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THE EFFECT OF DIGITAL PLATFORM ADOPTION ON THE PERFORMANCE OF CIREBON TRADITIONAL CULINARY MSMES: A TECHNOLOGY ACCEPTANCE MODEL ANALYSIS

Bahtiar[1*], Indra Surya Permana[2]

[1]Department of Perbankan Syariah, Universitas Nahdlatul Ulama Cirebon, Indonesia
[2]Department of Informatics, Institut Teknologi dan Kesehatan Mahardika Cirebon, Indonesia

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ABSTRACT

Digital transformation has changed how micro, small, and medium enterprises (MSMEs) market their products and improve business performance, particularly in the traditional culinary sector. This study aims to analyze the effects of perceived ease of use (PEOU), perceived usefulness (PU), and attitude toward use (ATU) on behavioral intention (BI) to use digital platforms, as well as the impact of behavioral intention on actual use (AU) and MSME performance among traditional culinary businesses in Cirebon. MSME performance was assessed through indicators such as sales growth, market expansion, operational efficiency, customer reach, and business competitiveness. The study employed a quantitative explanatory approach using a cross-sectional survey of 165 Cirebon traditional culinary MSME owners who use digital platforms, including GoFood, ShopeeFood, GrabFood, Instagram, TikTok Shop, and WhatsApp Business. Data were collected using a seven-point Likert scale questionnaire and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results indicate that PEOU has a positive and significant effect on BI ($\beta = 0.384$; $t = 4.374$; $p < 0.001$), while PU also positively and significantly influences BI ($\beta = 0.235$; $t = 2.963$; $p = 0.004$). In contrast, ATU does not have a significant effect on BI ($\beta = 0.129$; $t = 1.632$; $p = 0.105$). Furthermore, BI has a positive and significant effect on AU ($\beta = 0.339$; $t = 4.105$; $p < 0.001$), and greater actual use of digital platforms contributes positively to MSME performance by enhancing sales growth, expanding market reach, improving operational efficiency, and strengthening business competitiveness. The R^2 values are 0.357 for BI and 0.115 for AU. These findings demonstrate that perceived ease of use and perceived usefulness are the primary drivers of digital platform adoption, which subsequently supports improved MSME performance. The study highlights the importance of strengthening digital literacy, providing practical training on digital platform utilization, and developing more user-friendly digital platforms to accelerate digital transformation and enhance the competitiveness of traditional culinary MSMEs

1. INTRODUCTION

Digitalization has become a central driver of transformation for micro, small, and medium enterprises (MSMEs) across the globe (Bisri et al., 2026). Small businesses increasingly rely on digital platforms for marketing, payment systems, customer services, and distribution activities, particularly after the COVID-19 pandemic accelerated the shift in consumer behavior toward online channels (OECD, 2021). The (World Bank, 2021) emphasized that the ability to adopt digital technologies has become a crucial determinant of resilience and competitiveness among small businesses in the post-pandemic era. In this context, digital platforms are no longer perceived merely as promotional tools but as business infrastructures capable of reshaping market interactions and organizational capabilities (Verhoef et al., 2021). According to (Nambisan et al., 2019) digital transformation creates both opportunities and challenges for entrepreneurship, as traditional boundaries between producers and consumers become increasingly blurred through platform intermediation.

The phenomenon of digital platform adoption among MSMEs has attracted considerable scholarly attention due to the complexity of factors influencing adoption decisions. (Dwivedi et al., 2021) argued that digital technology adoption requires the integration of technical aspects, user behavior, and business governance mechanisms. For MSMEs, technology adoption decisions are frequently determined not only by technological capabilities but also by perceptions of ease of use, usefulness, and practical relevance to daily business activities. (Vial, 2019) defined digital transformation as a process aimed at improving an entity by triggering significant changes through combinations of information, computing, communication, and

Corresponding author.
E-mail: bahtiar@unucirebon.ac.id

connectivity technologies. Within the food and beverage sector, the emergence of online food delivery services, social media platforms, and business messaging applications has fundamentally transformed how firms establish and sustain their markets.

Globally, the online food delivery market is projected to continue experiencing substantial growth. (Wang et al., 2022) demonstrated that the online food delivery ecosystem has become a new competitive arena heavily influenced by consumer expectations regarding speed, convenience, and service reliability. (Pasirayi et al., 2023) found that partnerships with third-party delivery platforms positively affect firm value. Furthermore, (Li et al., 2020) in their systematic review of online food delivery platforms and sustainability, highlighted that such platforms not only alter consumption patterns but also influence operational dynamics among culinary businesses, including inventory management, packaging standards, and pricing strategies. (Foroughi et al., 2024) further suggested that continued use of food delivery applications is significantly influenced by user satisfaction, habitual behavior, and expectation confirmation.

