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Examining Personal Determinants of Mobile Payment Adoption: Evidence from Malaysian Micro Agro Entrepreneurs

Musramaini Mustapha[1], Mohd Aidil Riduan Awang Kader[2], Ariff Md Ab Malik[3*]
[1,2]Faculty of Business and Management, Universiti Teknologi MARA Cawangan Pahang, 26400 Bandar Jengka, Pahang, Malaysia
[3]Faculty of Business and Management, Universiti Teknologi MARA Cawangan Selangor, 42300 Puncak Alam, Selangor, Malaysia

*Authors' Email Address: [1]musra_08@uitm.edu.my, [2]aidilriduan@uitm.edu.my, *[3]ariff215@uitm.edu.my*

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*Corresponding Author

ABSTRACT

Mobile payments have grown rapidly as a digital payment system. However, in Malaysia, users remain hesitant to use mobile payment transactions. This study explores the influence of Mobile Usefulness (MU) and Mobile Ease of Use (ME) on Mobile Payment Adoption (MP) within the framework of the Mobile Technology Acceptance Model (MTAM). Both key personal determinants influence the adoption of mobile payment among micro Agro entrepreneurs. Using a quantitative approach, data was collected through a questionnaire and analysed using Statistical Package for Social Sciences (SPSS 20) and Partial Least Squares Structural Equation Modelling (PLS-SEM) version 4.0. Overall, the findings affirm that mobile payment adoption is strongly driven by personal perceptions of mobile usefulness and mobile ease of use, which explain approximately 49.6 percent of the variance. This study contributes empirical evidence for the Mobile Technology Acceptance Model (MTAM) and provides practical insights for local authorities, policymakers, service providers, and financial institutions seeking to strengthen Malaysia's digital payment ecosystem among micro Agro entrepreneurs.

Keywords: *mobile payment adoption, mobile usefulness, mobile ease of use, MTAM, PLS-SEM*

INTRODUCTION

Cashless payments are vital for today's business transactions. As Malaysia undergoes a digital transformation, its economic activities too must undergo a shift through mobile and electronic payments. These methods, which are key prior to financial inclusion, may advance a cashless society and improve efficiency for small businesses and underserved communities (BNM, 2022). Their adoption helps micro enterprises remain competitive in the digital economy. Micro businesses are represented primarily by micro Agro entrepreneurs. In Malaysia, the guidelines issued by SME Corporation Malaysia define a micro business as one with a sales turnover of less than RM300,000 or having fewer than 5 full-time employees. According to the Department of Statistics Malaysia (DOSM, 2025), MSME businesses make an important contribution to Malaysia's economy, accounting for

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RM652.4 billion of the country's Gross Domestic Product (GDP) in 2024. With such outstanding contributions, they are crucial in local and community earnings, rendering an urgent need for them to use cashless or digital payments. However, despite this urgency, most micro Agro entrepreneurs remain inconsistent in their use of digital payments. This is confirmed in a study by Mahakittikun et al. (2020), which found that micro Agro entrepreneurs feel uncertain about the benefits of adopting digital payment methods. The reasons for their hesitance remain sporadic (Klapper, 2023). Most of them still prefer cash transactions due to security concerns and limited digital literacy (Meher et al., 2021). According to Bhattarai et al. (2023), the reality among micro Agro entrepreneurs varies, with varying levels of reassurance regarding technology adoption and their personal business practices. Thus, addressing these inconsistencies, particularly those arising from basic personal factors, begins with applying the Mobile Technology Acceptance Model (MTAM) framework in the context of Malaysian micro Agro entrepreneurs.

Micro Agro entrepreneurs frequently encounter a disparity between national expectations for digital adoption and their limited digital competencies and experience with mobile payment systems (Sinha et al., 2019). According to Buteau (2021), the gap between national digital readiness and local Malaysian micro-business implementation remains a persistent challenge, limiting the widespread adoption of mobile payment. The main issues are related to their personal capacity and technological advancement, as they are not equipped to adopt this effective payment method (Dangkeng & Munir, 2025). Personal factors such as perceived usefulness and perceived ease of use are key determinants in the Technology Acceptance Model (TAM) proposed by Davis (1989). This model was later extended by Ooi and Tan (2016) to emphasise mobile technologies, forming the basis for the Mobile Technology Acceptance Model (MTAM). Previous studies conclude that usefulness and ease of use significantly impact mobile payment adoption among micro Agro entrepreneurs (Yuan et al., 2023; Atmaji & Tjhin, 2022; Hasan et al., 2021). However, a recent study noted that it goes the other way around, with some non-significant findings regarding their willingness to use mobile payment technologies (Slinger et al., 2024; Umami et al., 2023; Kholid & Asri, 2021). Thus, the inconsistencies related to these two personal factors are further explored in this study on Malaysian micro Agro entrepreneurs. The results may provide valuable insights into how mobile usefulness and perceived ease of use influence their intention to adopt mobile payment technologies.

