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ADOPTION OF ONLINE FOOD DELIVERY BY CULINARY MSMEs IN BOGOR: INNOVATION RESISTANCE PERSPECTIVE

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Abstract:

Background: MSMEs are vital to Indonesia's economy through job creation and poverty reduction, yet many remain hesitant to adopt digital technologies. Using Innovation Resistance Theory, this study investigates key functional and psychological barriers ranging from perceived value and usability to tradition and risk hindering OFD adoption. The findings aim to offer insights into overcoming these barriers and supporting the digital transformation of MSMEs.
Purpose: This study explores the factors that influence the adoption of Online Food Delivery (OFD) platforms among MSMEs in Indonesia, focusing on both internal and external aspects. The internal factors while the external factors encompass environmental influences. Although geographically centered on Bogor City, the findings offer broader relevance, as the resistance patterns identified reflect systemic challenges faced by MSMEs nationwide. By employing the Innovation Resistance Theory, this study contributes to the design of inclusive digital strategies and supports Indonesia's broader transition toward a sustainable, innovation-driven economy.
Design/methodology/approach: This study employs a quantitative method utilizing linear regression to analyze the influence of various factors on the intention to use Online Food Delivery (OFD) services among Micro and Small Enterprises (MSEs) in Bogor, with a sample of 290 respondents selected through purposive sampling. The analysis results indicate that Competitive Pressure exhibits the highest path coefficient of 0.381, signifying that each unit increase in competitive pressure significantly enhances users' intention to adopt OFD, with a t-value reaching 7.632 ($p < 0.01$).
Findings/Results: The SEM results reveal that competitive pressure ($\beta = 0.38$) and perceived trend ($\beta = 0.19$) positively influence OFD adoption, while usage barrier ($\beta = -0.29$) and value barrier ($\beta = -0.30$) are the strongest inhibitors. These findings contribute to the refinement of Innovation Resistance Theory in the context of MSME digital platform adoption.
Conclusion: The successful adoption of Online Food Delivery (OFD) platforms among culinary MSEs in Bogor City requires overcoming functional and psychological barriers through targeted strategies that improve user experience and reduce perceived risks. This study not only offers practical insights to facilitate digital transformation and enterprise sustainability but also contributes theoretically by extending Innovation Resistance Theory within the context of digital platform adoption in developing economies.
Originality/value: This study enhances the understanding of MSME adoption of OFD by examining internal and external resistance factors through Innovation Resistance Theory (IRT). It analyzes functional barriers (usage, value, risk), psychological barriers (tradition, image), and external factors (competitive pressure, perceived financial cost), providing a basis for future research on technology adoption across various sectors.

Keywords: digital transformation, innovation resistance technology, micro and small enterprises, online food delivery, technology adoption

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are crucial to Indonesia's economy, with approximately 65 million units projected by 2024 (Kemenkop, 2024). They play a significant role in job creation, the provision of local goods and services, and poverty reduction making their sustainability essential for economic stability. Bogor City, strategically located within the Jabodetabek region, offers promising opportunities for culinary MSEs, which comprise 28% of all MSME sectors (Cooperative and MSME Office, 2017). Known for its rich culinary heritage, this sector is rapidly evolving and serves as a key driver of the local economy. Digitalization particularly through Online Food Delivery (OFD) services is increasingly vital for enhancing competitiveness and business resilience (Rosmitha, 2022). OFD platforms have transformed the food industry by offering more accessible and flexible service options beyond traditional models (Hooi et al., 2021). However, many MSEs remain reluctant to adopt such technologies due to various persistent barriers (Berkas DPR, 2024).

Research indicates that Micro and Small Enterprises (MSEs) in Indonesia encounter greater barriers to technology adoption compared to medium-sized businesses. According to the Small Business Barometer Report by the Mastercard Center for Inclusive Growth and Mercy Corps Indonesia, three primary challenges are identified: low digital literacy (38%), insufficient structural support, and limited access to credit. Additionally, 35% of MSE operators remain skeptical about the benefits of technology, while 31% cite high investment costs as a major hurdle. Although 70% acknowledge the importance of support services such as business training, two-thirds have not accessed these resources in the past year further widening the technology adoption gap.

Consumer preferences show that 72% of Indonesians use multiple online food delivery (OFD) applications. GoFood is the most popular platform (76%), followed by ShopeeFood (72%) and GrabFood (64%). Despite the widespread use of OFD services, many MSEs are still reluctant to adopt them, often relying on traditional business models due to resistance to technological innovation. This resistance is explained by Innovation Resistance Theory (IRT), which categorizes barriers into two types: functional barriers (such as conflicts with user habits and perceived risks) and psychological barriers (including brand image and adherence to tradition). Moreover, factors like competitive pressure, emerging trends, and financial costs also influence technology adoption, as described in the Technology-Organization-Environment (TOE) framework.