In Indonesia, MSMEs remain the backbone of the national economy, accounting for approximately 65 million business units and employing the majority of the workforce (Kementerian Koperasi dan UKM Republik Indonesia, 2023). The rapid penetration of internet access and digital transactions has encouraged significant changes in business practices, particularly in promotion, transactions, and customer services. (Trinugroho et al., 2022) reported that digital technology adoption among Indonesian micro and small enterprises is influenced by both business characteristics and owner profiles. Similarly, (Affandi et al., 2024) demonstrated that digital adoption is positively associated with improved business performance, although the magnitude of benefits depends on managerial capabilities and digital literacy levels. (Susanty, 2024) documented how rural MSMEs in Indonesia have transformed through digital platforms, expanding from local markets to national and even global markets despite facing infrastructural and digital literacy challenges. Specifically, (Buchdadi et al., 2024) examined factors influencing behavioral intention to use the Quick Response Code Indonesian Standard (QRIS) among Indonesian MSMEs using an extended Technology Acceptance Model (TAM) and found that perceived usefulness and perceived ease of use remain dominant predictors.

At the local level, Cirebon City possesses a strong identity as one of Indonesia's prominent culinary destinations. Traditional culinary products such as empal gentong, nasi jamblang, tahu gejrot, docang, mie koclok, nasi lengko, and bubur sop kambing represent not only the coastal culinary heritage of West Java but also important drivers of the local economy based on MSMEs. This culinary sector absorbs thousands of workers and serves as a significant attraction for gastronomic tourism. Nevertheless, empirical studies specifically investigating digital platform adoption among traditional culinary MSMEs in Cirebon using a structured theoretical framework remain scarce. Most previous studies have focused on national-level contexts, consumer perspectives on digital platforms, or non-culinary MSMEs.

To examine digital platform adoption among MSMEs, a robust theoretical framework is required. The Technology Acceptance Model (TAM), developed by (Davis, 1989) is one of the most widely applied models for explaining individuals' acceptance and use of information technology. TAM proposes that perceived usefulness (PU) and perceived ease of use (PEOU) shape users' attitudes toward technology, which subsequently influence behavioral intention (BI) and actual use (AU). Although TAM has been extensively validated across various technological contexts (Venkatesh et al., 2003; Venkatesh & Davis, 2000), most existing studies have focused on general MSMEs, e-commerce adoption, digital payment systems, or consumer technology acceptance. Comparatively little attention has been paid to traditional culinary MSMEs operating within distinctive local cultural contexts, where business characteristics, customer interactions, and digital readiness differ substantially from those of other sectors. Furthermore, while several studies have demonstrated that digital adoption can improve MSME competitiveness, relatively few have empirically examined the complete TAM pathway and linked digital platform adoption to business performance outcomes, particularly in terms of sales growth, market expansion, operational efficiency, customer reach, and business competitiveness.

This study addresses these gaps by investigating digital platform adoption among traditional culinary MSMEs in Cirebon, a city recognized for its rich culinary heritage and tourism-based local economy.

Unlike previous studies that primarily examined technology acceptance or digital adoption in broader MSME settings, this research analyzes the complete TAM framework from perceived ease of use, perceived usefulness, and attitude toward use to behavioral intention and actual use and examines how digital platform adoption contributes to MSME performance. This focus is theoretically important because it extends the application of TAM to a culturally embedded and underexplored MSME context while integrating technology acceptance with business performance outcomes. Practically, the study provides evidence that can assist policymakers, local governments, digital platform providers, and MSME development agencies in designing more effective digital transformation strategies, including digital literacy programs, platform utilization training, and user-centered digital services to strengthen the competitiveness and sustainability of traditional culinary MSMEs. Accordingly, this study aims to: (1) analyze the effect of perceived ease of use on behavioral intention to use digital platforms; (2) examine the effect of perceived usefulness on behavioral intention; (3) investigate the influence of attitude toward use on behavioral intention; (4) analyze the effect of behavioral intention on actual use; and (5) examine the effect of actual digital platform use on the performance of traditional culinary MSMEs in Cirebon.

2. METHODS

Research Design

This study employed an explanatory quantitative research design using a cross-sectional survey approach. A quantitative approach was selected because the study aimed to examine causal relationships among variables based on the well-established Technology Acceptance Model (TAM) framework. The cross-sectional design enabled data collection at a single point in time, which is appropriate for capturing current perceptions and adoption behaviors. The unit of analysis consisted of owners or managers of traditional culinary MSMEs in Cirebon who had utilized at least one digital platform for business activities during the period 2020–2024.