LITERATURE REVIEW

This section discusses previous literature on the topic, starting with the Mobile Technology Acceptance Model (MTAM), followed by mobile payment adoption, mobile usefulness, and mobile ease of use.

Mobile Technology Acceptance Model (MTAM)

The Mobile Technology Acceptance Model (MTAM) is an extension of the Technology Acceptance Model (TAM) introduced by Davis (1989), which is related to the use of technology. This model focuses on the use of mobile technology which is growing rapidly nowadays to expedite daily affairs and decision-making processes, facilitating daily transactions and making them more effective and efficient. The MTAM focuses on two main basic principles namely perceived usefulness and perceived ease of use. This model may assist in anticipating user adoption and acceptance of mobile technology based on their perception of its usefulness and ease of use.

In addition to the two afore mentioned variables, many mobile technology studies have also incorporated other factors to predict the behavioural intention to use and actual use of mobile technology. These include perceived security risk (Wong et al., 2019; Van et al., 2019; Li et al., 2019), perceived trust (Wong et al., 2019; Ooi & Tan, 2016; Tiwari & Tiwari, 2020), and mobile self-efficacy (Tian & Chan, 2024; Lew et al., 2020; Zhang et al., 2023). Studies using the MTAM have been conducted in several countries such as Indonesia (Berisca et al., 2024; Ashoer et al., 2024; Putri et al., 2023; Permana & Putri, 2025; Cahyani et al., 2023; Ardiana et al., 2021), Pakistan (Zhang et al., 2023;

Khan et al., 2025), United Kingdom (Hanif & Lallie, 2021; Musyaffi et al., 2023), China (Yu et al., 2024), India (Kohli et al., 2024), and Malaysia (Ooi & Tan, 2016; Lew et al., 2020; Mohamad et al., 2021). Furthermore, this model has been applied in research in several industries such as banking (Ooi & Tan, 2016; Hanif & Lallie, 2021; Ashoer et al., 2024; Zhang et al., 2023; Kohli et al., 2024), hotel (Lew et al., 2020; Kim, 2014; Mohamad et al., 2021), transportation (Berisca et al., 2024; Yu et al., 2024; Di Pietro et al., 2015), and MSME (Putri et al., 2023; Permana & Putri, 2025; Musyaffi et al., 2023; Cahyani et al., 2023; Rahadian & Thamrin, 2023; Adriana et al., 2021).

Mobile Payment Adoption (MP) among Micro Agro Entrepreneurs

Studies have been conducted to examine the intention to use and actual use of mobile payment among micro Agro entrepreneurs (Suresh et al., 2025; Trianto et al., 2025; Chopra & Ranjani, 2020; Mavela & Tsibolane, 2024), as well as the extent to which mobile payment can improve their business performance. This is because most micro Agro entrepreneurs are located in rural areas, are running small-scale businesses, and are less exposed to technology adoption due to the digital divide (Rachbini et al., 2023; Gichuki & Mulu-Mutuku, 2018; Akyoo & Pallangyo, 2022).The study by Suresh et al. (2025) on 410 micro Agro entrepreneurs in India found that the majority acknowledged that the adoption of mobile payments can improve their business performance and contribute to poverty alleviation. This result is consistent with the quantitative study conducted by Trianto et al. (2025) on 400 micro Agro entrepreneurs in Indonesia and Malaysia. The study revealed that mobile payments can streamline daily business transactions due their ease of use and usefulness. Similarly, the mixed method study by Chopra and Ranjani (2020) revealed that perceived ease of use, peer influence, and perceived costs are significant factors leading to mobile payment adoption among 130 micro Agro entrepreneurs in India. This indicates that the intention to adopt mobile payments is largely influenced by the system's ease of use, recommendations from peers, and the cost-effectiveness of the shift.

