

Entrepreneurial Perspectives on Quick Commerce: Evidence from Bandung, Indonesia

Harmon CHANIAGO¹
Sri RAHARSO²
Mohammad Rizal GAFFAR³

DOI: 10.24818/mer/2026.01-03

ABSTRACT

This study aims to explore the entrepreneurial perspectives of nanostore owners in Bandung, Indonesia, in responding to the phenomenon of quick commerce (Q-commerce). This study involved a purposive sampling of 30 nanostore entrepreneurs in the urban Bandung. Participants were selected based on three criteria: operating for more than three years, having some exposure to digital services, and being located in dense urban areas. In-depth interviews lasting 45–60 minutes were conducted using a structured interview guide, and thematic analysis was performed using NVivo 12. The results identify three main themes that characterise nanostores' responses to Q-commerce: (1) suboptimal digital transformation, (2) adaptation to modern market pressures, and (3) aspirations for the future. The findings reveal that Q-commerce is perceived ambivalently: on the one hand, it offers opportunities for market expansion through simple applications such as WhatsApp; on the other hand, it presents challenges related to limited capital, logistics, and competition with modern retailers. This research enriches the literature on micro-entrepreneurship in emerging markets by emphasising that digital adoption among microenterprises (nanostores) is not linear but shaped by social networks, cultural values, and local capacity. The contribution of this research lies in offering a contextualised understanding of how nanostore entrepreneurs in emerging markets navigate Q-commerce. It also addresses a specific theoretical gap by exploring hybrid strategies at the intersection of digital adoption and community-based retail practices. Practically, the study provides insights for small business owners and policymakers on the importance of hybrid strategies – combining simple digital technologies with strong community relationships – to ensure the sustainability of nanostore businesses.

KEYWORDS: *Quick commerce, nanostore, micro-entrepreneurship, digitalisation, emerging markets*

JEL CLASSIFICATION: *L21, L26, L81, M30*

1. INTRODUCTION

Despite the growing attention on Q-commerce, there is a lack of clarity on how it disrupts traditional retail models like nanostores. Existing studies rarely address how small-scale entrepreneurs in emerging markets actually experience this shift.

This study positions Bandung as an ideal setting due to its dense urban population, strong nanostore presence, and growing exposure to digital commerce. Yet, no prior research has

¹ Bandung State Polytechnic, Indonesia, harmon@polban.ac.id, corresponding author

² Bandung State Polytechnic, Indonesia, sri.raharso@polban.ac.id

³ Bandung State Polytechnic, Indonesia, mohammad.rizal@polban.ac.id

critically explored how nanostore entrepreneurs in Bandung uniquely adapt to Q-commerce compared to other Indonesian cities.

The core problem this study addresses is the gap between technological innovation (like fast delivery and app usage) and the limited capacity of nanostores to fully adopt them. While Q-commerce promotes speed and efficiency, many nanostores lack the infrastructure, knowledge, or capital to keep up. This creates tension between modernisation and survival.

Quick commerce (Q-commerce) has emerged as one of the most significant trends in global retail transformation. This concept emphasises service speed, delivery within minutes, and the utilisation of digital technologies to bring products closer to consumers. The phenomenon of Q-commerce has grown rapidly in urban areas, particularly in emerging markets such as Indonesia. As one of Indonesia's major cities, Bandung represents a unique urban context where nanostores (small neighbourhood retail shops) continue to play a vital role in the daily retail supply chain.

Although Q-commerce has become increasingly prevalent, most previous studies have focused primarily on the consumer perspective, examining topics such as purchase intention, customer satisfaction, or technology adoption factors through quantitative surveys. However, research that specifically investigates how nanostore entrepreneurs interpret and respond to this phenomenon remains scarce. However, these entrepreneurs are key actors who maintain microeconomic resilience amid ongoing digital disruption.

The research gap lies in the limited number of qualitative studies that uncover the meaning-making processes of micro-entrepreneurs in facing Q-commerce. Studies focusing on developing-country contexts – particularly urban areas in Indonesia – are also underrepresented. Furthermore, the literature on micro-entrepreneurship suggests that digital technology adoption among small businesses is not always linear but is influenced by social, cultural, and community factors (Vlasov et al., 2022; Zhang et al., 2023). This condition underscores the need for a qualitative approach that can capture the lived experiences of nanostore owners rather than merely measuring quantitative variables.

