

Digital Adoption Decisions of Bandung Culinary MSMEs: A Bounded Rationality Perspective on Market Demand Uncertainty

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Abstract : This analysis explores how Bandung, Indonesia's culinary micro, small, and medium-sized businesses (MSMEs) decide whether to adopt digital platforms in the face of perceived market demand uncertainty. In-depth interviews with seven culinary MSME owners at different adoption stages (non-adopters to frequent multi-platform users) are analysed using a qualitative exploratory approach based on Herbert Simon's concept of bounded rationality, complemented with profile questionnaires from all seven respondents. There are four findings: (1) the non-linear relationship between digital adoption stages and business longevity; (2) drivers of digital adoption encompassing competitive advantage, market expansion amid demand volatility, operational efficiency, and platform promotion offers; (3) barriers to adoption attributable to generational gaps, limited digital literacy, perceived complexity, high platform costs and costly digital equipment (4) substantial dependence on trial and error experience, as a primary heuristic, rather than systematic cost-benefit analysis. Most digitally engaged businesses rely on younger family members for digital assistance, while one respondent who joined a formal digitalisation program perceived it as having limited impact. These results have a critical implication for developing experience-based digital literacy programs and extending bounded rationality into micro-scale culinary businesses in this ever-growing market.

Keywords: Digital Platform Adoption, MSME, Culinary Sector, Bounded Rationality, Market Demand Uncertainty.

Abstrak : Penelitian ini menganalisis bagaimana usaha mikro, kecil, dan menengah (UMKM) kuliner di Bandung, Indonesia, mengambil keputusan dalam mengadopsi platform digital di tengah ketidakpastian permintaan pasar. Penelitian menggunakan pendekatan eksploratif kualitatif melalui wawancara mendalam terhadap tujuh pemilik UMKM kuliner dengan tingkat adopsi digital yang berbeda, mulai dari belum menggunakan hingga pengguna multi-platform secara aktif. Analisis dilakukan berdasarkan konsep bounded rationality Herbert Simon dan dilengkapi dengan kuesioner profil responden. Hasil penelitian menunjukkan empat temuan utama: (1) hubungan nonlinier antara tahap adopsi digital dan keberlangsungan usaha; (2) faktor pendorong adopsi digital meliputi keunggulan kompetitif, perluasan pasar, efisiensi operasional, dan promosi platform; (3) hambatan adopsi mencakup kesenjangan generasi, keterbatasan literasi digital, persepsi kompleksitas, biaya platform, dan

perangkat digital; serta (4) ketergantungan pada pengalaman coba-coba sebagai strategi pengambilan keputusan. Sebagian besar pelaku usaha memperoleh bantuan digital dari anggota keluarga yang lebih muda. Temuan ini mendukung pengembangan program literasi digital berbasis pengalaman bagi UMKM kuliner.

Kata kunci: *Adopsi Platform Digital, UMKM, Sektor Kuliner, Bounded Rationality, Ketidakpastian Permintaan Pasar.*

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) constitute the backbone of the Indonesian economy, which contributes significantly to the Gross Domestic Product (GDP) and national employment (Kementerian Koordinator Bidang Perekonomian RI, 2023). In July 2024, about 25.5 million MSMEs have adopted digitalization and in the same year, the government has a target of 30 million enterprises to go digital by the end of 2024, according to the Ministry of Cooperatives and SMEs (ANTARA News, 2024). This shows how digitalization has become a strategic government agenda. The prevalence of digitalization within Indonesia's business landscape is evident in the adoption of digital payment schemes. Bank Indonesia first semester report in 2025 showed that 57 million users and 39.3 million merchants had used QRIS, where 93.16% of whom were MSMEs (Bank Indonesia, 2025). Several empirical studies of Indonesian MSMEs also confirmed that the use of social media and e-commerce, such as selling online in platforms like Shopee or Tokopedia has a positive affect on business performance, turning digital platforms into a strategic marketing and sales channel (Rahayu & Day, 2017; Yacob et al., 2023).

These seemingly high values might indicate widespread digital adoption, however, it also conceals some substantial variations among individual entrepreneurs. That is, some MSMEs have proficiently adopted multiple digital platforms while others are still stuck with conventional methods despite having decades of business experience. This variation cannot solely be explained by unequal technological access or the unavailability of infrastructures as in reality, there are low barriers to enter digital platforms with easy procedures including uploading a legally issued personal ID and pictures of the product. Therefore, the underlying factor that distinguishes MSMEs decision on whether or not they should jump onto the digitalization bandwagon is the subjective perception and decision. This decision reflects the theory of bounded rationality, a cognitive process laden with information constraints, personal experience and perceptions in the midst of economic and market uncertainty.

