

Analyzing Consumer Behavioral Intention to Utilize Food Delivery Services in Ride-Hailing Apps: A Study of Malang's Culinary SMES

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ABSTRACT

Keywords:

UTAUT; Behavioral Intention; SME's, Culinary;

Background: The MSME sector, especially the food and beverage industry, is a critical pillar for national economic stability and employment. However, actual field conditions reveal that technological implementation among small business actors does not always progress smoothly. Moreover, previous empirical findings concerning the effects of UTAUT constructs on technology adoption intentions within small enterprises still yield inconsistent and contradictory results.

Research Gap: The majority of prior studies regarding food delivery platforms tend to position the end consumer as the sole research subject, thereby focusing almost exclusively on the demand side. Very few studies highlight adoption behavior from the perspective of the merchants or the culinary MSMEs themselves as the supply side, even though the sustainability of the digital ride hailing ecosystem heavily relies on the readiness and technological acceptance of these business entities.

Novelty: This study shifts the analytical lens entirely to culinary MSMEs as the supply side, addressing empirical inconsistencies of prior research by establishing how performance expectancy, effort expectancy, social influence, and facilitating conditions collectively drive the actual behavioral outcomes of small business actors. It further integrates Islamic economic perspectives through *maslahah*, *amanah*, and *tawazun* principles.

Method: A quantitative approach with explanatory and correlational research design was employed. A sample of 173 culinary SME respondents was selected using purposive sampling. Data were collected through closed questionnaires with a 1 to 5 Likert scale. Data analysis utilized Structural Equation Modeling based on Partial Least Squares using SmartPLS 4.0 software.

Results: The structural model reveals a highly synchronized, positive network of behavioral and infrastructural dependencies. Performance expectancy ($\beta=0.318$, $p=0.000$), effort expectancy ($\beta=0.199$, $p=0.002$), social influence ($\beta=0.211$, $p=0.001$), and facilitating conditions ($\beta=0.165$, $p=0.002$) significantly influence behavioral intention. Facilitating conditions emerge as the strongest driver of actual usage behavior ($\beta=0.495$, $p=0.000$), followed by behavioral intention ($\beta=0.390$, $p=0.000$). The model explains 48.2 percent of variance in behavioral intention and 59.6 percent in usage behavior.

Conclusion: This study validates the UTAUT model within the supply side ecosystem of culinary MSMEs in Malang City. Digital transformation in small food businesses is driven by a synchronized mix of cognitive, social, and structural factors. Facilitating conditions act as the operational foundation, proving that in supply side environments, environmental and structural readiness overrides pure psychological intent.

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INTRODUCTION

The Micro, Small, and Medium Enterprises (MSMEs) sector, particularly within the food and beverage industry, plays a crucial role in maintaining national economic stability and absorbing a significant portion of the labor force. Nevertheless, the modern market dynamics driven by post-pandemic digitalization waves require culinary MSMEs to swiftly abandon conventional operational methods and transition toward digital ecosystems to sustain their competitive advantage (Li & Heath, 2020; Ray & Bala, 2021). One of the most dominant and widely adopted forms of digital transformation is the Mobile Food Ordering System, integrated through ride-hailing applications. Integration into this digital platform allows culinary business actors to expand their market reach beyond geographical boundaries, optimize real-time transactions, and leverage the efficiencies of cashless payment systems (Troise et al., 2021).

However, actual field conditions indicate that the implementation of this technology does not always progress linearly among small business actors. In satellite cities and regional economic hubs such as Malang City, the penetration of these food delivery technologies still faces a high degree of disparity. Many culinary MSME owners experience resistance due to limited digital literacy, concerns over high platform commission fees, and the perceived operational complexity of the applications (Chatterjee et al., 2021). This phenomenon implies that the mass availability of technological infrastructure from service providers does not automatically guarantee successful adoption at the organizational user or small business level. Consequently, an in-depth analysis is required to understand the determining factors that underlie the decisions of these business actors to adopt or reject such digital innovations.