While prior studies on technology adoption among micro, small, and medium-sized enterprises (MSMEs) have predominantly employed frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), these models largely focus on drivers of adoption intention and often overlook the nuanced psychological and structural barriers that hinder adoption. This theoretical gap is particularly evident in the context of online food delivery (OFD) platform adoption among culinary MSMEs, which are embedded in operational routines, constrained by limited resources, and shaped by informal management structures. To address this gap, the present study adopts the Innovation Resistance Theory (IRT), initially conceptualized by Ram and Sheth (1989), as it offers a comprehensive perspective on the psychological and behavioral impediments to innovation uptake. IRT emphasizes five key resistance dimensions: usage, value, risk, tradition, and image barriers which align closely with the real-world constraints faced by culinary MSMEs in Bogor. Thus, IRT is deemed the most suitable theoretical lens for this study, as it not only captures the multifaceted nature of resistance but also responds to the contextual complexity often neglected by mainstream technology adoption models.

This study aims to examine the resistance faced by culinary Micro and Small Enterprises (MSEs) in adopting online food delivery (OFD) platforms in Bogor City. It specifically investigates the extent of innovation resistance and identifies both internal and external factors that influence their decision to adopt or reject OFD technology.By exploring these dimensions, the research highlights the challenges culinary MSEs encounter in pursuing digital transformation and contributes to the broader discourse on technology adoption within Indonesia's food sector.

METHODS

This study applies Innovation Resistance Theory (IRT), developed by Ram and Sheth (1989), to explore consumer resistance to technological innovation. The theory suggests that individuals may resist new technologies when they perceive disruptions to their routines or conflicts with deeply held beliefs (Kaur et al., 2020).Such resistance often arises from concerns that adopting new technologies could compromise established habits or challenge personal values (Hew et al., 2019). IRT categorizes these barriers into two types: functional barriers such as usage, value, and risk (Jambak et al., 2023), and psychological barriers including tradition and image (Kaur et al., 2020). Sadiq et al. (2021) contend that resistance is a rational response to unfamiliar technologies. Moreover, Chen et al. (2022) and Talwar et al. (2020) show that these barriers significantly influence adoption decisions.A better understanding of these factors can help innovators and policymakers design strategies to reduce resistance and support technology adoption.

This study is based on primary data collected through a structured online questionnaire distributed to respondents. The target population includes micro and small enterprises (MSEs) operating in the food and beverage sector in Bogor City. These businesses were selected due to their potential exposure to and experience with online food delivery (OFD) platforms. The primary data capture the perceptions, attitudes, and behavioral intentions of MSEs regarding the adoption of OFD services. In addition, secondary data were obtained from institutional sources, such as the Bogor City Health Office (2023), to estimate the number of culinary MSEs and support the sampling process.

The research was conducted in Bogor City from November to December 2024, utilizing primary data collected through an online questionnaire distributed via Google Forms. The questionnaire was specifically designed to gather insights from micro and small enterprises (MSEs) in the food and beverage sector. The use of Google Forms facilitated widespread and efficient distribution, allowing respondents the flexibility to complete the survey at their convenience. The sample was selected using purposive sampling, targeting culinary MSEs in Bogor that are aware of Online Food Delivery (OFD) technology. This included three categories of respondents: (1) MSEs that recognize the benefits of OFD but have chosen not to adopt it; (2) MSEs that previously used OFD but have ceased usage due to encountered barriers; and (3) MSEs that use OFD infrequently and have not fully leveraged its potential. The sampling process involved distributing the questionnaire through community Facebook groups, direct outreach via WhatsApp and Instagram, and in-person visits to culinary outlets in Bogor.

The data analysis includes validity and reliability testing, descriptive statistical analysis, and Structural Equation Modeling using the Partial Least Squares (SEM-PLS) approach. Validity testing assessed whether the questionnaire items accurately measured the intended constructs. Reliability testing, conducted using Cronbach's Alpha and composite reliability, evaluated the internal consistency of the items. A construct was considered reliable if its Cronbach's Alpha exceeded 0.60. Descriptive statistics were used to summarize data distributions and present key insights in tables and graphs. SEM-PLS was selected for its ability to model complex relationships among multiple independent and dependent variables. This method is particularly suitable for exploratory research involving latent constructs and small to moderate sample sizes. It also enables the identification of both direct and indirect effects between resistance factors and usage intentions.