Bandung was selected as the research site for several reasons. First, Bandung is home to one of the largest concentrations of culinary MSMEs in the West Java Province, placed in the top three within the province, where projected numbers of culinary MSMEs reached as high as 187,355 units (Open Data Jabar, 2024). Second, Bandung is a recognized culinary tourism destination and a creative economy hub offering multifaceted culinary cuisines. Therefore, competition is also deemed to be high within the city. Third, culinary MSMEs tend to face market uncertainties. According to the Chairperson of Indonesian Culinary Entrepreneurs Association (APKULINDO) demonstrates how culinary MSMEs, including those in Bandung, experienced a decline in sales of up to 20% within the second semester of 2023, caused by lower consumer purchasing power and raw-material costs that continues to surge (Setiawan et al., 2025). The amalgamation of competitive business environment and tangible demand uncertainty makes Bandung a suitable research setting in order to examine the process of MSMEs deciding whether or not they should adopt digitalization.

Under market uncertainty, classical decision-making theories, which presume full rationality with entrepreneurs possessing complete and perfect information, cannot be used to explain the behavior of MSMEs. Therefore, this paper uses the concept of bounded rationality developed by Herbert A. Simon (1982) where during decision-making, individuals are often constrained by cognitive capacity, time, and information. This results in 'satisficing' decisions, which are sufficiently satisfactory, but not optimal. Under the context of digital adoption, Xiao et al. (2024) confirmed that bounded rationality affects the evolution of competition within these digital

platforms. This claim, strengthened by Kobiyyh and El Amri (2024), states that the limited information processing capacity and time pressure are two main drivers that constrain rational thinking of individuals and managers.

Based on the existing literature, there are three research gaps that could be identified. First is that prior studies on Indonesian MSME digital adoption have mostly relied on quantitative approaches based on the Technology-Organization-Environment model or the Technology Acceptance Model (TAM), which assumes that entrepreneurs are rather rational individuals who systematically evaluate technology attributes (Sugandini et al., 2022; Hoang, 2024). These studies have not fully captured the reality of entrepreneurs, who tend to have bounded rationality due to inevitable factors such as time, as well as failing to take into account the micro-cognitive processes behind digital adoption decisions constituting experience, intuition, and perceptions of market uncertainty. Second, the examination of culinary MSMEs in Bandung, based on decision-making behavior, still remains limited. Prior studies such as Efendi et al. (2024) focus on digital literacy preferences but have yet to address the facets of the decision-making process and uncertainty perception in depth. Third, past studies that incorporate the concept of bounded rationality within the context of technology adoption have largely been developed only in the context of digital platforms, large organizations, or developed markets. This makes such studies less applicable to micro MSMEs within developing countries, commonly small-scale, family businesses with limited digital literacy. Thus this unexplored area presents a crucial research gap that needs to be further investigated qualitatively.

To address these gaps, this study aims to qualitatively explore how Bandung culinary MSMEs tend to make decisions regarding platform adoption, where personal experience is the primary heuristic basis with the triggering context of demand uncertainty. This paper poses two research questions: (1) In what ways does the adoption of digital platforms vary among culinary MSMEs in Bandung and what are the major factors and barriers behind them? (2) How does personal experience and perception of market demand uncertainty affect the way culinary MSMEs in Bandung make decisions on whether to adopt digital platforms, considering the perspective of bounded rationality?. The novelty of this study is combining two rarely examined elements in qualitative studies on Indonesian MSMEs which are market demand uncertainty (as a common phenomenon concretely experienced by micro entrepreneurs, not abstract macroeconomic uncertainty) and the incorporation of the bounded rationality theory to realistically understand the decision making process on digital adoption at the level of individual culinary MSME actors through primary data collected in Bandung.

Theoretically, this study contributes to understanding how Simon's (1982) concept of bounded rationality, expanded by Xiao et al. (2024), operates specifically in the context of micro MSMEs in developing countries, particularly in the culinary sector characterized by high competition and volatile demand. The practical benefits of this research are threefold: (a) understanding the factors that influence why culinary MSME owners decide to adopt or not adopt digitalization; (b) providing insights for policymakers and MSME assistance institutions on effective designs for digitalization training that takes into account experience-based decision-making, instead of just delivering technical information; (c) providing future researchers with a basis for future quantitative studies that uses larger and more representative samples to test the generalizability of this study's findings.

