19-19 June 2003). M-payments. Paper presented at the Proceedings of the 25th International Conference on Information Technology Interfaces, 2003. ITI 2003.

Au, Y. A., & Kauffman, R. J. (2008). The economics of mobile payments: Understanding stakeholder issues for an emerging financial technology application. Electronic Commerce Research and Applications, 7(2), 141-164. doi:https://doi.org/10.1016/j.elerap.2006.12.004

Azwa Fudzali, F., Adilah Tarmazi, S. A., Wan Muhd Rahimi, W. N. A. i., & Abu Bakar, A. R. (2022). Malaysian Intention to Use e-Wallet: Forthcoming Expectation in Cashless Transactions. Malaysian Journal of Social Sciences and Humanities (MJSSH), 7(6), 1-11. doi:10.47405/mjssh.v7i6.1537

Bachfischer, A., Lawrence, E., & Steele, R. (2004). Classifying m-Payments: A User-Centric Model. Bhatti, T. (2007). Exploring Factors Influencing the Adoption of Mobile Commerce Journal of Internet Banking and Commerce, 12, no. 3. Retrieved from https://www.icommercecentral.com/open-access/exploring-factors-influencing-the-adoption-of-mobile-commerce.pdf

Blake, B. F., Neuendorf, K. A., & Valdiserri, C. M. (2003). Innovativeness and variety of Internet shopping. Internet Res., 13, 156-169.

Booker, Q. S., Austin, J. D., & Balasubramanian, B. A. (2021). Survey strategies to increase participant response rates in primary care research studies. Family Practice, 38(5), 699-702. doi:10.1093/fampra/cmab070

Chang, M. K., Cheung, W., & Lai, V. S. (2005). Literature derived reference models for the adoption of online shopping. Information & Management, 42(4), 543-559.

doi:https://doi.org/10.1016/j.im.2004.02.006
Chaouali, W., Ben Yahia, I., & Souiden, N. (2016). The interplay of counter-conformity motivation, social influence, and trust in customers' intention to adopt Internet banking services: The case of an emerging country. Journal of Retailing and Consumer Services, 28, 209-218.
doi:https://doi.org/10.1016/j.jretconser.2015.10.007
Chawla, D., & Joshi, H. (2020). Role of Mediator in Examining the Influence of Antecedents of Mobile Wallet Adoption on Attitude and Intention. Global Business Review, 0(0), 0972150920924506. doi:10.1177/0972150920924506
Chen, C., Czerwinski, M., & Macredie, R. (2000). Individual differences in virtual environments - introduction and overview. Journal of the American Society for Information Science and Technology, 51(6), 499-507. doi:10.1002/(SICI)1097-4571(2000)51:6<499::AID-ASI2>3 0.CO;2-
K
Clarke, I. (2001). Emerging Value Propositions for M-Commerce. Journal of Business Strategies, 18, 133. Daisy Mui Hung Kee, A. L. O., Zhe Jian Ooi, Pavithara Sathiaseelan, Kuan Pang, Sathyan KA, Sahana
Madhan. (2022). Have You Touched? A Case Study of Touch N Go E-Wallet. International Journal of Accounting & Finance in Asia Pasific (IJAFAP), Vol. 5 No. 1, 84-94, 84-94.
doi:10.32535/ijafap.v5i1.141
Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Q., 13, 319-340.
Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. International Journal of Man-Machine Studies, 38(3), 475-487.