Accordingly, this study employs a qualitative approach using in-depth interviews with 30 nanostore entrepreneurs in Bandung, Indonesia. The objectives are to understand their entrepreneurial perspectives toward Q-commerce, identify the opportunities and challenges that arise, and formulate the adaptive strategies they employ in response to digital transformation pressures.

The novelty of this study lies in three key aspects. First, it addresses the existing research gap by providing a qualitative understanding of how nanostore entrepreneurs interpret and respond to Q-commerce. Second, it focuses on micro-entrepreneurship within the context of large urban centres in developing countries – an area that has received limited attention in international literature. Third, it offers both theoretical and practical contributions: theoretically, by enriching the discourse on micro-entrepreneurship in the digital era; and practically, by providing strategic insights to support the sustainability of urban micro-enterprises (SMEs) and inform policy design for nanostore empowerment amid Q-commerce disruption.

2. LITERATURE REVIEW

2.1 Quick Commerce and Retail Transformation

Quick commerce (Q-commerce) is defined as an advanced evolution of e-commerce that emphasises ultra-fast product delivery – often within minutes – operating within limited urban areas (typically a 2-5 km radius), and relying on digital applications, online platforms, and urban logistics networks (Chen & Li, 2019; Ko et al., 2022). This concept has expanded rapidly across various countries, particularly in urban regions with high technological penetration (Letnik et al., 2022; Lozzi et al., 2022). Recent studies indicate that Q-commerce not only transforms consumer behaviour but also reshapes supply chain structures, marketing strategies, and traditional retail business models (Grant et al., 2024; Jocevski, 2020).

In developing countries, however, Q-commerce presents unique dynamics. Infrastructure challenges, high logistics costs, and limited human resources often make its implementation distinct from that in developed economies (Aragon et al., 2021; Knizkov & Arlinghaus, 2021). Therefore, it is essential to understand how local actors, including microentrepreneurs, interpret and respond to this phenomenon within their specific socioeconomic contexts.

2.2 Nanostores and Microentrepreneurship

The informal sector plays a crucial role as an economic backbone in developing countries, including Indonesia. One of its primary actors is the nanostore—a small-scale retail shop that sells daily necessities, typically family-run, and located within densely populated neighbourhoods (Boulaksil & Belkora, 2017; Chaniago, 2021). Locally, nanostores are widely known as *warung* or *toko kelontong*.

Nanostores remain the backbone of Indonesia's retail distribution system. They function not only as distribution channels but also as centres of social interaction and community trust. In both urban and rural contexts, nanostores are integral to local consumption networks and significantly outnumber small and medium-sized enterprises (Chaniago, 2022).

Studies on nanostores in developing economies suggest that their sustainability is deeply influenced by social relationships with customers and their adaptive capacity to market changes (Aragon et al., 2021; Leal-Rodriguez, 2020). From a micro-entrepreneurship perspective, nanostore adaptation to digitalisation tends to occur gradually and contextually. Leso et al. (2023) and Vlasov et al. (2022) emphasise that small business technology adoption is shaped by cultural norms, social networks, and community support rather than by purely rational or economic factors.

This notion aligns with the concept of hybrid entrepreneurship (Rosário et al., 2022), in which entrepreneurs integrate business sustainability with community-based opportunities and social practices. A study by Quinones et al. (2021) in Latin America further reveals that nanostores often utilise digital tools to enhance operational efficiency while maintaining traditional practices. Such integration enables nanostores to adapt to consumer demands and sustain their business continuity.

Therefore, adopting the hybrid entrepreneurship framework is particularly relevant to understand how nanostore entrepreneurs in Bandung navigate the challenges and opportunities presented by Q-commerce.