The hypotheses in this study are grounded in Innovation Resistance Theory (IRT), as formulated by Ram and Sheth (1989), which posits that individuals and organizations may resist adopting new technologies due to functional and psychological barriers. Based on prior empirical studies (e.g., Kaur et al. 2020; Chen et al. 2022; Sadiq et al. 2021). The study measures several variables related to the usage of Online Food Delivery (OFD) services using specific questionnaire items, each with a defined set of indicators.

The usage barrier significantly impedes technology adoption by reducing user intentions. Kaur et al. (2020) showed that perceived difficulty in using food delivery apps lowers consumers' willingness to adopt them. Similar findings in mobile payment and e-ticketing services confirm its negative effect (Chen et al. 2022).
H1: The usage barrier negatively correlates with the use intentions of OFD services.

The value barrier also reduces user intentions when perceived benefits do not justify the effort or cost. Kaur

et al. (2020) reported this in mobile payment adoption, with similar results in e-ticketing (Chen et al. 2022) and eco-friendly cosmetics (Sadiq et al. 2020).
H2: The value barrier negatively correlates with the use intentions of OFD.
The risk barrier, related to concerns about security and privacy, hinders adoption. Kaur et al. (2020) and Chen et al. (2022) found that risk perceptions significantly reduce user intentions in mobile payments and e-ticketing.
H3: The risk barrier negatively correlates with the use intentions of OFD.

The tradition barrier arises from a preference for conventional practices. Kaur et al. (2020) found this reduced adoption of food delivery apps, supported by similar findings in green cosmetics (Sadiq et al. 2020).
H4: The tradition barrier negatively correlates with the use intentions of OFD.

The image barrier refers to negative perceptions of technology or service quality. Kaur et al. (2020) and Chen et al. (2022) linked this barrier to lower adoption in food delivery and e-ticketing, while Sadiq et al. (2020) found similar results in cosmetic products.
H5: The image barrier negatively correlates with the use intentions of OFD.

Competitive pressure encourages firms to adopt innovations to maintain relevance. Studies (Chen et al. 2022; Nguyen et al. 2022) show that firms respond to market pressures by adopting technologies to enhance performance.
H6: Competitive pressure positively correlates with the use intentions of OFD.

Perceived trend reflects a firm's awareness of emerging technologies. Firms recognizing trends like social media or blockchain are more likely to adopt them (Li, 2020; Liu et al. 2023). OFD platforms also adopt AI based on perceived relevance (Zhang et al. 2023).
H7: Perceived trend positively correlates with the use intentions of OFD.

Perceived financial cost plays a critical role in adoption decisions. Higher perceived costs reduce adoption likelihood, as seen in mobile banking (Tiwari & Tiwari, 2020) and other technologies (Baabdullah et al. 2019; Alalwan et al. 2018).
H8: Perceived financial cost negatively correlates with the use intentions of OFD.

The conceptual framework, presented in Figure 1, is grounded in Innovation Resistance Theory (IRT) and identifies both functional and psychological barriers that influence MSEs' adoption of OFD services. It comprises eight constructs: usage barrier, value barrier, risk barrier, tradition barrier, image barrier, competitive pressure, perceived trend, and perceived financial cost. These constructs are hypothesized to have either positive or negative relationships with the intention to adopt OFD platforms. The framework provides a structured basis for analyzing the relationship between resistance factors and adoption behavior.

The framework includes key variables such as the Usage Barrier (e.g., "OFD is complicated to use"), Value Barrier (perceived benefits), Risk Barrier (reliability and performance concerns), Tradition Barrier (preference for conventional methods), and Image Barrier (usability and reliability perceptions). It also incorporates Competitive Pressure, Perceived Trend, and Perceived Financial Cost, offering a comprehensive perspective on the factors influencing MSEs' intentions to adopt OFD.

This framework reflects diverse perceptions of OFD adoption and provides insights into the drivers of both acceptance and resistance. Figure 1 illustrates the relationships among these variables, supporting a clearer understanding of how they interact to shape usage intentions. As a conceptual map grounded in Innovation Resistance Theory (IRT), the framework strengthens the study's theoretical basis and offers direction for future research.

RESULTS

The demographic data presented provides significant insights into the respondents involved in the study, particularly concerning gender, age, and business location. To begin with, the gender distribution reveals a higher representation of female respondents (57.60%) compared to male respondents (42.40%). This gender disparity suggests that female consumers may be more engaged in the Online Food Delivery (OFD) market, which aligns with previous research indicating that women are often more inclined to utilize food delivery services due to convenience and time-saving factors (Kaur et al. 2020; Amalia et al. 2023).