LITERATURE REVIEW AND RESEARCH FRAMEWORK

Digital Platform Adoption in MSMEs in Developing Countries

Previous studies which relied on the Technology-Organization-Environment (TOE) framework developed by Tornatzky and Fleischer (1990) identified three contexts that influence adoption decisions: the technological, organizational context, environmental context (industry pressure, policy, and market dynamics). In a study by Sugandini et al. (2022), which also applied the TOE framework to study social media adoption among Indonesian MSMEs, found that organizational factors such as internal resources, structure, and culture was the most influential factor in terms of social media adoption. Then, it was followed by environmental factors such as

industry pressure, policy and market dynamics, placing technological context such as technology characteristics and availability last. This shows how behavioral and social factors have a greater role in determining whether MSMEs would adopt digitalization, compared to technological availability. Rahayu and Day (2017) have found how Indonesian MSMEs obtained greater benefits when adopting e-commerce only at a higher stage, indicating that digital adoption is rather not a uniform decision among entrepreneurs.

In another study by Hoang (2024) which also uses the TOE framework to explain the digital transformation adoption among SMEs, found that organizational factors were the strongest drivers, followed by environmental factors, more specifically competitive pressure and changing customer demands. Hussain Shahadat et al. (2023), also applied the TOE framework with Diffusion of Innovation (DOI) to SMEs in developing countries. The study found that organizational and environmental factors were the dominant barriers to information-technology implementation. Both of these studies reinforce how MSME digital adoption cannot merely be explained due to limited technological equipment or sophistication, but rather the continuously evolving organization and market structure around them.

A study by Efendi et al. (2024), which specifically examines culinary MSMEs, focusing on digital literacy preferences in Bandung concludes the successes of digital adoption depends heavily on local context and the unique traits of entrepreneurs, highlighting how the influence and role of distinctive personal experiences. However, the study has yet to explore how cognitive processes and perceptions of market uncertainty affect these digital adoption decisions on an individual entrepreneur level in depth. This gap motivates the present study which aims to complement the understanding of digital adoption among Bandung culinary MSMEs using bounded rationality concept to explain the decision-making process, rather than focusing solely on structural mapping of drivers and barriers.

Bounded Rationality in Technology Adoption Decision-Making

Bounded rationality theory takes into account the limitations of cognitive abilities, time and information, explaining that individuals tend to make decisions not based on full optimization of all available information. Instead, they rely on simple shortcuts or rules of thumb, known as heuristics, leading to a satisficing result. At the MSME level, this bounded rationality manifests on the basis of personal experiences, observation on competitor behavior and strategies as well as recommendations from business peers to substitute a lengthy, complex systematic cost-benefit analysis. Lin et al. (2023), in a mixed-method study of tourism and hospitality SMEs in eleven emerging markets, found that information asymmetry, whether related to financial, business-regulatory, or legal aspects, reduced the likelihood of SMEs adopting product innovation. Through interviews with eight SME owners and managers, that study showed that limited access to information forced entrepreneurs to rely on personal judgment and experience in deciding on innovation adoption, rather than formal calculation of all available risks and benefits.

This finding reflects the context of culinary MSMEs in Indonesia, where systematic market data access is limited, so direct, primary experiences from entrepreneurs becomes the main source of information in understanding the rationale of their decisions. Therefore, this study places bounded rationality not as a poor form of irrational decision-making, but rather as an adaptive mechanism that allows micro MSME owners to make effective digital adoption decisions given the constraints of time, cognitive capacity and information. The variation of adoption stages and decisions in the context of Bandung culinary MSMEs can be understood as the outcome of a heuristic process that is rational within its own bounds, instead of a mere failure or delay in adoption.