2.3 Research Gap

Although the literature on Q-commerce has expanded rapidly, the majority of studies still focus on the consumer perspective or rely on quantitative approaches. Few studies have employed qualitative methods to explore the firsthand experiences of micro-entrepreneurs in responding to Q-commerce, particularly within developing-country contexts. Furthermore, research on nanostores in Indonesia remains limited, even though this context is crucial to enriching the global discourse on micro-entrepreneurship in the digital era.

Building on this gap, the present study theoretically positions itself to address the void by conducting a qualitative exploration of how nanostore entrepreneurs in Bandung interpret, respond to, and adapt to the emergence of Q-commerce.

3. METHODOLOGY

3.1 Research Approach

This study employed a qualitative approach with an exploratory case study design. This approach was chosen to enable an in-depth understanding of the experiences, perceptions, and adaptive strategies of nanostore entrepreneurs to respond to the Q-commerce phenomenon (Creswell & Poth, 2024). The method emphasises exploring the lived experiences and perspectives of nanostore owners rather than measuring variables quantitatively.

3.2 Research Participants

The participants comprised 30 nanostore entrepreneurs located in Bandung, Indonesia, selected through purposive sampling. The inclusion criteria were as follows: (1) owning and managing a nanostore for at least three years; (2) operating within urban areas of Bandung; and (3) having experience using or responding to digital-based services such as delivery applications, digital payment systems, or online communication platforms. The participants were selected to ensure diversity in age, gender, and business tenure, thereby providing a richer and more nuanced set of perspectives.

The choice of 30 participants was based on the principle of thematic saturation – interviews continued until no new themes emerged. This number also reflects diversity in business scale, years of operation, and digital readiness.

3.3 Data Collection Techniques

Data were collected through in-depth interviews, conducted both face-to-face and online, with an average duration of 45–60 minutes. The interview guide was designed to explore the participants' understanding of Q-commerce, their experiences interacting with digital services, the opportunities and challenges they encountered, and the adaptive strategies they implemented in managing their nanostores.

In addition to interviews, the researcher conducted limited field observations (such as contextual triangulation) to better understand operational environments, customer interactions, and the use of technology in daily business activities.

3.4 Data Analysis

Data were analysed using thematic analysis, as developed by Braun and Clarke (2006). The analytical process included several steps: transcription, initial coding, categorisation, and theme identification. Specifically, the steps were as follows: (1)

Verbatim transcription of interview recordings; (2) repeated reading to gain an overall understanding of the data; (3) Coding to identify meaningful units; (4) Grouping codes into broader categories, and (5) developing overarching themes that represent the experiences and perspectives of nanostore entrepreneurs. To facilitate data processing and organisation, NVivo 12 software was used during the analysis phase.

3.5 Validity and Reliability

To ensure data credibility, the study employed several validation techniques: source triangulation (interviews and observations), member checking by asking participants to verify interview summaries, and maintaining an audit trail documenting the analytical process (Noble & Heale, 2019). Research ethics were strictly observed by obtaining informed consent, maintaining the confidentiality of participant identities, and using anonymous codes in reporting to protect participants' privacy.

Triangulation was applied by combining interview responses with field observations. Researchers visited selected nanostores to observe real-time interactions, delivery practices, and technology usage. These observations were used to validate statements made during interviews.

Member checking was conducted by summarising interview notes and returning them to the participants via WhatsApp for confirmation. Participants were encouraged to correct or clarify their input.

NVivo 12 was used not just for organising codes, but also for maintaining consistency across the coding process. Codes were created using an inductive approach, then reviewed collaboratively by two researchers to reduce bias. Disagreements were resolved through discussion.

4. RESEARCH RESULTS

The thematic patterns derived from the interviews are further supported by direct statements from the participants. These quotations provide insight into how nanostore entrepreneurs navigate digital communication, manage operational constraints, respond to competitive pressures, and envision future opportunities related to Q-commerce. The selected excerpts below exemplify the lived experiences and perspectives that underpin the themes developed in this study:

- “I use WhatsApp to share prices and promotions with regular customers.” (Respondent 2)
- “I usually deliver items myself using a motorbike if the customer is nearby.” (Respondent 6)
- “We just wait for messages from customers and deliver by request, not every day.” (Respondent 18)
- “Competition with minimarkets is tough; they have more complete stock and better prices.” (Respondent 25)
- “Even though we don't use apps, customers still prefer to come here because they trust us.” (Respondent 20)
- “WhatsApp promo works. We send discounts or bundle prices, especially before payday.” (Respondent 23)
- “Hopefully in the future, we can also sell online or even partner with delivery apps.” (Respondent 16)

4.1 Thematic Analysis

Following the coding and categorisation process, several key findings were identified from the data.