The results of the qualitative study using in-depth interviews by Mavela and Tsibolane (2024) on 20 micro Agro entrepreneurs in South Africa show financial exclusion, growth optimism, and risk reduction as primary motives for long-term mobile payment use, which in turn can improve business performance. Similarly, Prihatmoko (2025) also found that mobile payment adoption can reduce dependence on informal cash-based systems in daily business transactions among micro Agro entrepreneurs in Indonesia. A majority of respondents acknowledged that mobile payment adoption can increase their business performance due to higher sales and profit, strengthen customer trust, and improve financial accessibility. However, the study by Gichuki and Mulu-Mutuku (2018) in Kenya found that although most respondents were aware of the benefits of using mobile payments such as saving costs and promoting market integration, women micro Agro entrepreneurs in Kenya were less likely to adopt mobile payments due to lack of knowledge, facilities, and hidden charges imposed by mobile service providers.Thus, this current study focuses on personal determinants of mobile payment adoption among Malaysian micro-entrepreneurs by examining two fundamental factors: Mobile Usefulness (MU) and Mobile Ease of Use (ME).

Mobile Usefulness (MU)

Mobile usefulness is one of the critical factors contributing to the intention to use mobile services. If users perceive the many benefits of using mobile service payments such as increased productivity, efficiency, or convenience, their intention to use the system would be higher, ultimately leading to actual usage. Ooi and Tan (2016) defined mobile usefulness as the perception of usefulness improvement for future users when they use the mobile services. Many studies have investigated the relationship between mobile usefulness and mobile payment adoption among micro Agro entrepreneurs (Khan & Shahid, 2025; Horne et al., 2015; Wijaya et al., 2025; Purwantini & Anisa, 2021).The study by Khan and Shahid (2025) on 282 micro Agro entrepreneurs in Pakistan found that the use of a mobile payment system known as e-paisa technology had helped increase the effectiveness and business performance of micro Agro entrepreneurs during the COVID-19 pandemic. The results of this study also revealed that more female micro Agro entrepreneurs use e-paisa technology to help launch

businesses compared to their male counterparts, mainly due to the mobile usefulness factor, which in turn increases the entrepreneurs' subjective well-being. The results of this study are consistent with that of Horne et al. (2015) on micro Agro entrepreneurs in two African countries, namely Kenya and Tanzania, proving that mobile payments greatly help the growth of micro Agro entrepreneurs especially in improving supply chain efficiency. The majority of the respondents believe that digital payments facilitate business transactions, especially in making digital payments to acquire raw material from suppliers. However, mobile payment adoption among micro Agro entrepreneurs in Kenya is higher than that in Tanzania due to better IT infrastructure and Internet accessibility.

Wijaya et al. (2025) investigated the extent to which the use of financial technology facilitates micro Agro entrepreneurs in Indonesia. The results revealed that perceived usefulness has a positive association with the intention to use fintech applications among micro Agro entrepreneurs. Similarly, the study conducted by Purwantini and Anisa (2021) on 136 micro Agro entrepreneurs in Indonesia also found perceived usefulness as a prominent contributor to the intention to use financial technology payments such as e-money, e-wallet, and Electronic Data Capture machine as they speed up the payment transaction process and make the business process more effective. Hence, this current study postulates that:

Hypothesis 1: There is a positive and significant relationship between mobile usefulness and mobile payment adoption in Malaysia.

Mobile Ease of Use (ME)

Mobile ease of use is closely related to a person's belief that using a specific mobile technology, such as an app or service, will be free of effort. This means that the easier it is to learn and use a mobile technology, the higher the intention to use and continue using it in the future. Ooi and Tan (2016) defined mobile ease of use as the acceptance of complication to use and learn new services for future users when they are willing to adopt the services.The study by Sathye et al. (2018) on 74 women micro Agro entrepreneurs in Fiji found that there was a positive relationship between mobile ease of use and intention to adopt mobile technology, which in turn contributed to improved business performance. The results of this study are also in line with the study by Lau et al. (2024) which employed a quantitative approach. The study found that the majority of respondents had a high intention to use the Quick Response Code Indonesian Standard (QRIS) payment system for business transactions because it is easy to use, simple to control, and not overly complicated. Similarly, Permana and Putri (2025) who conducted a study on 100 micro Agro entrepreneurs in Indonesia also exposed that the ease of use of payment gateways has a positive and significant impact on mobile payment adoption since it allows micro Agro entrepreneurs to conduct business transactions more easily, quickly, and efficiently.