Population and Sample

The population comprised all traditional culinary MSMEs in Cirebon City that utilize digital platforms. According to data from the Cirebon City Office of Cooperatives and MSMEs (2024), approximately 1,200 MSMEs operate in the food and beverage sector, with an estimated 40–50% having adopted at least one digital platform. Purposive sampling was employed, with the following inclusion criteria: (1) operating a traditional Cirebon culinary business such as *empal gentong*, *nasi jamblang*, *tahu gejrot*, *docang*, *mie koclok*, *nasi lengko*, or other traditional specialties; (2) actively using at least one digital platform (GoFood, ShopeeFood, GrabFood, Instagram, TikTok Shop, or WhatsApp Business) during the previous six months; (3) having operated the business for at least one year; and (4) being willing to complete the questionnaire in its entirety.

A total of 165 MSME owners successfully participated in the survey. This number exceeded the minimum sample size requirement for SEM-PLS based on the rule of thumb of five to ten times the largest number of indicators associated with a single construct (Sarstedt et al., 2022). Since the construct with the highest number of indicators consisted of five items, the minimum required sample size ranged from 25 to 50 respondents. Nevertheless, following the recommendations of (Sarstedt et al., 2022) to ensure adequate statistical power, a sample size of 165 respondents was considered sufficient for a model consisting of five constructs and four structural paths.

Table 1. Respondent Profile (N = 165)

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	73	44.2
	Female	92	55.8
Age	20–30 years	28	17.0
	31–40 years	54	32.7
	41–50 years	52	31.5
	> 50 years	31	18.8
Educational Level	Elementary/Junior High School	29	17.6

	Senior High School/Vocational School	82	49.7
	Diploma/Bachelor's Degree	48	29.1
	Master's/Doctoral Degree	6	3.6
Business Experience	1–3 years	42	25.5
	4–6 years	51	30.9
	7–10 years	39	23.6
	> 10 years	33	20.0
Main Culinary Product	*Empal Gentong*	38	23.0
	Nasi Jamblang	34	20.6
	Tahu Gejrot	27	16.4
	Mie Koclok	22	13.3
	Nasi Lengko/Docang	19	11.5
	Others	25	15.2
Number of Active Platforms	1 platform	31	18.8
	2 platforms	58	35.2
	3 platforms	49	29.7
	≥ 4 platforms	27	16.3
Monthly Revenue	< IDR 5 million	39	23.6
	IDR 5–15 million	62	37.6
	IDR 15–30 million	41	24.8
	> IDR 30 million	23	13.9

Source: Primary data processed, 2024.

Table 2 indicates that the majority of respondents were female (55.8%), aged between 31 and 50 years (64.2%), and had completed senior high school or vocational education (49.7%). In terms of business characteristics, most respondents had operated their businesses for four to six years (30.9%) and simultaneously utilized two to three digital platforms (64.9%). The most common culinary products were *empal gentong* (23.0%) and *nasi jamblang* (20.6%). Most respondents reported monthly revenues ranging from IDR 5 to 15 million (37.6%), indicating that they predominantly belonged to the micro-enterprise category.

Research Instrument

The research instrument consisted of a structured questionnaire containing 22 items measured using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The measurement model included five reflective constructs: Perceived Usefulness (PU) with five indicators, Perceived Ease of Use (PEOU) with five indicators, Attitude Toward Use (ATU) with five indicators, Behavioral Intention (BI) with three indicators, and Actual Use (AU) with four indicators. All items were adapted from validated TAM instruments in previous studies (Davis, 1989; Venkatesh et al., 2003) and modified to fit the context of culinary MSMEs and digital platform usage.

Table 2. Operationalization of Variables

Variable	Operational Definition	Indicators	Code	Scale
PU	MSME owners' perception that digital platforms are beneficial for business performance (e.g., increasing orders, market reach, and efficiency)	5 items	USEF1–USEF5	Likert 1–7
PEOU	MSME owners' perception that digital platforms are easy to learn, operate, and require minimal effort	5 items	EOU1–EOU5	Likert 1–7
ATU	Positive or negative attitudes toward the use of digital platforms in culinary business activities	5 items	ATT1–ATT5	Likert 1–7
BI	MSME owners' intention to continue using digital platforms in the future	3 items	BI1–BI3	Likert 1–7
AU	Actual use of digital platforms in daily business activities (frequency, intensity, and variety of use)	4 items	USE1–USE4	Likert 1–7

Digital Platforms Used by Respondents

This study investigated six major digital platforms commonly utilized by traditional culinary MSMEs in Cirebon. Table3 presents the comparative characteristics of these platforms.