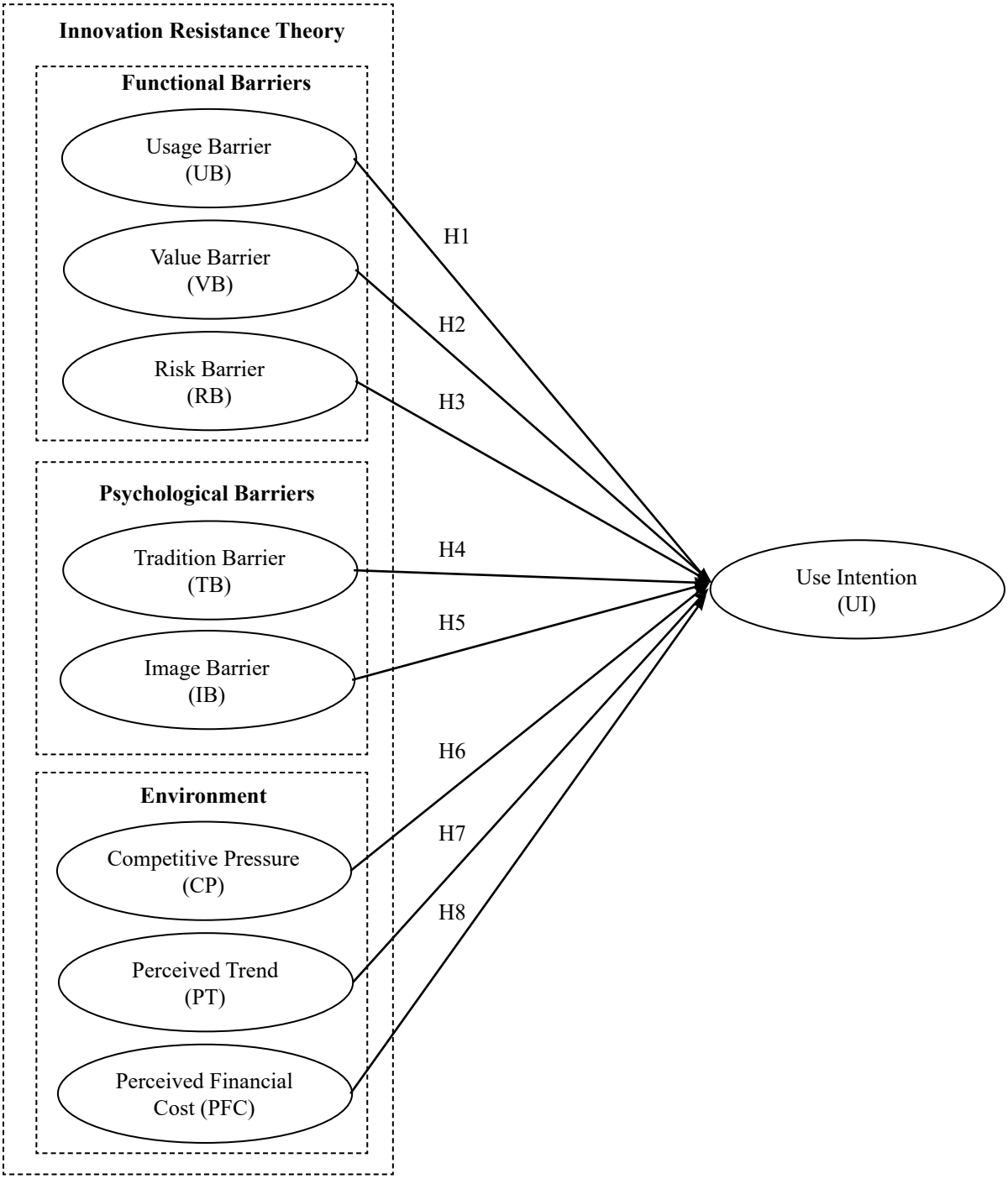

Figure 1. Conceptual Framework

Furthermore, the age demographics indicate that the majority of respondents belong to Generation Z (46.40%), followed by Millennials (35.60%). The representation of older generations, such as Generation X (12.70%) and Baby Boomers (5.30%), is significantly lower. This finding is consistent with existing literature that highlights the preference of younger generations for digital solutions, including OFD services, as they are more accustomed to technology and online transactions (Nguyen & Nguyen, 2023) The inclination of younger consumers towards OFD can be attributed to their lifestyle choices, which prioritize convenience and speed.