1. Identification of Key Codes. Several dominant codes emerged from participants' responses, including:

- Use of digital technology: WhatsApp was the most frequently used platform; a smaller number of respondents used Instagram or marketplaces, while many had not yet adopted any digital tools.
- Delivery system: Most deliveries were handled manually or on request (via motorcycle or direct delivery), with no structured system in place.
- Fast service (<30 minutes): Some participants offered this feature, but the implementation was inconsistent.
- Pricing strategy: Almost all participants adjusted to market prices; only a few implemented promotions or bundling (e.g., offering time-based discounts).
- Digital promotion: WhatsApp was the dominant channel; Instagram was rarely used, and many had not yet utilised digital marketing at all.
- Challenges: Competitive pricing, competition from minimarkets, limited capital, and insufficient product variety.
- Coping strategies: Personalised service, maintaining stock based on demand, WhatsApp-based promotions, and offering slightly lower prices.
- Future aspirations: Ability to compete with modern retail, business expansion, digitalisation, and maintaining community preference for their stores.

2. Theme Development. From these codes, five broader themes were initially identified:

- Partial Digitalisation: Most entrepreneurs relied solely on WhatsApp, with limited use of Instagram or marketplaces. Digital promotion was minimal, and many had yet to leverage online opportunities effectively.
- Infrastructure Limitations in Service: Deliveries were conducted manually and inconsistently, depending on daily circumstances. Fast service options existed but lacked standardisation.
- Competition with Modern Retail: Competitive pricing and product variety were the main threats. Limited capital made it difficult for nanostore owners to match the scale of larger retailers.
- Survival Strategies: Entrepreneurs emphasised personalised service (close relationships with customers), adjusted prices to market conditions, accepted lower profit margins, and conducted limited promotions through WhatsApp. Despite the challenges, they aspired to grow, expand digitally, and remain the preferred local option.
- Aspirations for the Future: Entrepreneurs expressed a desire to sustain their relevance in the community, pursue business expansion, and achieve parity – conceptually if not in scale – with modern retail.

3. Review and Refinement

- During the thematic refinement stage, overlapping categories were consolidated to form a more coherent structure:

- The themes “Partial Digitalisation” and “Infrastructure Limitations in Service” were merged into a broader theme, Suboptimal Digital Transformation.
- The themes “Competition with Modern Retail” and “Survival Strategies” were combined into Adaptation to Modern Market Pressures.
- The theme “Aspirations for the Future” was maintained as a distinct theme.

4. Final Thematic Structure. The final analysis produced three overarching themes, as follows:

- Suboptimal Digital Transformation – WhatsApp serves as the primary digital platform, while Instagram and marketplaces are minimally used. Digital promotion remains limited, with word-of-mouth still dominant. Delivery systems are unstandardised, and quick-service implementation is inconsistent.
- Adaptation to Modern Market Pressures – Main challenges include competition from minimarkets, competitive pricing, and limited capital. Coping strategies involve personalised service, maintaining stock aligned with local demand, simple promotional tactics, and price flexibility.
- Aspirations for the Future – Entrepreneurs aim to sustain their community relevance while aspiring for business expansion and digitalisation, envisioning themselves as competitive micro-retailers within their local ecosystems.

A summary table of the main themes, subthemes, and corresponding data sources is presented below.