However, the results of the qualitative study by Faudzi et al. (2024) revealed otherwise for women rural micro Agro entrepreneurs in Malaysia who prefer to use conventional methods over machinery to maintain quality. They also struggle to meet e-commerce demands due to their small-scale production, thus restraining their capacity to utilise mobile payment technology for business growth and sustainability. Sengaji and Radiansyah (2022) in their study on 65 micro Agro entrepreneurs revealed that there is no relationship between perceived ease of use and the intention to use mobile payment, primarily due to lack of knowledge and training among the respondents. Based on the above, this current study developed the hypothesis below:

Hypothesis 2: There is a positive and significant relationship between mobile ease of use and mobile payment adoption in Malaysia.

METHODOLOGY

The study sample comprised micro Agro entrepreneurs registered under the Federal Agricultural Marketing Authority (FAMA), Malaysia. Specifically, this study focused on participants involved in the Pasar Tani programme managed by FAMA. Among the various initiatives by FAMA, this programme aims to create a marketplace that enables micro Agro entrepreneurs to engage directly with customers. A total of 372 questionnaires were distributed to the respondents who were selected using purposive sampling. Only micro Agro entrepreneurs registered with FAMA and located in four different regions across Peninsular Malaysia were chosen. The questionnaire consisted of several sections: the respondents' profiles, the MTAM measurement items taken from Ooi and Tan (2016), and mobile payment adoption measurement items derived from Widayani (2022). All the items were measured using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) version 20, specifically to perform descriptive analysis of the respondents' profiles. To test the hypotheses, Partial Least Squares Structural Equation Modelling (PLS-SEM) was conducted using SmartPLS version 4. This approach examined the predictive power and relationships among the constructs, particularly to estimate the effects of Mobile Usefulness (MU) and Mobile Ease of Use (ME) on Mobile Payment Adoption (MP).

FINDINGS AND ANALYSIS

This section presents the descriptive analysis conducted using SPSS, followed by the measurement model assessment and hypothesis testing performed using SmartPLS.

Demographic Profile

Table 1 presents the demographic characteristics of the 372 micro Agro entrepreneurs who participated in this study. The majority were 56 years old and above (48.1%), followed by those aged 41 to 55 years (36.8%). Only 11.0% were between 26 and 40 years old. A small portion (4.0%) aged between 18 and 25. This distribution indicates that most of the micro Agro entrepreneurs are mature in terms of age. Regarding gender, 55.4% of the respondents were male, while 44.6 percent were female. This reflects a relatively balanced participation of both genders in micro entrepreneurial activities. The balance suggests that female participation in micro businesses is increasingly significant, in line with national initiatives promoting women's involvement in entrepreneurship. Nearly half of the respondents (47.8%) possessed a Malaysian Certificate of Education (SPM), followed by those holding diplomas or higher qualifications (19.2%) and certificates (7.8%). A smaller proportion reported having completed STPM (7.5%) or SRP/PMR (7.5%). Another 6.7% had completed only primary schooling (UPSR), and 3.5% had no formal qualifications. Overall, these results suggest that most micro Agro entrepreneurs have at least a basic secondary-level education. This supports their ability to engage with digital financial tools such as mobile payments. In terms of regional distribution, 39.2% of the respondents were from the East Coast region, and 36.0% were from the Southern region. Another 15.9% were from the Northern region, while 8.9% were from the Central region. This broad regional representation indicates that the sample captures micro entrepreneur participation across diverse geographical areas in Peninsular Malaysia. This ensures that the findings reflect a balanced regional perspective.