Additionally, the data illustrates the distribution of respondents based on their business locations within Bogor. The percentages are relatively evenly distributed across the different regions, indicating a diverse engagement with OFD services throughout the area with Bogor Timur and Bogor Utara each accounting for 17.00%, while Bogor Barat has the lowest representation at 18.60%. This geographic distribution

suggests a diverse engagement with OFD services across different areas, reflecting varying levels of access to technology and delivery infrastructure. Previous studies have indicated that regional differences can significantly influence the adoption of OFD services, as urban areas typically exhibit higher usage rates due to better infrastructure and service availability (Hew et al. 2019; Talwar et al. 2020).

In summary, the demographic insights provided in the table highlight critical factors influencing the adoption and utilization of Online Food Delivery services. The predominance of female respondents and younger age groups suggests a target demographic that is likely to drive the growth of OFD in the region. Furthermore, the geographic distribution indicates that while there is broad interest in OFD services, localized strategies may be necessary to enhance service delivery and customer satisfaction across different areas. These findings contribute to the understanding of consumer behavior in the context of OFD and align with existing literature that emphasizes the importance of demographic factors in shaping market trends.

The initial step in assessing the outer model involves examining the outer loadings of the indicators. High outer loadings suggest a substantial amount of common variance within the construct. The minimum acceptable value for outer loading is 0.7 (Hair et al. 2022). The outer loading values for the constructs under investigation are presented in Table 1. Indicator Reliability.

Based on the results in Table 1, all indicators have outer loadings above 0.7, indicating they meet the reliability criteria. This suggests that the constructs are well-defined and that the indicators effectively measure the intended variables. The next step in evaluating the outer model involves testing internal consistency reliability, assessed using Cronbach's alpha and composite reliability. According to Hair et al. (2022), the accepted threshold for both Cronbach's alpha and composite reliability is greater than 0.6. The results of these assessments are summarized in Table 2. Convergent Validity, which provides insights into the reliability of the constructs under investigation.

As shown in Table 2, all latent variables exceed the required threshold, confirming that the constructs in the model are reliable. Convergent validity assesses the extent to which a construct explains the variance of its indicators and is measured using the Average Variance Extracted (AVE). Hair et al. (2022) suggest that AVE values greater than 0.50 indicate that the construct explains more than 50% of the variance of its indicators. The AVE values for all constructs are above the 0.50 threshold, demonstrating good convergent validity. Use Intention has the highest AVE of 0.843, indicating that this construct has an exceptionally strong measurement. Risk Barrier follows with an AVE of 0.797, while Image Barrier (0.786) and Value Barrier (0.772) also show high levels of convergent validity. Usage Barrier (0.693) and Competitive Pressure (0.708) further demonstrate acceptable convergent validity, validating the constructs in this model.

Discriminant validity assesses whether constructs are sufficiently distinct from one another, capturing different phenomena. Commonly, researchers evaluate discriminant validity using criteria such as the Fornell-Larcker criterion, cross loadings, and the Heterotrait-Monotrait (HTMT) ratio (Hair et al. 2022). The Fornell-Larcker criterion states that the square root of the AVE for each construct should be greater than its highest correlation with other constructs. The table below provides the Fornell-Larcker criterion evaluation for this model.

The results show that the square root of the AVE for each construct exceeds its highest correlation with other constructs, thus meeting the Fornell-Larcker criterion. Additionally, the cross-loadings indicate that indicators load higher on their respective constructs than on others, further supporting the model's discriminant validity. This comprehensive evaluation of the measurement model confirms that all constructs are reliable, valid, and distinct, ensuring the robustness of the research findings.

The analysis reveals significant relationships between various factors and the intention to adopt Online Food Delivery (OFD) platforms among micro and small enterprises (MSEs), as shown in Table 3. Competitive pressure significantly influences adoption intentions, with a path coefficient of 0.381 and a p-value of 0.000, confirming Hypothesis 1 (H1). This finding aligns with Çaldag and Gokalp's (2023) research, which highlights that competitive pressure drives organizations to innovate to maintain their competitive edge. As MSEs perceive increased competition, they are more likely to adopt OFD services to improve operational efficiency and customer engagement, strengthening their market position (Gokalp et al., 2022).