Table 1. Results of Thematic Analysis

Main Theme	Codes (Subthemes)	Example Data Excerpts
1. Suboptimal Digital Transformation	WhatsApp is the main promotional channel	“Promotion, through WhatsApp.” (Respondents 2, 6, 7, 8, 16, 23, 28)
	Limited use of Instagram/Marketplace	“Not yet.” / “None.” (Respondents 10, 17, 21, 24)
	Traditional promotion is still dominant	“Word-of-mouth is more effective nowadays.” (Respondents 9, 27)
	Non-standard delivery system	“Only by request.” (Respondents 12, 18, 19)
	Inconsistent quick delivery service	“There is fast delivery.” (Respondents 1, 2, 6, 7, 12, 13, 16, 23, 26) vs. “No delivery.” (Respondents 11, 14, 20, 22, 24, 25, 27, 28)
2. Adaptation to Modern Market Pressures	Intense price competition	“Competitive prices and good service.” (Respondent 17)
	Limited capital and inventory	“Limited capital to meet market demand.” (Respondent 25)
	Personalised service strategy	“Providing more personal service tailored to customers’ needs.” (Respondent 20)
	Selling with thin profit margins	“Operating with very small profit margins.” (Respondent 18)
	Simple promotional methods	“Offering discount or bundled promotions via WhatsApp.” (Respondent 23)
3. Aspirations for the Future	Remaining the preferred local choice	“To remain the community’s preferred choice.” (Respondents 1, 3, 12, 29)

Main Theme	Codes (Subthemes)	Example Data Excerpts
	Business digitalisation	“Hopefully, we can go more digital.” (Respondent 17)
	Business expansion	“To open new branches in other areas.” (Respondent 16)
	Competing with modern retail	“Able to compete with modern retail stores.” (Respondents 9, 10, 11, 13)

Source: authors’ own processing

4.2 Explanation of Thematic Analysis

Theme 1: Suboptimal Digital Transformation.

The interview results indicate that the majority of nanostore owners in Bandung have adopted digital technologies, though their usage remains limited – primarily to WhatsApp. Respondents emphasised that WhatsApp is used for customer communication as well as for promotional purposes. As expressed by a participant:

“Promotion, through WhatsApp.” (R2, R6, R7, R8, R16, R23, R28)

However, the use of other platforms, such as Instagram or online marketplaces, was found to be minimal. Several respondents even admitted that they had never attempted any form of digital promotion:

“Not yet.” (R10, R17, R21, R24)

Moreover, traditional promotion remains perceived as effective—particularly word-of-mouth communication, which is seen as more trustworthy among local customers:

“Word-of-mouth is more effective nowadays.” (R9, R27)

Regarding delivery services, most nanostores do not have a standardised delivery system. Deliveries are typically conducted only upon customer request, often using personal motorcycles or being handled directly by the owner. A small number of entrepreneurs offer “fast delivery” (within 30 minutes), although its implementation is inconsistent:

“There is fast delivery.” (R1, R2, R6, R7, R12, R13, R16, R23, R26)

“No delivery.” (R11, R14, R20, R22, R24, R25, R27, R28)

These findings suggest that digital transformation among nanostore entrepreneurs remains partial and fragmented, lacking integration across business processes.

Theme 2: Adaptation to Modern Market Pressures

Competition with minimarkets and modern retail chains emerged as a dominant issue. Almost all respondents mentioned challenges such as competitive pricing, limited capital, and incomplete product assortments:

“Competition is increasing, with very competitive prices.” (R11, R14, R17)

“Limited capital to meet market needs quickly.” (R25)

To remain competitive, nanostore owners rely on personalised customer service, maintaining stock according to local demand, and adjusting prices to match the market:

“Providing more personal service tailored to customer needs.” (R20)

“Operating with thin profit margins.” (R18)

Some participants also adopted simple promotional strategies, such as offering discounts or bundled product deals through WhatsApp:

“Offering discounts or bundled promotions via WhatsApp.” (R23)

These strategies demonstrate that nanostores depend largely on social proximity, personalised relationships, and price flexibility as key mechanisms to withstand competitive pressures from modern retail formats.