Digital transformation among culinary MSMEs should not only be understood from a technological efficiency perspective but also from an ethical and socio-economic perspective. Within Islamic economic thought, business activities are expected to generate *maslahah* (public benefit) by creating economic value while maintaining social responsibility and fairness. The adoption of digital food delivery platforms can represent an instrument of *maslahah* when technology enables MSMEs to expand market access, improve customer services, and strengthen economic resilience without violating Islamic business principles. Furthermore, the implementation of digital platforms requires *amanah* (trustworthiness), particularly regarding product information accuracy, transaction transparency, halal assurance, and responsible interaction with consumers. Therefore, technology acceptance among Muslim entrepreneurs is not solely determined by perceived usefulness and operational capability but also embedded within ethical considerations that guide sustainable business practices.

Within the landscape of academic literature, analyses regarding technology acceptance still largely rely on the Unified Theory of Acceptance and Use of Technology (UTAUT) (Dwivedi et al., 2019; Venkatesh et al., 2016). This model consistently examines the influence of performance expectancy, effort expectancy, social influence, and facilitating conditions on technology usage intention and behavior. Although the UTAUT model has been widely validated across various digital service contexts, a crucial research gap remains. The majority of prior studies regarding food delivery platforms tend to position the end-consumer as the sole research subject, thereby focusing almost exclusively on the demand side (Ray et al., 2021). Very few studies highlight adoption behavior from the perspective of the merchants or the culinary MSMEs themselves as the supply side, even though the sustainability of the digital ride-hailing ecosystem heavily relies on the readiness and technological acceptance of these business entities. Furthermore, prior empirical findings regarding the influence of UTAUT constructs on technology adoption intentions in small businesses still show inconsistent and contradictory results (Gupta & Arora, 2020) (Gupta & Arora, 2020), necessitating a rigorous validation of the baseline model within this specific context.

To bridge this theoretical gap, this study examines the direct and sequential relationships within the core UTAUT framework applied directly to organizational micro-merchants. By shifting the analytical lens entirely to culinary MSMEs, this study addresses the empirical inconsistencies of prior research by establishing how performance expectancy, effort expectancy, social influence, and facilitating conditions collectively drive the actual behavioral outcomes of small business actors. This streamlined approach ensures a robust and focused evaluation of technology acceptance mechanics in a sector that serves as the backbone of the local economy.

Based on the background and issues outlined, this study is formulated with the primary objective of analyzing the factors that influence the behavioral intention and actual use behavior of culinary MSMEs in Malang City regarding food delivery services within ride-hailing applications. Specifically, this study aims to evaluate the direct effects of performance expectancy, effort expectancy, social influence, and facilitating conditions on usage intention, as well as its subsequent impact on actual behavior. Additionally, this study evaluates the mediating role of behavioral intention in bridging the core acceptance determinants with actual technology utilization. The findings of this research are expected to provide clear theoretical contributions to the development of digital marketing literature and offer practical, actionable recommendations for platform managers and policymakers to accelerate sustainable digital transformation for MSMEs.

METHOD

Research Desain

This study employs a quantitative explanatory research design to empirically test and analyze the causal relationships derived from the Unified Theory of Acceptance and Use of Technology (UTAUT) framework. The explanatory approach is selected to investigate how specific technology acceptance factors structurally dictate the digital platform utilization patterns of small business operations. Data collection is executed via structured self-administered surveys distributed directly to the targeted business owners.

Population and Sampling

The target population for this research comprises all culinary Micro, Small, and Medium Enterprises (MSMEs) operating within the administrative boundaries of Malang City that have integrated digital food delivery channels into their business operations. To ensure the collected data tightly aligns with the theoretical constructs of the structural model, non-probability purposive sampling is utilized based on three explicit inclusion criteria:

- (a) The culinary MSME must be an active registered merchant partners on at least one major ride-hailing food delivery platform (GrabFood, GoFood, or ShopeeFood).
- (b) The enterprise must have utilized the mobile food ordering platform for a minimum duration of one year to ensure that the operational behavior reflects sustained usage rather than a temporary trial phase.
- (c) The respondent must be the primary owner or chief operational manager who actively makes technology deployment choices for the business entity.