Conceptual Framework

Based on the literature review above, this study constructs a conceptual framework that positions the digital platform adoption decision of culinary MSMEs as the outcome of an interaction between two main elements. First is the perception of market demand uncertainty which includes changes in customer patterns, competitive pressure and a shift in consumer preferences. Second is the basis of decision-making characterised by bounded rationality based on personal experience, trial-and-error and observation of competitor behavior. Together, these function as a heuristic or

mental short-cut that determines whether MSMEs decide to accept, postpone or reject digital adoption. From the TOE framework, techno-organizational factors which includes ease of platform access and availability of resources (Tornatzky & Fleischer, 1990; Sugandini et al., 2022; Hoang, 2024) are positioned as enabling conditions which influence how readily a heuristic is translated into a definite adoption action. This framework serves as an interpretive lens to analyze the variation in adoption stages, the drivers and barriers as well as the decision-making process of the seven Bandung culinary MSMEs in this study.

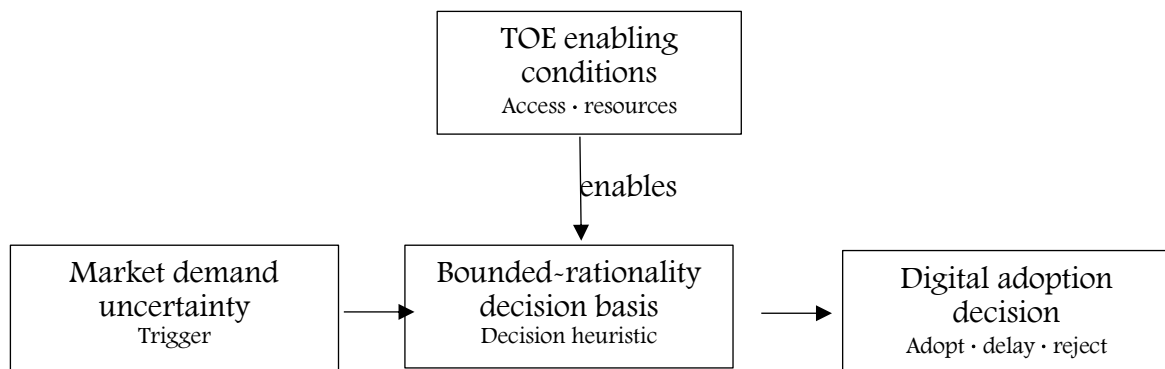


Figure 1. Research Framework

RESEARCH METHOD

This study utilizes a descriptive-exploratory qualitative approach paired with thematic analysis as it supports the research aim of understanding how Bandung culinary MSMEs perceive market demand uncertainty and translate it into adopting digitalization in depth. This process is context-based and cannot be explained through simple relationships among variables. This approach is also consistent with the character of bounded rationality as a concept explaining individual cognitive processes, so that it is more appropriately explored through the narratives and direct experiences of entrepreneurs than through quantitative measurement. This study was conducted in Bandung city within the West Java Province, involving seven culinary MSME actors selected using purposive sampling. The purposive sampling criteria includes: (1) being the owner or head manager of MSME culinary businesses in Bandung; (2) the business operations have been ongoing for at least one year, at the time the interview was carried out; and (3) informed consent and willingness to share their experiences on digitalization adoption (have used or not) in running the business.

The seven selected participants exemplified variation across three aspects: (a) business longevity with MSMEs established between 1968 to 2017; (b) type of culinary product ranging from selling Indonesian main dishes such as *nasi uduk* (Turmeric Rice) and *nasi gudeg* (Jackfruit Rice) to fruits and snacks and processed seasonings; and (c) their current digital adoption stage which ranges from those who have not used but are planning to adopt to those who use multiple platforms extensively, including international platforms. This variation therefore allows the study to capture a broader spectrum of digital adoption behavior rather than representing only one particular MSME profile. The seven participants are adequate for small-scale exploratory studies that aim to map initial patterns and themes. This value is comparable to Lin et al.'s (2023) study which examined eight participants from SMEs in emerging markets. Semi-structured interviews were carried out in order to collect the primary data directly with each participant. The interviews focused on four main aspects: (1) business profile and history; (2) their current use of digital platforms whether used for sales, payment, or promotion; (3) factors that drive or hinder the use or adoption of digital platforms; (4) the ways in which the participants make important decisions such as through personal experience, including those decisions that related to digitalisation. The interviews were conducted in Indonesian and subsequently translated into English by the authors

of this study. Results from the interview were then recorded in the form of a narrative point summary for each participant.