Table 3. Comparison of Digital Platforms Used by Respondents

Platform	Category	Main Features	Cost/Commission	Coverage	Relevance for Culinary MSMEs
GoFood	Food Delivery	Delivery services, merchant promotions, analytics dashboard	20–25% per transaction	National	Very High
ShopeeFood	Marketplace + Delivery	E-commerce integration, vouchers, cashback	18–22% per transaction	National	High
GrabFood	Food Delivery	Delivery services, GrabAds, loyalty programs	20–25% per transaction	National	Very High
Instagram	Social Commerce	Feed, Stories, Reels, IG Shopping, direct messaging	Free (optional paid advertisements)	Global	High
TikTok Shop	Video Commerce	Short videos, live selling, affiliate marketing	2–5% per transaction	Global	Moderate to High
WhatsApp Business	Direct Messaging	Product catalog, automated messages, customer labels	Free	Global	Very High

Table 4 demonstrates the heterogeneity of digital platforms utilized by respondents. Food delivery platforms (GoFood, GrabFood, and ShopeeFood) charge commissions ranging from 18% to 25% per transaction but provide broad customer bases and analytical features. Social commerce platforms (Instagram and TikTok Shop) offer global reach with minimal costs but require visual content creation capabilities. WhatsApp Business emerged as the most frequently used platform due to its ease of operation and cost-free nature, although its market reach is generally limited to existing customer networks.

Data Analysis Technique

Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS version 4.0 software. SEM-PLS was selected for several reasons: (1) it is suitable for predictive models with reflective constructs; (2) it does not require multivariate normality assumptions; (3) it is effective for relatively small to medium sample sizes; and (4) it can simultaneously handle complex models involving multiple constructs and indicators (Hair et al., 2022). The analysis procedure was conducted in three stages. First, the outer model (measurement model) was evaluated through: (a) convergent validity testing using outer loadings (threshold ≥ 0.70) and Average Variance Extracted (AVE) values (threshold ≥ 0.50); (b) reliability testing using Cronbach's Alpha (≥ 0.70) and Composite Reliability (CR) (≥ 0.70); and (c) discriminant validity assessment using the Heterotrait-Monotrait Ratio (HTMT < 0.85) and the Fornell-Larcker criterion. Second, the inner model (structural model) was evaluated using the coefficient of determination (R^2), effect size (f^2) based on (Cohen, 2013) guidelines (small ≥ 0.02, medium ≥ 0.15, and large ≥ 0.35), and path coefficients. Third, significance testing was performed using bootstrapping with 1,000 subsamples to obtain *t*-statistics and *p*-values at a significance level of $\alpha = 0.05$.

3. RESULTS AND DISCUSSIONS

Descriptive Statistics

Descriptive statistical analysis was conducted to describe respondents' perceptions of each construct in the research model. Table 4 presents a summary of the descriptive statistics for the five latent variables.

Table 4. Descriptive Statistics of Variables (N = 165)

Variable	N Items	Mean	Std. Dev.	Min	Max
PU (Perceived Usefulness)	5	6.497	0.774	3.000	7.000
PEOU (Perceived Ease of Use)	5	5.716	1.184	2.200	7.000
ATU (Attitude Toward Use)	5	6.063	0.916	3.000	7.000
BI (Behavioral Intention)	3	6.024	1.143	1.000	7.000
AU (Actual Use)	4	3.903	1.079	1.000	6.000

Table 4 shows that Perceived Usefulness (PU) exhibited the highest mean score (6.497 on a seven-point scale), indicating that respondents strongly perceived digital platforms as beneficial for their culinary businesses. This finding is consistent with the study of (Affandi et al., 2024), which revealed that Indonesian MSME owners generally acknowledge the benefits of digital platforms in expanding market reach and improving operational efficiency. Attitude Toward Use (ATU) (6.063) and Behavioral Intention (BI) (6.024) also recorded high mean scores, suggesting positive attitudes and strong intentions toward the continued use of digital platforms. Conversely, Actual Use (AU) demonstrated the lowest mean score (3.903), indicating that although respondents possessed strong intentions to use digital platforms, the actual intensity of platform utilization remained varied and had not yet reached an optimal level among traditional culinary MSMEs in Cirebon. The discrepancy between intention (BI = 6.024) and actual usage (AU = 3.903) is noteworthy because it suggests the existence of barriers preventing the translation of intention into actual behavior. The relatively high standard deviation of PEOU (1.184) indicates heterogeneity in respondents' perceptions regarding ease of use, which may be influenced by differences in digital literacy and prior experience with digital platforms.

Outer Model (Measurement Model) Evaluation

The evaluation of the outer model aimed to ensure that the measurement indicators possessed adequate validity and reliability before proceeding to the structural model assessment. Table 5 presents the results of convergent validity and reliability evaluations.