Measurement

All latent variables in the structural framework are measured using multi-item subjective indicator scales adapted from validated baseline technology acceptance instruments (Venkatesh et al., 2003, 2016). Responses are quantified using a uniform Five-Point Likert Scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Latent Variable	Operatixonal Definition	Adopted Source
Performance Expectancy (PE)	The degree to which the owner believes using food delivery apps increases business performance.	Venkatesh et al. (2003); Troise et al. (2021)
Effort Expectancy (EE)	The degree of perceived ease associated with managing the merchant platform application.	Venkatesh et al. (2003); Chatterjee et al. (2021)
Social Influence (SI)	The perceived social pressure from the business environment to adopt digital delivery platforms.	Venkatesh et al. (2003); Ray et al. (2021)

Facilitating Conditions (FC)	The perceived availability of operational and technical infrastructure to support platform usage.	Venkatesh et al. (2003); Dwivedi et al. (2019)
Usage Intention (UI)	The subjective probability that the merchant will continue to utilize the platform in future operations.	Venkatesh et al. (2003); Venkatesh et al. (2016)
Usage Behavior (UB)	The actual frequency and depth of integrating the digital delivery service into daily business routines.	Venkatesh et al. (2016); Troise et al. (2021)

Data Analysis Technique

Data analysis is performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) executed via SmartPLS software. PLS-SEM is highly suitable for this study as it does not impose strict normal distribution assumptions on the sample data and exhibits superior statistical power when evaluating complex direct and mediated structural paths simultaneously (Hair et al., 2019). The evaluation of the empirical model is executed through a two-stage process:

1. Measurement Model (Outer Model) Evaluation

Before examining the structural pathways, the measurement model must demonstrate sufficient validity and reliability.

- Convergent Validity:** Assessed via factor loadings (minimum threshold of 0.70) and Average Variance Extracted (AVE), which must exceed 0.50 for every latent construct.
- Discriminant Validity:** Verified using the Heterotrait-Monotrait Ratio (HTMT), where all values must remain strictly below 0.85, indicating that each construct is empirically distinct.
- Construct Reliability:** Determined through Cronbach's Alpha and Composite Reliability (CR), with both metrics requiring values greater than 0.70 to confirm internal consistency.

2. Structural Model (Inner Model) Evaluation

Once the outer model is validated, the structural paths are assessed to verify the proposed hypotheses (H1 to H6). The explanatory power and predictive relevance are determined using the Coefficient of Determination, Effect Size and path coefficients. Hypothesis significance testing is conducted through a non-parametric bootstrapping procedure with 5,000 resamples to compute two-tailed p-values and t-statistics (critical t-value > 1.96 at a significance level of $\alpha = 5\%$).

RESULTS

This section presents the empirical results of the two-stage Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis conducted using SmartPLS. The results first report the measurement model (outer model), including indicator reliability, construct reliability, convergent validity, and discriminant validity. The section then presents the structural model (inner model), model fit, explanatory power, and hypothesis testing for the relationships specified in the UTAUT-based research framework.

Measurement Model (Outer Model) Evaluation

The measurement model was evaluated using indicator reliability, internal consistency, and convergent validity criteria. According to Hair et al. (2019), indicator reliability is established when the outer loadings of all items exceed the conservative psychometric threshold of 0.70. As confirmed by the outer loadings matrix, all 22 measurement items display robust loadings well above the threshold, spanning from a minimum value of 0.743 (SI4) to a maximum value of 0.842 (BI3), ensuring strong individual item reliability.

Table 1. Outer Loadings Matrix

	BI	EE	FC	PE	SI	UB
BI 1	0.813					
BI 2	0.809					
BI 3	0.842					
EE 1		0.799				
EE 2		0.799				

EE 3		0.746				
EE 4		0.821				
FC 1			0.806			
FC 2			0.823			
FC 3			0.818			
FC 4			0.808			
PE 1				0.836		
PE 2				0.751		
PE 3				0.780		
PE 4				0.780		
SI 1					0.824	
SI 2					0.787	
SI 3					0.772	
SI 4					0.743	
UB 1						0.750
UB 2						0.780
UB 3						0.791
UB 4						0.776

Construct reliability and convergent validity were further validated using Cronbach's alpha, Composite Reliability and the Average Variance Extracted (AVE). As illustrated in the overview matrix, all constructs demonstrate superior internal consistency, comfortably beating the standard 0.70 threshold (Hair et al., 2017). Facilitating Conditions (FC) exhibits the highest internal reliability (Cronbach's alpha = 0.830; rho_c = 0.887), while the remaining constructs (BI, EE, PE, SI, UB) yield stable alpha scores between 0.759 and 0.803, paired with composite reliability metrics between 0.857 and 0.870. Convergent validity is fully supported across the model since every single latent construct securely exceeds the minimum 0.50 AVE benchmark (Hair et al., 2019), topped by Behavioral Intention at 0.675 and anchored reliably by Usage Behavior at 0.599.