Table 1. Indicator reliability

Construct	Observed Variable	Indicator	Outer Loading
Usage Barrier	X1.1	OFD is complicated to use (Ease of Use)	0.858
	X1.2	OFD is confusing with irrelevant content (Convenience)	0.819
	X1.3	OFD application is too complex (Flexibility)	0.820
Value Barrier	X2.1	OFD does not offer much benefit compared to other methods (Value)	0.861
	X2.2	OFD does not contribute significantly to operational business management (Effort)	0.896
Risk Barrier	X3.1	I worry that using OFD may not function as expected to meet business needs (Performance Risk)	0.885
	X3.2	Unprofessional or inappropriate behavior of drivers is common (Perceived Risk)	0.900
Tradition Barrier	X4.1	I rely more on traditional sales methods than modern digital technologies (Habit)	0.849
	X4.2	Customer satisfaction with my traditional methods is higher than using OFD (Norm)	0.855
	X4.3	I tend to rely on traditional sales marketing methods (Practice)	0.856
Image Barrier	X5.1	OFD service is difficult to use (Perceived Complexity)	0.859
	X5.2	I have the perception that OFD is unreliable (Reliability Image)	0.913
Competitive Pressure	X6.1	Strategic need to adapt	0.862
	X6.2	Risk of competitive disadvantage	0.786
	X6.3	Threat to market share	0.873
Perceived Trend	X7.1	Awareness of consumer trends in using OFD services	0.864
	X7.2	Increased adoption of OFD by competitors	0.870
	X7.3	Following OFD technology trends to maintain business competitiveness	0.805
Use Intention	Y1	The cost of using the OFD platform is higher compared to traditional sales methods (without OFD)	0.921
	Y2	Commission or management fees of OFD services are burdensome	0.915
	Y3	Initial setup or integration costs for using the OFD platform burden MSMEs. such as purchasing extra devices (e.g.. phone. internet)	0.919

Table 2. Convergent validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Competitive Pressure	0.795	0.879	0.708
Image Barrier	0.731	0.88	0.786
Perceived Financial Cost	0.837	0.89	0.670
Perceived Trend	0.804	0.884	0.718
Risk Barrier	0.746	0.887	0.797
Tradition Barrier	0.814	0.889	0.728
Usage Barrier	0.779	0.871	0.693
Use Intention	0.907	0.942	0.843
Value Barrier	0.705	0.871	0.772

In contrast, the image barrier presents a notable challenge, with a path coefficient of -0.190 and a p-value of 0.000, showing that negative perceptions of OFD hinder adoption intentions, thus supporting Hypothesis 2 (H2). This finding aligns with Kaur et al.'s (2020) study, which highlights that negative perceptions of new technologies' complexity and reliability can significantly impede adoption. Furthermore, perceived financial cost plays a critical role, with a path coefficient of 0.305 and a p-value of 0.000, indicating that higher perceived costs are associated with stronger intentions to use OFD, thus confirming Hypothesis 3 (H3). This is consistent with Tiwari and Tiwari (2020), who found that perceived financial costs negatively impact the likelihood of adopting new technologies, as consumers weigh the costs against potential benefits.

The perceived trend has a positive influence on adoption intentions, as indicated by a path coefficient of 0.191 and a p-value of 0.000, thus confirming Hypothesis 4 (H4). This finding is supported by Liu et al. (2023), who argue that businesses that recognize and engage with current technological trends are more likely to adopt innovative solutions. On the other hand, risk barriers (path coefficient = -0.159, p-value = 0.000), tradition barriers (path coefficient = -0.297, p-value = 0.000), usage barriers (path coefficient = -0.290, p-value = 0.000), and value barriers (path coefficient = -0.305, p-value = 0.000) all present significant challenges to adoption, affirming Hypotheses 5 (H5), 6 (H6), 7 (H7), and 8 (H8).

The tradition barrier, reflected by a path coefficient of -0.297, demonstrates that adherence to conventional practices significantly hinders the adoption of new technologies. This finding is consistent with Rabaa'i et al. (2024), who note that innovations that disrupt established routines and cultural norms face resistance from users. Similarly, the usage barrier emerges as a significant impediment, with a path coefficient of -0.290, affirming that perceived difficulties in using OFD platforms negatively affect adoption intentions. This is supported by Istanto et al. (2022), who argue that the complexity of new technologies can deter users who are accustomed to traditional methods.

Lastly, the value barrier exhibits a substantial negative influence, with a path coefficient of -0.305, indicating that when MSEs perceive the value of OFD as insufficient relative to its costs, their intention to adopt the platform decreases. This aligns with Morar (2013), who emphasizes that the perceived value must outweigh the costs and efforts associated with adopting new technologies. Collectively, these findings underscore the complex interplay of factors influencing resistance to technology adoption among MSEs in the context of OFD platforms, emphasizing the need for targeted strategies to overcome these barriers and improve adoption rates.