Table 5. Results of Outer Model Evaluation

Construct	Indicator	Outer Loading	AVE	CR	Cronbach's Alpha
PU	USEF1	0.698	0.619	0.890	0.842
	USEF2	0.739			
	USEF3	0.802			
	USEF4	0.874			
	USEF5	0.809			
PEOU	EOU1	0.787	0.684	0.915	0.883
	EOU2	0.804			
	EOU3	0.862			
	EOU4	0.841			
	EOU5	0.837			
ATU	ATT1	0.918	0.810	0.955	0.941
	ATT2	0.929			
	ATT3	0.933			
	ATT4	0.883			
	ATT5	0.831			
BI	BI1	0.878	0.759	0.904	0.838
	BI2	0.872			
	BI3	0.864			
AU	USE1	0.934	0.541	0.810	0.715
	USE2	0.867			
	USE3	0.636			

USE4	0.366

The outer model evaluation presented in Table 5 indicates that most indicators exhibited outer loading values above the recommended threshold of 0.70, demonstrating adequate contributions to their respective latent constructs. The PU construct showed loadings ranging from 0.698 to 0.874 with an AVE value of 0.619; PEOU exhibited loadings ranging from 0.787 to 0.862 with an AVE of 0.684; ATU demonstrated the highest loadings (0.831–0.933) with an AVE of 0.810; and BI presented loadings ranging from 0.864 to 0.878 with an AVE of 0.759.

Two indicators within the Actual Use (AU) construct exhibited loadings below the recommended threshold of 0.70, namely USE3 (0.636) and USE4 (0.366). (Sarstedt et al., 2022) suggested that indicators with loadings between 0.40 and 0.70 may be retained if their removal does not substantially improve AVE or Composite Reliability and if they possess important theoretical relevance. In the present study, the AVE value of the AU construct remained above the acceptable threshold of 0.50 (0.541). Therefore, both indicators were retained to ensure comprehensive measurement of the actual use construct, encompassing frequency, duration, variety, and consistency of digital platform usage. Nevertheless, these findings suggest the need for refinement of the actual use measurement instrument in future studies.

The AVE values of all constructs exceeded the recommended threshold of 0.50 (ranging from 0.541 to 0.810), confirming adequate convergent validity. Composite Reliability values ranged from 0.810 to 0.955, while Cronbach's Alpha values ranged from 0.715 to 0.941, both exceeding the minimum threshold of 0.70. These results indicate satisfactory internal consistency reliability for all constructs.

Discriminant validity was assessed using two criteria: the Heterotrait-Monotrait Ratio (HTMT) and the Fornell-Larcker criterion. Table 6 presents the HTMT results.

Table 6. Heterotrait-Monotrait Ratio (HTMT)

	PU	PEOU	BI	ATU	AU
PU	-				
PEOU	0.513	-			
BI	0.523	0.617	-		
ATU	0.358	0.423	0.386	-	
AU	0.386	0.692	0.357	0.422	-

Table 6 demonstrates that all HTMT values were below the conservative threshold of 0.85 (Henseler et al., 2015), confirming satisfactory discriminant validity among the constructs. The highest HTMT value was observed for the PEOU–AU pair (0.692), which remained well below the critical threshold. This result indicates that although perceived ease of use and actual use are correlated, they represent empirically distinct constructs.

Table 7. Fornell-Larcker Criterion

	PU	PEOU	BI	ATU	AU
PU	**0.787**				
PEOU	0.444	**0.827**			
BI	0.446	0.538	**0.871**		
ATU	0.319	0.390	0.353	**0.900**	
AU	0.307	0.573	0.339	0.344	**0.735**

As shown in Table 7, the square root of AVE values on the main diagonal (displayed in bold) exceeded the inter-construct correlations in the corresponding rows and columns, indicating that the Fornell-Larcker criterion was satisfied. For example, the square root of AVE for the ATU construct (0.900) was greater than its correlations with PU (0.319), PEOU (0.390), BI (0.353), and AU (0.344). These findings provide further evidence supporting the discriminant validity of the measurement model and demonstrate that each construct captures a distinct conceptual domain.

Inner Model (Structural Model) Evaluation

After the measurement model was confirmed to be valid and reliable, the structural model was evaluated to test the proposed research hypotheses. Table 8 presents the results of hypothesis testing using the bootstrapping procedure with 1,000 subsamples.