Table 2. Construct Reliability and Validity Overview

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BI	0.759	0.759	0.862	0.675
EE	0.803	0.817	0.870	0.627
FC	0.830	0.831	0.887	0.662
PE	0.795	0.800	0.867	0.620
SI	0.788	0.792	0.863	0.612
UB	0.777	0.778	0.857	0.599

Structural Model (Inner Model)

Once the outer model was verified, the inner model's overall fit and explanatory power were assessed. To ensure empirical distinctiveness, discriminant validity was scrutinized using the Heterotrait-Monotrait Ratio (HTMT). All latent construct pairings fall safely below the conservative 0.85 HTMT threshold (Henseler et al., 2015), except for the conceptual link between Usage Behavior and Facilitating Conditions, which registers at 0.864. Because this value remains safely below the absolute 0.90 ceiling recommended for highly interrelated behavioral constructs (Gold et al., 2001; Hair et al., 2019, 2017), the overall measurement model successfully demonstrates clean, independent structural integrity.

Table 3. Heterotrait-Monotrait Ratio (HTMT) Matrix

	BI	EE	FC	PE	SI	UB
BI						
EE	0.643					
FC	0.645	0.566				
PE	0.756	0.594	0.612			
SI	0.652	0.496	0.558	0.568		
UB	0.838	0.666	0.864	0.678	0.597	

Based on the model fit indices, the model exhibits an excellent data fit, as demonstrated by an SRMR of 0.065 for the saturated model and 0.068 for the estimated model both residing comfortably below the critical 0.08 misspecification ceiling (Henseler et al., 2016). Concurrently, the Normed Fit Index (NFI) records values of 0.754 and 0.751, confirming an acceptable predictive modeling configuration for variance-based SEM (Hair et al., 2017).

Table 4. Model Fit Criteria Summary

	Saturated model	Estimated model
SRMR	0.065	0.068
d_ULS	1.178	1.265
d_G	0.469	0.475
Chi-square	456.079	460.953
NFI	0.754	0.751

The predictive power of the framework is quantified via the Coefficient of Determination (R-Square). Behavioral Intention yields an R-Square value of 0.482, indicating that the baseline UTAUT antecedents account for 48.2% of a merchant's cognitive willingness to adopt food delivery applications. Crucially, the ultimate dependent variable, Usage Behavior, achieves a strong R-Square value of 0.596, establishing that 59.6% of the variance in actual digital platform integration is driven collectively by the merchant's behavioral intentions and the facilitating infrastructure.

Table 5. Coefficient of Determination (R-Square) Overview

	R-square	R-square adjusted
BI	0.482	0.469
UB	0.596	0.591

Hypothesis testing

To determine the statistical significance of the individual pathways, a non-parametric bootstrapping routine with 5,000 resamples was executed. The corresponding parameters (Original Sample, T-statistics, and P-values) are presented in Table 6

Table 6. Structural Path Coefficients and Hypothesis Assessment Summary

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
BI -> UB	0.390	0.389	0.055	7.147	0.000
EE -> BI	0.199	0.202	0.065	3.051	0.002
FC -> BI	0.165	0.165	0.054	3.069	0.002
FC -> UB	0.495	0.497	0.050	9.845	0.000
PE -> BI	0.318	0.318	0.061	5.209	0.000
SI -> BI	0.211	0.213	0.061	3.476	0.001

The bootstrapping results support all six structural hypotheses. Performance Expectancy significantly influences Behavioral Intention ($\beta = 0.318$, $t = 5.209$, $p < 0.001$); Effort Expectancy significantly influences Behavioral Intention ($\beta = 0.199$, $t = 3.051$, $p = 0.002$); Social Influence significantly influences Behavioral Intention ($\beta = 0.211$, $t = 3.476$, $p = 0.001$); Facilitating Conditions significantly influence Behavioral Intention ($\beta = 0.165$, $t = 3.069$, $p = 0.002$) and Usage Behavior ($\beta = 0.495$, $t = 9.845$, $p < 0.001$); and Behavioral Intention significantly influences Usage Behavior ($\beta = 0.390$, $t = 7.147$, $p < 0.001$).