The results of this study not only confirm the proposed hypotheses but also contribute to the existing literature by providing empirical evidence on the barriers and drivers influencing OFD adoption among MSEs. Addressing these barriers through training, support, and clear communication of OFD benefits can foster greater adoption and enhance the competitiveness of MSEs in the digital marketplace. The detailed findings from the hypothesis testing are presented in Table 3. Hypothesis Testing Results.

Figure 2. Structural Model Results presents the outcomes of the hypothesis testing conducted using the Structural Equation Modeling (SEM) approach with Partial Least Squares (PLS). This model illustrates the path relationships between latent variables along with the corresponding path coefficients and significance levels obtained through the bootstrapping procedure. The results provide empirical evidence regarding the strength and direction of the proposed hypotheses in the context of online food delivery adoption among micro and small culinary enterprises in Bogor.

Table 3. Hypothesis testing results

Hypothesis	Path (B)	P-value	Decision
H1: Competitive Pressure → Use Intention	0.381	0.000	Accepted
H2: Image Barrier → Use Intention	-0.190	0.000	Accepted
H3: Perceived Financial Cost → Use Intention	0.305	0.000	Accepted
H4: Perceived Trend → Use Intention	0.191	0.000	Accepted
H5: Risk Barrier → Use Intention	-0.159	0.000	Accepted
H6: Tradition Barrier → Use Intention	-0.297	0.000	Accepted
H7: Usage Barrier → Use Intention	-0.290	0.000	Accepted
H8: Value Barrier → Use Intention	-0.305	0.000	Accepted