doi:https://doi.org/10.1006/imms.1993.1022
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. Retrieved from http://www.jstor.org/stable/2632151
Dholakia, N., & Rask, M. (2002). CONFIGURING MOBILE COMMERCE PORTALS FOR CUSTOMER RETENTION.
Dillon, A., & Watson, C. (1996). User analysis in HCI — the historical lessons from individual differences research. International Journal of Human-Computer Studies, 45(6), 619-637. doi:https://doi.org/10.1006/ijhc.1996.0071
Ding, M., & Hampe, J. F. (2003). Reconsidering the Challenges of mPayments: A Roadmap to Plotting the Potential of the Future mCommerce Market. Paper presented at the Bled eConference.
Dr. Yanto Ramli, M., Hariani, S., Hamzah, A. P., & Usman, F. (2020). THE IMPLICATION OF FEATURES AND TRUST THAT INFLUENCE THE INTENTION
TO USE THE DIGITAL PAYMENT APPLICATION. South East Asia Journal of Contemporary Business, Economics and Law, 22(1 (August)). Retrieved from https://seajbel.com/wp-content/uploads/2020/10/SEAJBEL22_224.pdf
Gia-Shie, L., & Pham Tan, T. (2016). A Study of Factors Affecting the Intention to Use Mobile Payment Services in Vietnam. Economics World, 4(6). doi:10.17265/2328-7144/2016.06.001
Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. Journal of Marketing Theory and Practice, 19(2), 139-152. doi:10.2753/MTP1069-6679190202
Hassanein, C. C. K. (2002). UnderstandingM-Commerce A Consumer Centric Model. Quarterly Journal Of ElectronicCommerce, 3, 247-271.Retrieved from

https://www.academia.edu/4460286/Understanding_M_Commerce_A_Consumer_Centric_Model
Herrero Crespo, Á., & Rodríguez del Bosque, I. (2008). The effect of innovativeness on the adoption of B2C e-commerce: A model based on the Theory of Planned Behaviour. Computers in Human Behavior, 24(6), 2830-2847. doi:https://doi.org/10.1016/j.chb.2008.04.008
Ilker Etikan, S. A. M., Rukayya Sunusi Alkassim. (2016). Comparison of Convenience Sampling and Purposive Sampling. . American Journal of Theoretical and Applied Statistics, 5,No.1(1), 1-4. doi:10.11648/j.ajtas.20160501.11
Karahanna, E., Ahuja, M., Srite, M., & Galvin, J. (2002). Individual differences and relative advantage: The case of GSS. Decision Support Systems, 32, 327-341. doi:10.1016/S0167-9236(01)00124-5
Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. Computers in Human Behavior, 26(3), 310-322. doi:10.1016/j.chb.2009.10.013
Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: predicting mobile payment adoption. The Service Industries Journal, 35(10), 537-554. doi:10.1080/02642069.2015.1043278
Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement, 30(3), 607-610. doi:10.1177/001316447003000308
Lim, A. S. (2008). Inter-consortia battles in mobile payments standardisation. Electron. Commer. Res. Appl., 7, 202-213.
Mallat, N. (2004). Theoretical constructs of mobile payments adoption. Paper presented at the IRIS Information Systems Research Seminar, Scandinavia, Falkenberg, Sweden.
Mallat, N. (2007). Exploring consumer adoption of mobile payments – A qualitative study. The Journal of Strategic Information Systems, 16(4), 413-432. doi:https://doi.org/10.1016/j.jsis.2007.08.001
Mallat, N., Rossi, M., Tuunainen, V. K., & Oorni, A. (2006, 4-7 Jan. 2006). The Impact of Use Situation and Mobility on the Acceptance of Mobile Ticketing Services. Paper presented at the Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS'06).
Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013.
Universal Access in the Information Society, 14(1), 81-95. doi:10.1007/s10209-014-0348-1 Martins, C., Oliveira, T., & Popovič, A. (2014). Understanding the Internet banking adoption: A unified
theory of acceptance and use of technology and perceived risk application. International Journal of Information Management, 34(1), 1-13. doi:https://doi.org/10.1016/j.ijinfomgt.2013.06.002
May, P. (2001). Mobile commerce: Opportunities, applications, and technologies of wireless business (Vol.
3): Cambridge University Press.
Nadhira, A. F. (2021). ANALYSIS OF FACTORS AFFECTING CUSTOMER SATISFACTION: STUDY ON E-WALLET SERVICES. Retrieved from http://eprints.ums.ac.id/92520/11/NASKAH%20PUBLIKASI.pdf
Ng-Kruelle, G., Swatman, P. A., Rebne, D. S., & Hampe, F. (2002). The Price of Convenience: Privacy and Mobile Commerce.