Table 1: Respondents' Demographic Profile

Demographic factors		Frequency	Percent
Age	18-25 years old	15	4
	26-40 years old	41	11
	41-55 years old	137	36.8
	56 years old and above	179	48.1
Gender	Male	206	55.4
	Female	166	44.6

Demographic factors		Frequency	Percent
Education	UPSR	25	6.7
	SRP/PMR	28	7.5
	SPM	178	47.8
	STPM	28	7.5
	Certificate	29	7.8
	Diploma & above	71	19.2
	None of the above	13	3.5
Region	Northern	59	15.9
	East Coast	146	39.2
	Central	33	8.9
	Southern	134	36

Measurement Model, Structural Model, and Hypothesis Testing

The measurement model was evaluated based on indicator reliability, internal consistency reliability, and convergent validity, following the guidelines proposed by Hair et al. (2022). Table 2 presents the results for the outer loadings, variance inflation factor (VIF), Cronbach's alpha (CA), average variance extracted (AVE), and composite reliability (CR) for the constructs of Mobile Usefulness (MU), Mobile Ease of Use (ME), and Mobile Payment Adoption (MP). All item loadings exceeded the recommended minimum of 0.7, ranging from 0.718 to 0.911, demonstrating that each indicator strongly represents its respective construct. The VIF values, which ranged from 1.626 to 4.275, were below the threshold value of 5.0, indicating the absence of multicollinearity concerns among the indicators. Cronbach's alpha coefficients were 0.898 for MU, 0.878 for ME, and 0.868 for MP, all exceeding the 0.7 benchmark, thus confirming good internal consistency reliability. Similarly, the AVE values for MU (0.767), ME (0.733), and MP (0.603) were higher than the 0.5 cut-off, signifying that more than 50% of the variance in the indicators was explained by the respective latent constructs (Fornell & Larcker, 1981). In addition, all CR values ranging from 0.901 to 0.929 surpassed the recommended level of 0.70, providing further support for the constructs' internal reliability and convergent validity. Overall, these findings confirm that all constructs in the measurement model demonstrate adequate reliability and convergent validity. Therefore, the items used for measuring Mobile Usefulness, Mobile Ease of Use, and Mobile Payment Adoption are reliable and valid, allowing the study to proceed to the assessment of discriminant validity and the evaluation of the structural model.

Table 2: Measurement model

Constructs	Items	Loadings	VIF	Cronbach's alpha (CA)	Average variance extracted (AVE)	Composite reliability (CR)
Mobile Usefulness (MU)	MU1	0.911	4.275	0.898	0.767	0.929
	MU2	0.889	3.831			
	MU3	0.862	2.339			
	MU4	0.839	2.152			
Mobile Ease of Use (ME)	ME1	0.871	2.616	0.878	0.733	0.916
	ME2	0.833	1.921			
	ME3	0.839	1.989			
	ME4	0.88	2.683			
Mobile Payment Adoption (MPA)	MP1	0.793	1.88	0.868	0.603	0.901
	MP2	0.793	1.966			
	MP3	0.805	2.009			
	MP4	0.765	1.743			
	MP5	0.718	1.626			
	MP6	0.782	1.834			

The discriminant validity was assessed using the Fornell–Larcker criterion (Fornell & Larcker, 1981), as shown in Table 3. The square roots of the average variance extracted (AVE) were greater than the corresponding inter-construct correlations, confirming that each construct is empirically distinct from the others. The AVE for Mobile Ease of Use (0.856), Mobile Payment Adoption (0.776), and Mobile Usefulness (0.876) exceeded their respective correlations with other constructs. These results demonstrate satisfactory discriminant validity among the constructs in the measurement model. The discriminant validity was further examined using the Heterotrait-Monotrait ratio of correlations (HTMT), following the recommendation of Henseler et al. (2015). As presented in Table 4, all HTMT values were below the conservative threshold of 0.85, indicating adequate discriminant validity among the constructs. The HTMT ratios between Mobile Ease of Use and Mobile Payment Adoption (0.728), Mobile Ease of Use and Mobile Usefulness (0.733), and Mobile Payment Adoption and Mobile Usefulness (0.723) were within the acceptable range. These results confirm that the constructs are empirically distinct and that multicollinearity or conceptual overlap is not a concern in this measurement model.