To complement the qualitative data, the researchers distributed a short-profile questionnaire via Google Forms to the seven participants in the study. The questionnaire achieved a full response rate from the seven participants that self-administered their responses in mid-June 2026. The questionnaire included: business name, number of employees (including their family members who assist them), the current number and name of digital platforms used, the individual who manages the business's digital activities, whether they had previously participated in digitalisation training, reasons for not adopting certain platforms as well as future plans related to digitalization. The data collected from the questionnaire were then used to build the profile tables and to triangulate the information conveyed in the interviews, not to generate the study's main findings. Data were analyzed using the six-phase thematic analysis developed by Braun and Clarke (2006), namely familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report, combining inductive and deductive approaches. Inductively, the researchers repeatedly read the interview summaries to identify patterns and categories emerging naturally from the data, without forcing them into predetermined categories. After establishing the patterns from the interview, the researchers organized the data into relevant themes related to the study's conceptual framework, which consists of variation in digital adoption stages, main drivers of digital adoption, barriers to digital adoption and the interpretation through the bounded rationality perspective. The process of analysing the data generated four main themes displayed in the Results and Discussion section.

In order to strengthen the credibility of the data interpretation, the researchers compared the interview data with the profile questionnaire data completed to confirm each of the seven participants' current digital adoption status, the platforms used and individuals who managed the digital activities for the business, if they have adopted digitalization. This process of triangulation showed some points of divergence between the self-reported questionnaire and interviews. In these cases, the semi-structured interview was used as the primary source to determine the business profile and data on their digital adoption. These incongruities are reported transparently and discussed in the limitations section of this paper. This study does not intend to generalize the findings to the entire population of culinary MSMEs but to provide an initial understanding that could be further processed and tested with larger sample sizes.

The credibility of this study's findings was strengthened through several measures. The first is the triangulation process to compare the interview data with the profile questionnaire data. Second is the persistent observation being applied through repeated reading of interview summaries before themes were established. Third, an audit trail was maintained by documenting the coding process from raw excerpts to categories and themes, so interpretation could be traced back to its primary source. To enhance transferability, Tables 1 and 2 contain a thick description of each informant's context, allowing readers to assess the extent to which the findings could be relevant to other contexts. This study conforms to the ethical principles of research involving human participants: (1) all participants voluntarily participated and expressed their willingness to be interviewed as well as completing the questionnaire after being provided an explanation of the use of data for the purposes of research; (2) participants were openly told that they have the complete right to refuse to answer some questions or to withdraw at any time without any consequence imposed; (3) the business names of the participants are also revealed with the owners' complete consent, while their personal identities are kept anonymous. Thus, the study did not collect sensitive, personal data and all samples or data are used only for academic purposes.

RESULTS AND DISCUSSION**Results****Table 1.** Informant Characteristics (based on interviews)

No	Business Name	Year Established	Product Type	Current Digital Adoption Status
1	Nasi Uduk Ci Iiing	2011	Nasi Uduk	Partial adoption: GrabFood, Gojek (GoFood)
2	Batagor Pempek Setiabudi Regency	2017	Batagor, Pempek	Not yet adopted; plans for the future
3	Sumber Rezeki (Papaya)	1999	Fruits	Minimal adoption: Whatsapp, since 2023
4	Kembang Tahu	1994	Kembang Tahu	Not yet adopted; has interest
5	Nasi Gudeg Pajajaran	1990	Nasi Gudeg	Full adoption: offline + GoFood, GrabFood, ShopeeFood
6	Lumpia Basah	1983-1984	Lumpia Basah	Full adoption: offline + Shopee, GrabFood, GoFood
7	Samara Micron	1968	Cooking Spices (240 items)	Extensive adoption, trial-and-error: Shopee, Tokopedia, Blibli, Alibaba (previously Bukalapak)

Source: Primary Data (2026)

Table 2. Supplementary Informant Profile (based on questionnaire)

No	Business Name	Number of Employees	Digital Activity Manager	Attended Digital Training	Plan to Add Platforms
1	Nasi Uduk Ci Iiing	Handled alone	Owner	No	Not yet considered (mentioned ShopeeFood)
2	Batagor Pempek Setiabudi Regency	3-5 people	Owner	No	Yes –Instagram
3	Sumber Rezeki (Papaya)	1-2 people	Owner	No	Yes
4	Kembang Tahu	Handled alone	Owner	No	Yes

5	Nasi Gudeg Pajajaran	3-5 people	Child/family	No	No
6	Lumpia Basah	Handled alone	Owner	No	Yes – GoFood
7	Samara Micron	More than 5 people	Child/family & employees	Yes (Ministry of Trade)	Not yet considered

Source: Primary Data (2026)

Informant Characteristics

This study involved seven culinary MSME actors in Bandung with variation in business longevity, product type, and digital platform adoption stage. Table 1 provides a concise summary of the seven participants' characteristics, gathered from the interviews while Table 2 presents a supplementary profile from the questionnaire. Table 1 shows a range in business age, from Samara Micron (established in 1968) to Batagor Pempek Setiabudi Regency (established in 2017). This variation supports the selection criteria described in the Research Method section. The mention of participant count is descriptive, in order to depict the distribution of patterns in this small sample and, is not intended for generalization.