DISCUSSION

The validation of H1 ($\beta=0.318$, $t = 5.209$, $p = 0.000$) underscores that performance expectancy serves as a vital driver of strategic intent. Culinary business operators view mobile ordering apps through a pragmatic lens; when they perceive that platforms like GrabFood or GoFood will directly expand their

customer reach and accelerate order turnover, their motivation to join the platform increases. This finding aligns with Troise et al. (2021), who noted that for small enterprises, technology adoption is primarily driven by clear economic advantages. Concurrently, the verification of H2 ($\beta = 0.199$, $t = 3.051$, $p = 0.002$) validates that effort expectancy reduces operational friction. Because micro-merchants constantly juggle high-stress tasks like cooking and manual order fulfillment, a simple, intuitive application layout lowers their psychological resistance to digital transition (Chatterjee et al., 2021).

Interestingly, the support for H3 ($\beta = 0.211$, $t = 3.476$, $p = 0.001$) indicates that local business environments generate a powerful social ecosystem effect. In highly competitive regional culinary hubs like Malang City, small business owners do not make decisions in a vacuum. Observing competing vendors leverage food delivery apps to capture digital market share creates a strong environmental standard, motivating merchants to adopt the same technology to preserve their market relevance (Ray et al., 2021).

The final structural breakthrough is revealed through the dual paths of Facilitating Conditions (H4 and H5) and its connection to actual Usage Behavior (H6). Facilitating conditions significantly influence initial intention (H4, $\beta = 0.165$, $t = 3.069$, $p = 0.002$). More importantly, Facilitating Conditions emerge as the single most powerful driver across the entire model when predicting actual long-term Usage Behavior (H5, $\beta = 0.495$, $t = 9.845$, $p = 0.000$).

This massive statistical weight shows that while a strong behavioral intention (H6, $\beta = 0.390$, $t = 7.147$, $p = 0.000$) is necessary to kickstart the digital shift, the continuous daily operation of the system relies heavily on solid external support. Without reliable internet, affordable commission models, functional hardware, and prompt customer service, actual day-to-day integration breaks down, no matter how motivated the merchant is. This finding refines the UTAUT framework by proving that for resource-dependent small businesses, environmental infrastructure acts as a vital foundation that directly controls actual usage behavior (Dwivedi et al., 2019; Venkatesh et al., 2016).

Although this study does not position behavioral intention as the sole mechanism explaining technology usage, the findings indicate that behavioral intention functions as an important psychological pathway connecting cognitive and social factors with actual adoption behavior. Performance expectancy, effort expectancy, social influence, and facilitating conditions strengthen merchants' intention to utilize digital platforms, which subsequently contributes to actual usage. However, the stronger direct influence of facilitating conditions on usage behavior demonstrates that MSME technology adoption differs from individual consumer adoption because organizational usage depends heavily on resource availability.

The comprehensive empirical support for all six structural pathways provides a powerful validation and expansion of the Unified Theory of Acceptance and Use of Technology (UTAUT) within the supply-side ecosystem of culinary Micro, Small, and Medium Enterprises (MSMEs). Rather than presenting anomalies or path rejections, the structural model reveals a highly synchronized, positive network of behavioral and infrastructural dependencies. This complete validation underscores that the digital transformation of small food businesses is not driven by an isolated factor, but by a systematic convergence of economic utility, operational ease, social dynamics, and technological readiness.

The structural analysis identifies Performance Expectancy as a premier cognitive driver of a merchant's behavioral intention. This finding demonstrates that culinary MSME owners behave as highly rational, utility-maximizing economic actors. Their mental commitment to adopting online food delivery platforms is heavily dictated by concrete expectations of commercial benefit, such as reaching a broader consumer base across the city, accelerating daily transaction turnover, and scaling total revenue. This outcome strongly aligns with the baseline assertions of Venkatesh et al. (2003) and directly echoes the contemporary empirical work of Troise et al. (2021), who observed that small-scale food operators evaluate technology through a pragmatic lens of market preservation and economic viability.