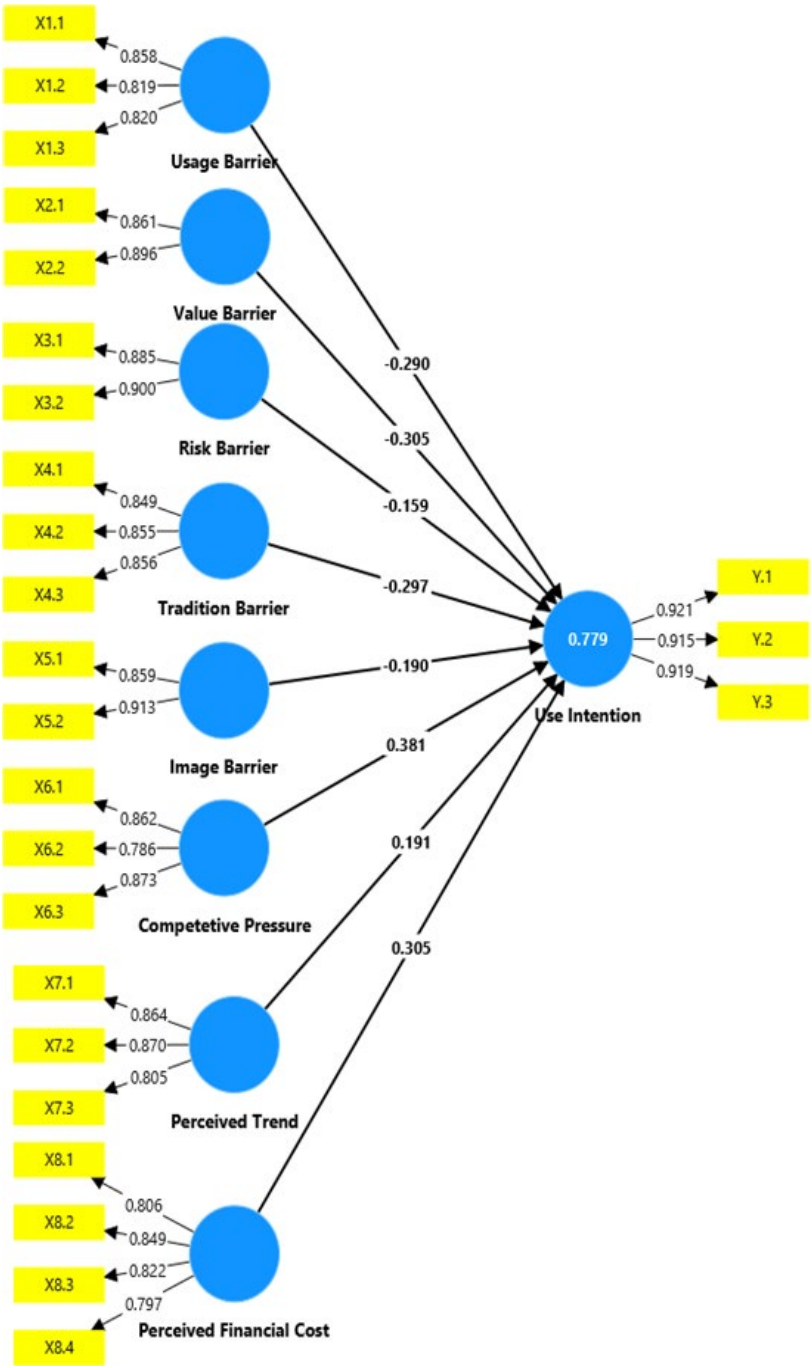

Figure 2. Structural model results

Managerial Implication

The findings of this study on the adoption of Online Food Delivery (OFD) platforms by culinary Micro and Small Enterprises (MSEs) in Bogor City reveal several important managerial implications. First, addressing functional barriers is crucial; providing training and ensuring user-friendly interfaces can reduce concerns regarding the complexity of OFD platforms. Enhancing the perceived value is also vital MSEs should effectively communicate the benefits of OFD, such as expanded market reach, through targeted marketing efforts. To mitigate risk perceptions, building trust via secure payment systems and offering trial periods can support broader adoption. Cultural considerations should not be overlooked; integrating traditional elements into the OFD experience may appeal to consumers with strong cultural preferences. Furthermore, leveraging competitive pressure can encourage a collective push toward digital adoption. Keeping pace with market trends and actively engaging customers through digital channels can help MSEs remain competitive. Finally, addressing perceived financial costs through affordable integration strategies can make OFD adoption more accessible for resource-constrained enterprises.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study offers a comprehensive analysis of the resistance encountered by culinary micro and small enterprises (MSEs) in Bogor City toward adopting Online Food Delivery (OFD) platforms, utilizing the Innovation Resistance Theory (IRT) as its analytical framework. The findings reinforce earlier scholarship, particularly that of Kaur et al. (2020), by confirming that internal functional barriers, namely usage, value, and risk, are the most salient inhibitors of adoption, often rooted in perceived complexity, financial burdens, and data security concerns. Furthermore, the identification of external influences, such as competitive pressure and perceived technological trends, as facilitators of adoption is consistent with Nguyen et al. (2022), who argue that such drivers shape the digital engagement of culinary MSEs in emerging markets. Notably, this study also aligns with the conclusions of Tiwari and Tiwari (2020), revealing that perceived financial cost is not a substantial deterrent, suggesting a more complex calculus of perceived utility and necessity among MSE actors. Bogor City was intentionally selected as the focal context because of its status as a rapidly developing urban center with a vibrant culinary sector, which simultaneously embodies entrenched traditional practices and increasing exposure to digital innovations. This dual characteristic renders Bogor an instructive microcosm for investigating resistance phenomena in economies undergoing a digital transition. Nonetheless, this contextual specificity introduces inherent limitations to the generalizability of the findings. Regions with differing socio-cultural configurations, infrastructure readiness, or market maturity may exhibit divergent patterns of resistance to and adoption of EVs. In light of these considerations, future research should seek to replicate and expand this study across varied geographic and sectoral domains to enhance external validity. Longitudinal studies are warranted to assess the enduring impact of OFD adoption on business resilience, competitiveness, and sustainability. Moreover, evaluating the effectiveness of targeted intervention strategies aimed at mitigating resistance could offer practical pathways for accelerating digital inclusion among MSEs. In summary, this study contributes to the evolving discourse on digital transformation by illuminating the complex interplay of psychological, structural, and contextual barriers that shape technology adoption among micro-enterprises in developing urban environments.

Recommendations

To improve the adoption of Online Food Delivery (OFD) platforms among culinary micro and small enterprises (MSEs) in Bogor City, several strategic recommendations are proposed. These include providing education and training to enhance digital literacy, developing clear communication strategies to emphasize long-term benefits, and implementing robust data security measures to foster trust. Establishing support networks for experience-sharing, offering incentives through local government initiatives, and increasing awareness of market trends are also essential. Furthermore, promoting user-friendly OFD platforms, encouraging collaborative marketing efforts, and incorporating feedback mechanisms can support continuous platform improvement. Community engagement programs and pilot initiatives can help build confidence among MSEs in using OFD technologies, while mentorship and networking events can facilitate collaboration and knowledge exchange. By executing these comprehensive strategies, stakeholders can cultivate a supportive ecosystem that enables culinary MSEs in Bogor City to successfully adopt OFD, ultimately fostering growth and innovation in the sector.

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