Table 2 contributes to the participant profile in three ways. First, regarding the management of digital activities, the two businesses with the highest adoption levels, namely Nasi Gudeg Pajajaran (full adoption) and Samara Micron (extensive adoption), are the only participants whose digital activities are managed by a child or family member (at Samara Micron also assisted by employees). On the other hand, the other participants, including those who have not or partially adopted tend to manage their business activities themselves (including digital activities for those who have partially adopted). This pattern supports the generational-facilitation argument discussed in Theme 3 on how the involvement of younger family members is associated with high levels of digital adoption due to their technological adeptness. Second, only one of the seven participants selected (Samara Micron) has ever attended a formal digitalization training, from the Ministry of Trade but showed how it does not have a substantial impact on the business. This accounts for the fact that formal information channels through these workshops or events are not primary drivers for digital adoption, specifically within this study. Third, regarding future plans, some participants stated that they plan to add platforms (Batagor, Sumber Rezeki, Kembang Tahu, Lumpia Basah), some have not yet considered it (Nasi Uduk Ci ling and Samara Micron), and one informant stated that it does not plan to add any (Nasi Gudeg Pajajaran). Thus, the diversity of their plans advances the idea that the willingness to further adopt digital tools is not due to their current adoption stage but due to the perceived need and experiential bias of each entrepreneur.

Variation in Digital Platform Adoption Stages

The first finding shows that the digital platform adoption stages of the seven participants span a wide spectrum and are not linearly related to business longevity. Two participants Batagor Pempek Setiabudi Regency and Kembang Tahu have not adopted any form of digitalization while one participant, Sumber Rezeki has minimal digital adoption, limited to selling through Whatsapp. Three participants, namely Nasi Uduk Ci ling, Nasi Gudeg Pajajaran, and Lumpia Basah) has adopted multiple digital selling platforms. One participant, Samara Micron has reached an extensive adoption stage with a history of cross-platform trial-and-errors, even selling on international digital platforms. This further demonstrates how this relatively small sample was able to capture a full range of digital adoption stages, from no adoption to extensive adoption.

There is a missing linear relationship between business longevity and adoption stage. Specifically, Kembang Tahu which has existed since 1994 has not adopted any form of digitalization while Lumpia Basah which was established earlier in 1983-1984 had reached multi-platform adoption and identified which platform generated the highest sales. By contrast, Batagor Pempek Setiabudi Regency, which was the youngest business among the seven participants, established in 2017 has

not adopted any digital tools even though the owner has expressed interest to expand digitally in the future.

This finding is consistent with the arguments in the study of Sugandini et al. (2022) and Hoang (2024) which show how organizational and environmental factors are the strongest determinants of MSME digital adoption, compared to technology availability. The ease of joining digital platforms as expressed by Nasi Gudeg Pajajaran and Samara Micron who stated that it only required "a photo of the product and registration," further proves how the registration process of these platforms is not the main limiting factor. Rather, what distinguishes each of the participants was rather their perceived need, perceived competitive pressure, availability of supporting resources and the psychological readiness to adapt, as discussed further in the sections below.

Drivers of Digital Platform Adoption

Among participants who have adopted digital platforms, several mutually complementary drivers were identified. First, competitive pressure was the main driver for the informant Nasi Uduk Ci Ling, who stated that the number of direct visitors declined due to the emergence of similar businesses, so that digital platform adoption was undertaken "in order to be more competitive." Second, Lumpia Basah mentioned the efficiency of transactions and security resulted from digital adoption made the owner want to adopt digitalization. It provided "faster smoothness" and made "the money safer" compared to conventional cash transactions.