Concurrently, the verification of Effort Expectancy confirms that application simplicity is an essential catalyst in reducing initial resistance to technology. Because micro-merchants typically manage multiple intensive roles simultaneously acting as chefs, inventory managers, and customer service representatives they are highly sensitive to cognitive overload. A user-friendly, intuitive application interface with simple menu management and hassle-free transaction workflows minimizes operational friction, thereby increasing their intention to adopt the tool. This relationship matches the conclusions of Chatterjee et al. (2021), who argued that complex system architectures act as deterrents for resource-

constrained managers, whereas intuitive platforms flatten the learning curve and foster positive adoption intent.

A compelling dimensional alignment is observed in the validation of Social Influence. In heavily concentrated regional culinary hubs, small businesses do not operate in a vacuum; they are embedded within dense, highly visible competitive networks. The high significance of this path highlights a localized cluster effect, where merchants are acutely sensitive to the digital shifts of their peers. Observing neighboring food stalls successfully utilizing digital platforms to capture delivery orders creates an aggressive local industry norm. This environment fosters a strategic pressure to conform, where MSME owners adopt the technology out of fear of market marginalization and customer diversion to digitally integrated competitors. This finding supports the work of Ray et al. (2021), confirming that social proof and peer imitation are powerful mechanisms for technology diffusion within tight-knit business communities.

The definitive structural insight of this study lies in the dual pathways of Facilitating Conditions and their subsequent integration with Behavioral Intention to dictate actual Usage Behavior. While behavioral intention exerts a strong, significant direct effect on actual usage, validating the core psychological bridge of the UTAUT framework (Venkatesh et al., 2016), it is heavily outpaced by the direct influence of Facilitating Conditions on actual Usage Behavior.

This substantial statistical disparity exposes a critical operational reality. For an individual consumer, positive intent is often the final and single most dominant catalyst required to execute a technology behavior. However, for a resource-dependent business entity, pure psychological motivation is secondary to infrastructural feasibility. A merchant can possess an absolute intention to process digital food orders, yet if they face unstable internet connectivity, lack appropriate smartphone hardware, or experience unresponsive platform technical support, the actual day-to-day execution of the technology breaks down entirely. From an Islamic entrepreneurship perspective, the positive influence of performance expectancy reflects that MSME actors perceive technology as a means to achieve economic improvement. This aligns with the principle of *maslahah*, where business innovation is encouraged when it generates broader economic benefits and strengthens entrepreneurial sustainability.

Consequently, facilitating conditions act as the operational foundation of the entire model. This dominant path expands the boundary conditions of the classical UTAUT framework, proving that in B2B or supply-side environments, environmental and structural readiness overrides pure psychological intent. This perspective directly enriches the academic discourse advanced by Dwivedi et al. (2019), which argues that organizational technology deployment requires an immediate, sustained availability of operational assets to convert cognitive intentions into stable, long-term usage habits.

The digital integration of culinary MSMEs contributes directly to sustainable development goals. By bridging the digital divide for micro-merchants, food delivery platforms advance SDG 8 (Decent Work and Economic Growth) through market access and revenue expansion, and SDG 9 (Industry, Innovation, and Infrastructure) by modernizing local supply chains. Furthermore, empowering traditional food vendors reduces economic disparities (SDG 10) between large restaurant chains and micro-enterprises. However, achieving a sustainable digital food ecosystem requires mitigating platform dependence risks. High commission rates, sudden algorithm changes, and lack of data ownership disproportionately harm small vendors with low bargaining power. Sustainable digital transformation demands a balanced value creation model where platform corporations, MSME merchants, delivery drivers, and end-consumers share equitable economic benefits without exploitation (Gharar or *Riba*).

CONCLUSION

From a theoretical standpoint, these findings contribute significantly to the evolution of technology acceptance modeling. By validating all six pathways in a supply-side framework, this study demonstrates that the UTAUT model originally designed to evaluate individual consumer or employee behavior retains a high degree of structural integrity when transposed into an entrepreneurial, firm-level context.

However, the major theoretical implication rests on the restructuring of the intention-behavior link. In standard consumer-centric technology models, facilitating conditions are often theorized as a secondary background factor that merely supports intent. This study shifts that paradigm by proving that for small businesses, facilitating conditions serve as a direct, dominant driver of actual behavior.

This implies that future theoretical modifications of technology models targeting MSMEs must treat environmental, structural, and institutional readiness as primary drivers rather than peripheral variables. The study effectively conceptualizes that organizational technology usage is a highly resource-dependent behavior rather than a purely volition-driven psychological choice.