Theme 3: Aspirations for the Future

Most of the respondents expressed a desire for their businesses to remain the preferred shopping choice within their communities despite the rise of modern retail:

“To remain the preferred choice of the community.” (R1, R3, R12, R29)

Several participants also shared aspirations for growth, either through digitalisation or business expansion:

“Hopefully, we can go more digital.” (R17)

“To open a new branch in another area.” (R16)

A few even articulated an ambition to elevate their nanostores to a more professional level – comparable to modern retail outlets:

“Able to compete with modern retail stores.” (R9, R10, R11, R13)

These aspirations illustrate a long-term vision among nanostore entrepreneurs – not merely to survive amid market disruption, but to progressively transform into more professional, adaptive, and sustainable enterprises.

5. FINDING

Thematic analysis of in-depth interviews with 30 nanostore entrepreneurs in Bandung revealed three major themes that represent their lived experiences in responding to the phenomenon of quick commerce (Q-commerce).

The three overarching findings of this study are as follows:

1. Partial Digital Transformation. WhatsApp dominates as the primary digital tool, while the use of Instagram or online marketplaces remains minimal. Traditional promotion methods continue to play a strong role.
2. Adaptation to Modern Market Pressures. Challenges related to limited capital and price competition are addressed through personalised service, selective inventory management, and flexible pricing strategies.
3. Future Aspirations. Entrepreneurs aim to remain the preferred choice within their communities while gradually moving toward digitalisation, business expansion, and competitiveness with modern retail stores.

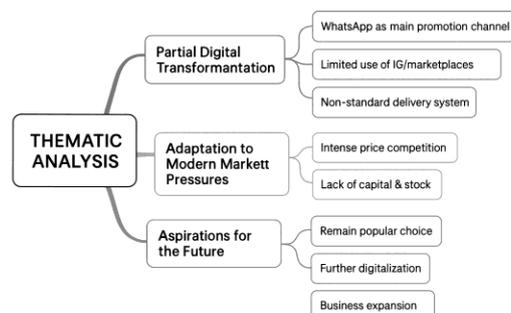


Figure 1. Visual mind map of the three thematic findings

Source: research result

The following are the most frequently occurring words identified through thematic analysis using NVivo software:

“Price, WhatsApp, market, flexible, adjust, promotion, help, goods, needs, many, request, fast, delivery.”

This indicates that the dominant themes revolve around pricing strategies, the use of WhatsApp, service flexibility, and challenges related to market competition and product delivery.

Table 2. Summary of research findings

Dominant Word	Theme	Meaning in the Research Context
Price	Competitive Strategy	Nanostores emphasise price adjustments based on market dynamics; price competition represents the main challenge to modern retail.
WhatsApp	Digital Promotion	WhatsApp serves as the primary platform for communication and promotion, while Instagram and marketplaces are rarely utilised.
Market	Competitive Environment	Modern retail stores and minimarkets act as key benchmarks; nanostores adapt to local market dynamics.
Flexible	Survival Strategy	Nanostores maintain flexibility in pricing and services to meet customer needs.
Adjust	Business Adaptation	The ability to adjust stock, service, and pricing is perceived as a key survival factor.
Promotion	Promotional Efforts	Simple promotional strategies (discounts, product bundling) are primarily executed through WhatsApp.
Help	Social/Personal Support	Close relationships between customers and shop owners add personal value compared to modern retail.
Goods	Product Availability	Maintaining product variety remains challenging due to limited financial capital.
Needs	Consumer Responsiveness	Nanostores adjust stock and services according to residents' daily needs.
Request	Service System	Most delivery services operate on a request-based (on-demand) system.
Fast	Delivery Service	Some stores offer fast delivery, though implementation remains inconsistent.
Delivery	Logistics Infrastructure	Goods distribution is handled manually; standardised delivery systems are not yet in place.
Many	Competitive Scale	Reflects the growing number of competitors, particularly minimarkets and modern retailers.

Source: authors' own processing

Interpretation

- **Partial Digital Promotion:** WhatsApp is the dominant platform used, while other forms of digital promotion remain underutilised.
- **Pricing and Market:** The primary strategy of nanostores is to maintain competitive prices aligned with market conditions.
- **Flexibility and Adjustment:** Operational flexibility and the ability to adapt to consumer needs serve as key strengths for business survival.
- **Personal and Social Service:** Entrepreneurs strive to maintain close and supportive relationships with their customers.

- Delivery and Product Availability: These areas remain weaknesses, primarily due to limited financial resources.