Table 8. Results of Hypothesis Testing (Bootstrapping with 1,000 Subsamples)

Hypothesis	Path	Beta	t-statistic	p-value	CI 2.5%	CI 97.5%	Decision
H1	PEOU → BI	0.384	4.374	< 0.001	0.217	0.558	Supported
H2	PU → BI	0.235	2.963	0.004	0.085	0.401	Supported
H3	ATU → BI	0.129	1.632	0.105	-0.037	0.272	Not Supported
H4	BI → AU	0.339	4.105	< 0.001	0.196	0.509	Supported

The hypothesis testing results indicate that three out of the four proposed hypotheses were supported. H1 (PEOU → BI) was supported and exhibited the largest path coefficient (β = 0.384; t = 4.374; p < 0.001), with a confidence interval that did not include zero [0.217; 0.558]. H2 (PU → BI) was also supported (β = 0.235; t = 2.963; p = 0.004), with a confidence interval ranging from 0.085 to 0.401. In contrast, H3 (ATU → BI) was not supported (β = 0.129; t = 1.632; p = 0.105) because its confidence interval included zero [-0.037; 0.272]. Finally, H4 (BI → AU) was supported (β = 0.339; t = 4.105; p < 0.001), with a confidence interval ranging from 0.196 to 0.509.

Table 10. Coefficient of Determination (R-squared)

Endogenous Variable	R-squared	Adjusted R-squared	Interpretation
Behavioral Intention (BI)	0.357	0.345	Moderate
Actual Use (AU)	0.115	0.109	Weak

The coefficient of determination indicates that the TAM model explained 35.7% of the variance in Behavioral Intention (R^2 = 0.357), which falls within the moderate category according to Chin (1998). Meanwhile, Behavioral Intention explained only 11.5% of the variance in Actual Use (R^2 = 0.115), indicating a weak explanatory power. The adjusted R-squared values were very close to the corresponding R-squared values (0.345 vs. 0.357 for BI; 0.109 vs. 0.115 for AU), suggesting that the model did not suffer from overfitting.

Table 11. Effect Size (f-squared)

Path	f-squared	Effect Size Category
PEOU → BI	0.168	Medium
PU → BI	0.067	Small
ATU → BI	0.021	Small
BI → AU	0.130	Small to Medium

The effect size analysis (f-squared) revealed that Perceived Ease of Use (PEOU) exerted a medium effect (f^2 = 0.168) on Behavioral Intention (BI), indicating that removing PEOU from the model would substantially reduce the explained variance in BI. In contrast, Perceived Usefulness (PU) demonstrated a small effect (f^2 = 0.067), while Attitude Toward Use (ATU) exhibited only a marginal effect (f^2 = 0.021) on BI. The path from Behavioral Intention to Actual Use (BI → AU) showed a small-to-medium effect (f^2 = 0.130). These findings confirm that Perceived Ease of Use is the most influential predictor within the proposed model.

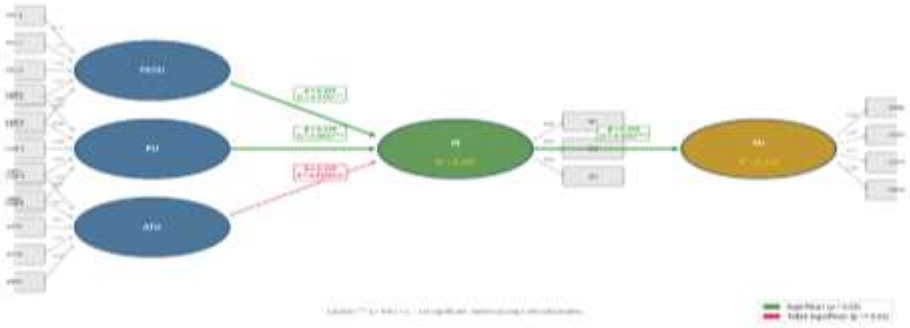

Figure 2. Results of the PLS-SEM Structural Model

Discussion

The Effect of Perceived Ease of Use (PEOU) on Behavioral Intention (BI)

Hypothesis 1 was supported, exhibiting the largest path coefficient in the model (β = 0.384; t = 4.374; p < 0.001). This finding indicates that the ease of using digital platforms is the strongest driver of usage

intention among traditional culinary MSME owners in Cirebon. The result is consistent with the fundamental proposition of the Technology Acceptance Model (TAM) proposed by (Davis, 1989) and aligns with the findings of (Venkatesh & Davis, 2000) who emphasized the critical role of perceived ease of use across various organizational contexts. In the context of Cirebon culinary MSMEs, business owners generally manage digital platform accounts independently without dedicated digital marketing staff. Consequently, ease of interface, menu navigation, and order management features become crucial determinants influencing their willingness to continue using digital platforms.

This finding is also in line with (Buchdadi et al., 2024) who reported that perceived ease of use was the dominant predictor of QRIS adoption among Indonesian MSMEs. Practically, platforms that provide Indonesian-language interfaces, integrated tutorials, and responsive customer support are more readily adopted by culinary MSME owners who possess varying levels of digital literacy. For example, WhatsApp Business has become a preferred platform due to its familiar interface and minimal learning curve.