The dominance of facilitating conditions also corresponds with the Islamic concept of *tawazun*, emphasizing balance between human intention and supporting resources. Although entrepreneurs may possess strong willingness to adopt digital platforms, sustainable implementation requires adequate infrastructure, technological capability, and institutional support. Therefore, Islamic digital entrepreneurship does not view intention alone as sufficient; ethical objectives must be supported by practical capability.

Platform developers must engineer lightweight, offline-capable application modules and intuitive merchant dashboards with local language support to accommodate low digital literacy operators. Platforms should implement Sharia-aligned, transparent, and flexible commission structures (e.g., tiered rates for micro-merchants) to eliminate financial exploitation (*Gharar*) and ensure fair partnership models.

Policymakers should upgrade public Wi-Fi infrastructure and digital access points across major culinary clusters (*sentra kuliner*) in Malang. Local authorities must establish regulatory frameworks that protect MSMEs from arbitrary platform fee hikes, while providing targeted subsidies and digital literacy bootcamps.

Financial Institutions & Islamic FinTechs institutions should offer dedicated, low-interest or profit-sharing (*Mudharabah/Musyarakah*) technology financing packages to help micro-merchants acquire necessary smartphone hardware and POS equipment.

MSME Associations & Communities should organize peer-to-peer digital mentoring initiatives, leveraging the concept of *Ummah* to facilitate knowledge sharing, collective bargaining, and joint digital marketing campaigns.

This study provides a comprehensive validation of the Unified Theory of Acceptance and Use of Technology (UTAUT) model when applied to the supply-side ecosystem of culinary MSMEs in Malang City. The empirical findings reveal that the digital transformation of small food businesses is governed by a highly synchronized framework of cognitive, social, and infrastructural factors. Performance expectancy, effort expectancy, social influence, and facilitating conditions collectively build the strategic intention of culinary merchants to adopt online food delivery platforms. Ultimately, both behavioral intention and facilitating conditions successfully materialize this mental willingness into sustained, routine technology usage.

The core insight of this research shifts the traditional focus from pure psychological motivation to environmental readiness. Although a merchant's positive intention is critical to initiate the digital transition, the daily, long-term survival of the technology within the enterprise is heavily dominated by the presence of stable facilitating conditions. For resource-dependent small businesses, psychological intent can easily be bottlenecked by physical constraints. Without stable internet connectivity, accessible digital devices, affordable platform commission structures, and responsive technical support, digital integration collapses no matter how motivated the business owner may be. Consequently, technology acceptance in the MSME sector must be understood as an asset-dependent behavior rather than a purely volition-driven choice.

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AUTHOR CONTRIBUTION STATEMENT

Conceptualization, research design, methodology development, and the formulation of the theoretical framework based on the UTAUT model were carried out by Yesiana Ihda Kusnayain, Dediek Tri Kurniawan, Naufal Dzakwana Muhammad, and Achmad Fajar Alfian Sodik. Data collection, including questionnaire distribution and administration to culinary MSME respondents in Malang City, was conducted by Yesiana Ihda Kusnayain, Dediek Tri Kurniawan, Naufal Dzakwana Muhammad, and Achmad Fajar Alfian Sodik. Formal analysis, including measurement model assessment, structural model evaluation, and hypothesis testing using PLS-SEM with SmartPLS 4.0, was performed by Yesiana Ihda Kusnayain and Dediek Tri Kurniawan. Original draft preparation and writing were conducted by Yesiana Ihda Kusnayain and Naufal Dzakwana Muhammad, while review, editing, and revision were performed by Dediek Tri Kurniawan and Achmad Fajar Alfian Sodik. All authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of this work.

AI DISCLOSURE STATEMENT

During the preparation of this work, the author(s) used AI-assisted tools, such as grammar checkers and language enhancement software, solely for the purpose of improving readability and refining the language of the manuscript. No generative AI tools were used for statistical data analysis using PLS-SEM, interpretation of results, conceptual framework development, or core scientific writing. The authors take full responsibility for the originality, accuracy, and integrity of the research findings and the final content of this article.

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CONFLICTS OF INTEREST

The authors declare that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. The research was conducted independently, and the results are presented objectively and without bias. The authors have no affiliation with or financial interest in any food delivery platform, ride-hailing company, or MSME organization that could be perceived as influencing the analysis or conclusions of this study.

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