Third, Samara Micron adopted digitalization to expand their market and consumer reach. Specifically, their multi-platform adoption has allowed them to feel like "building a new store without needing additional premises." This shows the perception of operational efficiency as a primary factor to expand digitally without new physical investment on buildings. Fourth, the incentives provided from the platform such as promotions provided by Shopee had allowed consumers to purchase more of their products with reduced costs, without cutting any profit margin to the MSME, becoming an opportunity to appeal to more customers and scale-up the business through higher sales at the same time.

This pattern of drivers illustrates a combination of reactive drivers, namely responding to perceived competitive pressure and market change, and proactive drivers, namely taking advantage of the efficiency and reach opportunities offered by platforms. This finding is inline with Hussain Shahadat et al.'s (2023) study on how environmental factors such as competitive pressure and changing customer demand are important precursors to an MSME's decision on whether to adopt digitalization within a developing country context. In this study, the pressure comes in the form of the uncertainty of the market such as the customer number and purchasing patterns that entrepreneurs cannot predict beforehand.

Barriers to Digital Platform Adoption

Among participants who have not adopted or have only partially adopted digital platforms, four barriers of differing character were identified. First, psychological and generational barriers were explicitly demonstrated by Samara Micron, which stated that younger-generation entrepreneurs adopt digital technology relatively more easily than older generations, and that the older generation "must be helped by the younger generation to adapt." The same informant also personally stated that operating digital platforms is "quite complicated" and "not yet familiar," even though its own business has adopted many platforms.

Second, a barrier in the form of satisfaction with existing conditions was demonstrated primarily by Kembang Tahu, which in the interview stated that its business "already has many customers" so that it did not yet feel an urgency to adopt, although it still expressed a desire toward digitalization. The case of Sumber Rezeki displays a different pattern and in fact underscores the role of market demand uncertainty as the context of this study. That informant recounted that in the past demand for its products was very high, even reaching buyers as far as Singapore and Malaysia with stock that could sell out within hours, but that sales have now declined markedly as similar traders have proliferated in the market. Interestingly, although such a decline in demand could logically serve as a strong trigger for adoption, Sumber Rezeki has still not switched to digital platforms and cited "no opportunity yet" as its reason. The pattern derived from these two participants shows how their decision to not adopt digitalization is not active resistance but rather

the absence of a trigger to change for Kembang Tahu or rather a blocked translation of the trigger to push for a concrete action for Sumber Rezeki.

Third, material-resource barriers were identified more clearly, in fact, from the questionnaire data. When asked on the main reason for not using any digital platform, Kembang Tahu mentioned that there was “no capital in the form of a mobile phone yet,” while Sumber Rezeki stated that its phone’s storage capacity was rather insufficient, worsened by capital constraints. This information is critical as it shows a concrete device and capital constraints. Additionally, it also emphasizes the attitudinal aspects where Kembang Tahu did not think it was necessary to adopt digitalization with “already many returning customers” and Sumber Rezeki, whom has not been granted the “opportunity” to digitally adopt. The differences between the two MSMEs shows how self-administered questionnaire provided room for participants to disclose these material constraints that tend to be sensitive to impart directly. Thus, some non-adoption that attitudinally appears as “satisfaction with current conditions” is fundamentally also intertwined with limited access to basic digital devices.

Fourth, structural barriers and cognitive load at the stage of sustained use. Rising platform administration costs were mentioned by Samara Micron, and reinforced in the questionnaire by the statement that “the fees charged are quite large,” as a constraint even though the registration process is relatively easy, showing that barriers can arise at the usage stage, not only at the initial adoption stage. Among participants who have adopted, the questionnaire also surfaced indications of cognitive load as a reason for not adding further platforms, as shown by Nasi Gudeg Pajajaran, which stated a reluctance to add platforms because it was “dizzy with too many.” This reason aligns with the idea of Kobiyh and El Amri (2024) that limited information-processing capacity and time pressure are fundamental constraints shaping decisions; in micro MSMEs, those constraints determine not only the decision to begin adopting but also the extent to which adoption is expanded.

The difference in the character of barriers is also crucial as the policy or assistance implications differ. To address situational or material barriers, it could focus on practical facilitation such as provisioning of online devices to augment digital access while to intervene attitudinal or generational barriers necessitates a personalized educational approach, even suggested by Samara Micron. In addition to that, the owner of Samara Micron also mentioned the importance for a business to have “an inner will to try and learn,” which differs based on their subjective perceptions and experiences, while being supported by formal government training.