Next, discriminant validity was initially examined using the cross-loading criterion (Chin, 1998; Hair et al., 2022). As shown in Table 5, the loading of each indicator on its assigned construct was higher than its loadings on any other construct, confirming that the items shared greater variance with their respective latent variable than with others. For instance, the indicators of Mobile Ease of Use (ME1–ME4) loaded strongly on ME (0.833–0.880) compared to their loadings on Mobile Payment Adoption (0.514–0.564) and Mobile Usefulness (0.512–0.593). Similarly, the indicators of Mobile Payment Adoption (MP1–MP6) exhibited the highest loadings on their respective construct (0.718–0.805). The indicators of Mobile Usefulness (MU1–MU4) also showed higher loadings on MU (0.839–0.911) than on other constructs. Thus, the results demonstrate that all indicators uniquely represent their respective constructs and are not substantially correlated with other latent variables in the model. The measurement model, as shown in Figure 1, illustrates the relationships between the latent constructs and their respective indicators.

Table 3: Discriminant validity based on the Fornell-Larcker Criterion

Constructs	ME	MP	MU
ME	0.856		
MP	0.640	0.776	
MU	0.652	0.641	0.876

Table 4: Discriminant validity based on the Heterotrait-Monotrait Ratio (HTMT)

Constructs	ME	MP	MU
ME			
MP	0.728		
MU	0.733	0.723	

Table 5: Discriminant validity based on the Cross Loadings

Constructs	ME	MP	MU
ME1	0.871	0.514	0.542
ME2	0.833	0.564	0.512
ME3	0.839	0.56	0.593
ME4	0.88	0.547	0.582
MP1	0.529	0.793	0.523
MP2	0.461	0.793	0.505
MP3	0.518	0.805	0.515
MP4	0.508	0.765	0.511
MP5	0.412	0.718	0.41
MP6	0.537	0.782	0.509