Nohria, N., & Leestma, M. (2001). A Moving Target: the Mobile-Commerce Customer. MIT Sloan Management Review, 42, 104-105.
O.O.Obe, & Balogun, V. (2007). Practice, Trends and Challenges of Mobile Commerce in Nigeria. Information Technology Journal, 6, 448-456.
Oliver Gotz, K. L.-G., and Manfred Krafft. (2010). Evaluation of Structural Equation Models Using the

Partial Least Squares (PLS) Approach: Springer-Verlag Berlin Heidelberg 2010.
Ondrus, J., & Pigneur, Y. (2006). Towards a holistic analysis of mobile payments: A multiple perspectives approach. Electronic Commerce Research and Applications, 5(3), 246-257. doi:https://doi.org/10.1016/j.elerap.2005.09.003
P.Sarika, S. V. (2019). Impact Of Mobile Wallets On Cashless Transaction. International Journal of Recent Technology and Engineering (IJRTE), 7(6S5).
Rieh, S. Y. (2004). On the Web at home: Information seeking and Web searching in the home environment. Journal of the American Society for Information Science and Technology, 55(8), 743-753. doi:https://doi.org/10.1002/asi.20018
Soegoto, D. S., & Tampubolon, M. P. (2020). E-Wallet as a Payment Instrument in the Millennial Era. IOP Conference Series: Materials Science and Engineering, 879(1), 012139. doi:10.1088/1757-899X/879/1/012139
Sun, H., & Zhang, P. (2006). The role of moderating factors in user technology acceptance. International Journal of Human-Computer Studies, 64(2), 53-78. doi:10.1016/j.ijhcs.2005.04.013
Tahar, A., Riyadh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived Ease of Use, Perceived Usefulness, Perceived Security and Intention to Use E-Filing: The Role of Technology Readiness. The Journal of Asian Finance, Economics and Business, 7(9), 537-547. doi:10.13106/jafeb.2020.vol7.no9.537
Tan, J. M., Wider, W., Rasli, A., Jiang, L., Tanucan, J. C. M., & Udang, L. N. (2024). Exploring positive impact of social media on employee mental health: A Delphi method. Online Journal of Communication and Media Technologies, 14(3), e202436.
Venkatesh, V., & Davis, F. D. (1996). A Model of the Antecedents of Perceived Ease of Use: Development and Test*. Decision Sciences, 27(3), 451-481. doi:https://doi.org/10.1111/j.1540-5915.1996.tb00860.x
Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. Management Science, 46(2), 186-204.
doi:10.1287/mnsc.46.2.186.11926
Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. MIS Quarterly, 36(1), 157- 178. doi:10.2307/41410412
Xiaojun, D., Junichi, I., & Sho, H. (2004). Unique Features of Mobile Commerce.
Xu, G., & Gutiérrez, J. (2006). An Exploratory Study of Killer Applications and Critical Success Factors in M-Commerce. J. Electron. Commer. Organ., 4, 63-79.
Yang, M., Mamun, A. A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless Transactions: A Study on Intention and Adoption of e-Wallets. Sustainability, 13(2). doi:10.3390/su13020831
Yi, M. Y., Fiedler, K. D., & Park, J. S. (2006). Understanding the Role of Individual Innovativeness in the Acceptance of IT-Based Innovations: Comparative Analyses of Models and Measures*. Decision Sciences, 37(3), 393-426. doi:https://doi.org/10.1111/j.1540-5414.2006.00132.x
Zmijewska, A., Lawrence, E., & Steele, R. (2004). Towards Understanding of Factors Influencing User Acceptance of Mobile Payment Systems. Paper presented at the International Conference WWW/Internet.
Zmud, R. W. (1979). Individual Differences and MIS Success: A Review of the Empirical Literature. Management Science, 25(10), 966-979.Retrieved from https://EconPapers.repec.org/RePEc:inm:ormnsc:v:25:y:1979:i:10:p:966-979.