The Effect of Perceived Usefulness (PU) on Behavioral Intention (BI)

Hypothesis 2 was supported (β = 0.235; t = 2.963; p = 0.004), indicating that the perceived benefits derived from digital platform usage significantly encourage usage intention. The tangible benefits perceived by Cirebon culinary MSME owners include increased orders through platform search and recommendation algorithms, expanded customer reach beyond the physical location of the business, greater promotional efficiency through targeted advertising features, and easier transaction recording. This finding supports the core premise of TAM (Venkatesh & Davis, 2000) and is consistent with the studies of (Affandi et al., 2024; Trinugroho et al., 2022) which demonstrated a positive relationship between digital adoption and business performance in Indonesia.

Within the context of *empal gentong* and *nasi jamblang* businesses, the benefits of digital platforms are particularly evident in acquiring tourist customers who search for culinary recommendations through platforms such as GoFood or GrabFood before visiting Cirebon. Delivery platforms also enable business owners to serve wider geographical areas without establishing physical branches. (Merín-Rodrigáñez et al., 2024) supported this finding by demonstrating that digital transformation among innovative MSMEs positively affects business performance through business model innovation. In the present context, this transformation is reflected in the shift from a traditional dine-in model to a multi-channel business model integrating dine-in services, food delivery, and social commerce.

The Effect of Attitude Toward Use (ATU) on Behavioral Intention (BI)

Hypothesis 3 was not supported (β = 0.129; t = 1.632; p = 0.105), indicating that attitude toward use did not significantly influence behavioral intention at the 0.05 significance level. Although the path coefficient was positive, its effect was insufficient to achieve statistical significance. This finding is noteworthy because it differs from the predictions of the classical TAM, which positions attitude as an important mediator, yet it is not entirely inconsistent with contemporary empirical literature.

One possible explanation is that, in the context of traditional culinary MSMEs in Cirebon, decisions to adopt digital platforms are driven more by pragmatic considerations such as ease of use and direct benefits than by affective evaluations of technology. Business owners tend to adopt digital platforms due to market demands, competitive pressures from other businesses, and operational needs to reach customers, rather than because of favorable attitudes toward technology itself (Bahtiar, Diantama, et al., 2025). (Venkatesh et al., 2003) in the development of the Unified Theory of Acceptance and Use of Technology (UTAUT), similarly found that the attitude variable became insignificant when perceived usefulness and perceived ease of use were controlled, suggesting that attitude may merely serve as a proxy for these more direct determinants (Bahtiar, Bisri, et al., 2025).

Furthermore, given that the majority of respondents possessed a senior high school or vocational education background (49.7%), decision-making orientations may be more pragmatic and outcome-oriented, focusing on tangible business outcomes such as increases in orders or profit margins after platform commissions rather than abstract evaluations of technology. This finding is also supported by (Kim

& Jin, 2024), who demonstrated that among MSMEs, digital capabilities exert greater influence through practical innovation pathways rather than through attitudinal evaluations.

The Effect of Behavioral Intention (BI) on Actual Use (AU)

Hypothesis 4 was supported (β = 0.339; t = 4.105; p < 0.001), indicating that strong behavioral intention significantly translates into actual usage of digital platforms. This finding supports the fundamental causal chain proposed by TAM (Davis, 1989; Venkatesh & Davis, 2000), which identifies behavioral intention as the direct predictor of actual technology use.

However, the relatively low R-squared value for Actual Use (R^2 = 0.115) indicates that behavioral intention explained only approximately 11.5% of the variance in actual platform usage. This suggests that factors beyond the TAM framework substantially influence the intensity of digital platform utilization among culinary MSMEs. Potential factors include: (1) digital infrastructure, such as stable internet connectivity and adequate technological devices; (2) platform commission fees that reduce business profit margins, particularly on food delivery platforms charging commissions of 18–25% per transaction; (3) ecosystem support in the form of training, mentoring, and technical assistance provided by government agencies or MSME associations; (4) seasonally fluctuating market demand, particularly related to tourism seasons in Cirebon; and (5) business production capacity, which may limit the ability to fulfill large volumes of orders.

(Surahman et al., 2023) reported similar findings, demonstrating that the relationship between digital transformation intentions and MSME operational performance is moderated by contextual factors. (Clemente-Almendros et al., 2024) further argued that firm-size heterogeneity moderates the impact of digital transformation, with smaller enterprises facing greater implementation barriers despite having strong intentions. These findings imply that policy interventions should not only encourage adoption intentions but also address structural barriers that hinder the translation of intentions into actual usage.

Overall, the TAM model explained 35.7% of the variance in behavioral intention through the combined effects of perceived ease of use, perceived usefulness, and attitude toward use. The hierarchy of influence identified PEOU (β = 0.384) as the strongest predictor, followed by PU (β = 0.235), while ATU (β = 0.129) was not statistically significant. This pattern suggests that, within the context of regionally distinctive culinary MSMEs, pragmatic considerations related to usability and perceived benefits are more influential than attitudinal evaluations of technology.