MU1	0.605	0.569	0.911
MU2	0.601	0.559	0.889
MU3	0.546	0.566	0.862
MU4	0.531	0.55	0.839

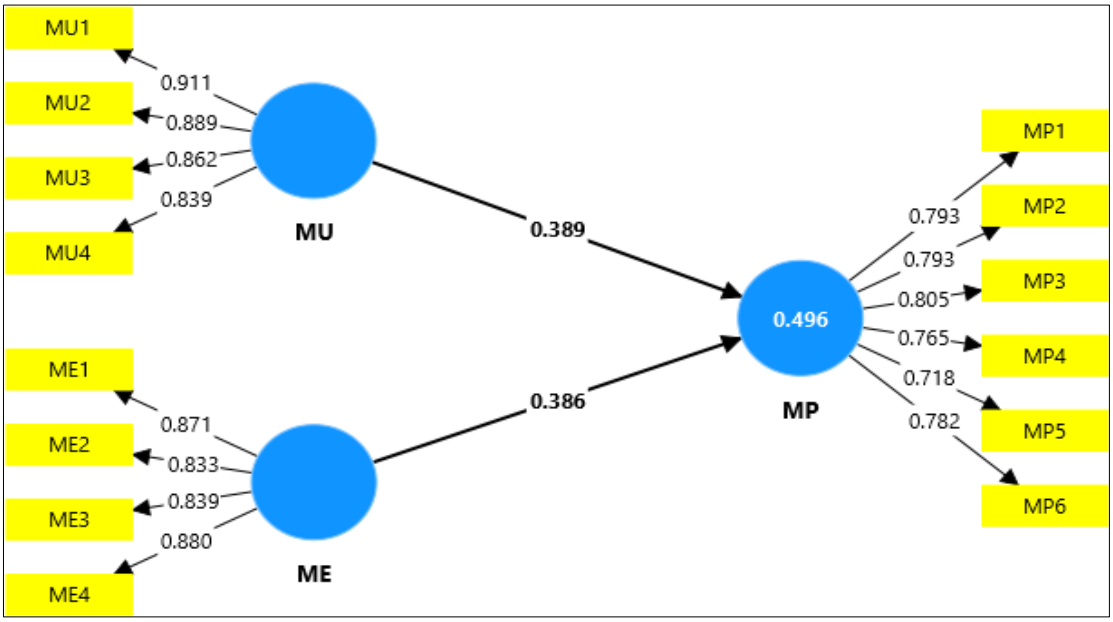

Figure 1: The Structural Model

The structural model and hypothesis testing were conducted after the measurement model had been successfully established. The VIF values for Mobile Ease of Use and Mobile Usefulness were both below the threshold of 5.0 (Hair et al., 2022). Hence, multicollinearity is not a concern in this study. After confirming that collinearity is not an issue, the significance of the hypothesised relationships was tested using bootstrapping with 10,000 subsamples and bias-corrected confidence intervals. Table 6 below shows that both Mobile Ease of Use and Mobile Usefulness had significant positive effects on Mobile Payment Adoption. Mobile Ease of Use ($\beta = 0.386$, $t = 6.904$, $p < .001$) and Mobile Usefulness ($\beta = 0.389$, $t = 6.720$, $p < .001$) were found statistically significant predictors. The results indicate that when mobile payment adoption is seen as easy to use and useful, adoption is more likely among micro Agro entrepreneurs. Based on Table 6 below, the R^2 value represents the proportion of variance in the endogenous construct explained by its predictor variables. In this study, the R^2 value for Mobile Payment Adoption (MP) was 0.496, indicating that Mobile Usefulness (MU) and Mobile Ease of Use (ME) jointly explain approximately 49.6% of the variance in mobile payment adoption. This value reflects a moderate level of explanatory power, suggesting that nearly half of the variation in adoption behaviour can be attributed to these two personal determinants. In addition, the effect size (f^2) was examined to determine the individual contribution of each construct to the model's explanatory power. According to Chen (1998, 2010), a direct relationship with an effect size below 0.02 is weak, medium at 0.15, and strong at 0.35 and above. Both Mobile Usefulness (MU) and Mobile Ease of Use (ME) demonstrated medium effect sizes in this study, with values of 0.173 and 0.170, respectively. These results indicate that each construct contributes meaningfully to explaining Mobile Payment Adoption and that the removal of either predictor would cause a noticeable reduction in the R^2 value.

Table 6: Results of Structural Model Assessment and Hypothesis Testing

Hypo-thesis	Relation-ship	Beta	Std. Error	T-Valu-es	P-Values	BCI LL	BCI UL	Effect Size		R^2	Decision
								f2	Effect Type		
HI	MU →MP	0.389	0.058	6.720	p < .001)	0.291	0.481	0.173	Medium Effects	0.496	Supported
H2	ME →MP	0.386	0.056	6.904	p < .001)	0.292	0.474	0.170	Medium Effects		Supported

*:p<0.1; **:p<0.05;***:p<0.01
Note: use a 95% confidence interval with a bootstrapping of 10000.

CONCLUSION

The adoption of mobile payments among micro Agro entrepreneurs in Malaysia is influenced by the system's usefulness and ease of use. This study highlighted critical aspects of how personal factors, from the MTAM perspective, impact the integration of digital payment transactions in Malaysian micro Agro businesses. Understanding these personal factors is essential for targeted future strategies, which can help local micro Agro entrepreneurs use mobile payments in their daily business transactions. They also allow entrepreneurs to benefit from a digital platform by reducing dependence on cash (Mutiso & Reuben, 2021; Liang et al., 2022; Agustina et al., 2023). Those who view mobile payment platforms as beneficial are more inclined to adopt them, indicating that enhancing their perception of usefulness can lead to higher adoption rates (Natakumusah et al., 2023). Additionally, when micro Agro entrepreneurs consider mobile payments easy to operate, they are more likely to incorporate these technologies into their businesses (Rafdinal & Senalasari, 2021). Ultimately, this can foster a widespread adoption of digital payment among local micro Agro entrepreneurs, leading to improved business outcomes and enhanced participation in k-economic performance. Future studies should extend these findings to other states to build a more comprehensive understanding of mobile payment adoption in micro business sectors in Malaysia. This study suggests that future research could be used to better understand the impact of other factors, such as environmental factors. Understanding the unique challenges faced by micro Agro entrepreneurs is key to effectively promoting the adoption of mobile payments that align with their daily operational business payment transactions, ensuring that strategies are tailored to user contexts.

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AUTHORS' CONTRIBUTION

Mustapha, M. conceptualised and designed the study, developed the methodology and discussion of results, conducted the data analysis, ensured data verification, and led the manuscript writing. Kader, M.A., contributed to the literature review. Malik, A. particularly verified the content of the manuscript. All authors provided critical feedback and helped shape the research, analysis, and manuscript.

CONFLICT OF INTEREST DECLARATION

We certify that the article is the Authors' and Co-Authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. This research/manuscript has not been submitted for publication, nor has it been published in whole or in part elsewhere. We testify that all Authors have significantly contributed to the work, validity, and legitimacy of the data and its interpretation for submission to Journal Intelek.

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