Decision-Making Basis: Personal Experience as the Dominant Heuristic

The fourth finding, which is the main focus of this study, shows that six of the seven participants explicitly stated that personal experience is the primary basis for making important decisions regarding their business, including decisions related to digital adoption. Batagor Pempek Setiabudi Regency, Sumber Rezeki, Kembang Tahu, and Nasi Gudeg Pajajaran directly stated that they use personal experience as the basis of decision-making. Lumpia Basah added that “if we do not try things we cannot do, we will never know whether the outcome is good or bad,” reflecting how personal experience formed through experimentation plays an active role in the digital adoption decision rather than merely observing passively.

Samara Micron which has adopted digitalization extensively explicitly framed its decision process of adopting digitalization as a form of “trial and error” across various platforms, including the one that was discontinued after a year as the sales generated were not optimal. This pattern is a form of experiential learning, in which the decision to continue or discontinue using a digital platform can be attributed to the perceived outcome rather than on systematic market analysis before the decision is made. By contrast, only Nasi Uduk Ci Ling contrasted its decision basis as “feeling, not personal experience.”

As Samara Micron mentioned the futility of the previous MSME training, it shows how direct experience and personal observation turn into primary sources of obtaining information to make a decision, which strongly correlates to the concept of bounded rationality logic in this context. Not only inline with Simon (1982) bounded rationality theory, this finding is also consistent with Lin et al. (2023), who, in their study of eight tourism and hospitality SMEs in emerging markets, found

that limited access to financial, regulatory, and legal information drove SME owners to rely on personal judgment in deciding on innovation adoption.

Under the context of Bandung culinary MSMEs, these constraints appear not only for the access to formal information but also the availability of time as well as cognitive capacity when a business owner evaluates the various platform options systematically, as described by Kobiyyh and El Amri (2024). Based on the conceptual framework of this study, it could be concluded that the conditions of uncertainty within the market such as the presence of fluctuating demands, changing customer numbers and competitive pressure under Theme 2 are triggers which prompts MSME owners to consider digitalization as a business strategy. However, how that trigger translates into a tangible action is determined by bounded rationality under theme 4 and the availability of acquiring the digital devices and capital or even the involvement of younger family members who tend to be more competent in operating these digital tools.

Entrepreneurs who have experienced positive effects from the shift and experimentation of digitalization supported by the presence of younger family members who eases the process of this adoption, tend to translate this trigger into digital adoption quicker. Conversely, those entrepreneurs whose decision basis is built on the stability of current conditions or who face equipment constraints such as phones or digital devices tend to postpone or stall their decision on digital adoption, requiring a stronger trigger or even a concrete opportunity before being able to do so. The pattern established between market uncertainty, experience-based heuristics, and enabling conditions becomes the main contributors in why culinary MSMEs in Bandung use digital platforms.

CONCLUSION AND RECOMMENDATIONS

This study concludes that culinary MSMEs in Bandung adopt digital platforms through decision-making processes shaped by perceived market demand uncertainty and bounded rationality. The findings show that digital adoption stages vary from non-adopters to extensive multi-platform users, and these stages are not directly associated with business longevity. Digital adoption is influenced by competitive pressure, transaction efficiency, market expansion opportunities, and platform incentives, while adoption barriers arise from generational differences, limited digital literacy, resource constraints, perceived complexity, and additional administrative burdens. From the bounded rationality perspective, most participants relied on accumulated experience and trial-and-error processes rather than systematic cost-benefit analysis when making digital adoption decisions. The study also highlights the importance of younger family members as digital facilitators, particularly among businesses with higher levels of digital adoption. These findings contribute to understanding how experience, uncertainty perception, and enabling conditions influence digital transformation among micro-scale culinary MSMEs.

Future research should involve larger samples, broader geographical contexts, and quantitative approaches to examine the relationship between market uncertainty, bounded rationality, enabling conditions, and digital adoption more systematically. Future studies should also apply stronger data verification strategies, such as direct observation of digital platform usage and confirmation interviews, to improve data accuracy. For culinary MSME practitioners, digital adoption decisions should combine practical experience with external knowledge sources to support more informed strategies. For policymakers and MSME support institutions, digitalization programs should emphasize practical demonstrations, mentoring-based assistance, guided experimentation, and improved access to basic digital resources rather than relying only on technical information delivery. These approaches can support more effective and sustainable digital transformation among culinary MSMEs.

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