The theoretical implications of this study indicate that TAM remains relevant for explaining technology adoption among micro-enterprises engaged in local culinary businesses, although the ATU → BI pathway may not always be significant. These findings contribute to academic discussions concerning the boundaries of TAM applicability, particularly among populations with demographic and socioeconomic characteristics different from the original TAM context, which primarily involved knowledge workers in large organizations. The study also suggests that TAM may need to be extended with additional variables such as platform commissions, digital literacy, and government support to improve its predictive power regarding actual use.

From a managerial perspective, MSME owners should prioritize digital platforms that are easy to operate and provide tangible business benefits. Business owners are advised to begin their digitalization journey with platforms characterized by low learning curves, such as WhatsApp Business, before transitioning to more complex platforms, including food delivery marketplaces. Multi-channel platform diversification is also recommended to reduce dependency on a single platform and mitigate risks associated with changes in platform commission policies.

From a policy perspective, the findings highlight the need for MSME digitalization programs that focus on: (1) practical operational assistance rather than merely general training, including merchant dashboard management, visual promotional content development, menu optimization on delivery platforms, and integration of online orders with daily production processes; (2) subsidies or commission negotiations for traditional culinary MSMEs that represent cultural heritage assets; (3) the development of digital infrastructure within Cirebon's traditional culinary clusters; and (4) digital certification programs aimed at enhancing digital literacy and increasing MSME owners' confidence in utilizing technology.

4. CONCLUSION

Based on the results of the analysis and discussion, this study draws several conclusions. First, perceived ease of use (PEOU) has a positive and significant effect on behavioral intention (BI) to use digital platforms among traditional culinary MSMEs in Cirebon ($\beta = 0.384$; $p < 0.001$). Ease of use emerged as the strongest determinant of adoption intention, particularly because most business owners manage digital platforms independently without dedicated digital personnel. Second, perceived usefulness (PU) positively and significantly influences behavioral intention (BI) ($\beta = 0.235$; $p = 0.004$). The perceived benefits of digital platforms, such as increased orders, broader market reach, and greater promotional efficiency, encourage MSME owners to adopt these technologies. Third, attitude toward use (ATU) does not significantly affect behavioral intention (BI) ($\beta = 0.129$; $p = 0.105$), indicating that positive attitudes alone are insufficient to stimulate adoption intentions. Instead, MSME owners tend to base adoption decisions on pragmatic considerations related to usability and tangible business benefits. Fourth, behavioral intention (BI) positively and significantly influences actual use (AU) ($\beta = 0.339$; $p < 0.001$), suggesting that stronger intentions can be translated into actual adoption behavior, although external factors beyond the Technology Acceptance Model (TAM) continue to play an important role.

Theoretically, this study contributes to the application and extension of the Technology Acceptance Model in the context of traditional culinary MSMEs. The findings demonstrate that perceived ease of use and perceived usefulness are more influential than attitude toward use in shaping digital platform adoption intentions, highlighting the predominance of functional and instrumental considerations in this setting. Furthermore, the moderate explanatory power for behavioral intention ($R^2 = 35.7\%$) and the relatively weak explanatory power for actual use ($R^2 = 11.5\%$) suggest that TAM alone is insufficient to fully explain digital platform adoption among regionally distinctive culinary MSMEs and should be complemented by additional contextual variables.

Practically, the findings imply that digital platform providers, local governments, and MSME development agencies should prioritize initiatives that enhance platform usability and accessibility. Such initiatives include simplifying platform interfaces, providing continuous digital literacy training, offering technical assistance, and strengthening mentoring programs for MSME owners. These efforts are expected to reduce technological barriers and encourage more sustainable digital adoption among traditional culinary businesses.

This study has several limitations. First, the research was limited to traditional culinary MSMEs in Cirebon, which may restrict the generalizability of the findings to other regions with different socio-economic and cultural characteristics. Second, the cross-sectional research design was unable to capture changes in adoption behavior over time. Third, the explanatory power for actual use remained relatively low, indicating that important determinants outside the TAM framework were not included in the model. Fourth, the study did not incorporate direct business performance indicators that could provide a more comprehensive understanding of the outcomes of digital platform adoption.

Therefore, future studies are encouraged to employ longitudinal research designs, expand the geographical scope to other regions, and incorporate additional variables such as business performance, digital literacy, perceived cost, platform support, government assistance, and social influence. Comparative analyses between traditional and modern culinary MSMEs are also recommended to provide a broader understanding of digital adoption behavior across different business contexts.

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