The graphical output generated from Nvivo is illustrated in Figure 2 below:



Figure 2: Graphic output of research results from Nvivo software

Source: research results

6. DISCUSSION

Although the findings support the existing literature, they also reveal critical nuances. Many nanostores selectively adopt digital tools not because they are unwilling, but due to structural constraints.

Rather than viewing digitalisation as a binary (adopt vs. not adopt), this study shows that hybrid models—mixing manual delivery with WhatsApp, traditional trust with limited digital promotion—are practical compromises in low-resource settings.

These insights challenge the assumption that Q-commerce adoption follows a universal trajectory. In Bandung, community trust and flexible pricing remain stronger predictors of business continuity than full tech integration.

Comparisons with other regions (India, Latin America) should be treated with caution. Bandung's dense urban and social cohesion creates a unique adaptation pattern. Therefore, policies must be hyper-local and context-aware.

This study aims to explore how nanostore entrepreneurs in Bandung, Indonesia, interpret and respond to the rise of quick commerce (Q-commerce). Through thematic analysis, three dominant themes were identified: partial digital transformation, adaptation to modern retail pressures, and future aspirations. Together, these themes illustrate the ambivalent position of nanostores within an evolving retail ecosystem. The discussion below integrates these findings with existing theoretical perspectives and previous studies from emerging markets.

6.1 Q-Commerce as an Ambivalent Opportunity in Emerging Markets

Nanostore entrepreneurs perceive Q-commerce as both a source of opportunity and a constraint. On the one hand, digital platforms such as WhatsApp allow them to expand their customer base beyond the immediate neighbourhood. On the other hand, most entrepreneurs face difficulties in meeting the speed and logistical demands of Q-commerce due to limitations in capital and infrastructure.

This ambivalence aligns with the findings of Grant et al. (2024) and Jocevski (2020), who emphasise that digital tools can enhance market access but that their benefits are often uneven in resource-constrained contexts. The present findings also support Aragon et al. (2021), who argue that the implementation of Q-commerce in developing countries is restricted by systemic logistical gaps. Hence, these results highlight a structural tension: while digitalisation creates new opportunities for growth, it simultaneously exposes the capacity gap between small-scale entrepreneurs and large, platform-based retailers.

6.2 Partial and Contextual Digital Transformation

The findings reveal that digital adoption among nanostores is partial and highly contextual. Entrepreneurs primarily use WhatsApp for promotion and customer communication, while platforms such as Instagram and online marketplaces remain underutilised. Traditional marketing forms – particularly word-of-mouth – continue to dominate.

This pattern is consistent with the arguments of Vlasov et al. (2022) and Zhang et al. (2023), who contend that digital adoption in small enterprises is non-linear, shaped by cultural and community factors rather than purely rational economic calculations. Similar dynamics have been documented among nanostores in other developing contexts, where digital tools are integrated selectively rather than comprehensively (Aragon et al., 2021; Leal-Rodriguez, 2020). Consequently, the nanostores in Bandung illustrate a gradual and selective trajectory of digitalisation, one that is grounded in community trust and constrained by limited resources.

6.3 Adaptation to Modern Retail Pressures

Competition with minimarkets and modern retailers emerged as a central theme. Nanostores are under persistent pressure to match competitive pricing, diversify product assortments, and develop promotional strategies. To cope, they rely on personalised services, flexible pricing, and low-cost promotional efforts – for instance, offering discounts or product bundles through WhatsApp.

These strategies confirm the findings of Leso et al. (2023), which emphasise that community trust represents a distinctive competitive advantage for micro-retailers in emerging markets. Furthermore, the findings echo Knizkov and Arlinghaus (2021), who observed that in contexts with weak infrastructure, small retailers leverage social embeddedness to compensate for structural disadvantages. This implies that although nanostores cannot compete at scale, they remain relevant by mobilising relational capital and trust-based interactions to sustain their position within local economies.

6.4 Aspirations and Future Orientation

Despite current limitations, nanostore entrepreneurs expressed aspirations for digital expansion, business growth, and competitiveness with modern retail formats. These aspirations reflect a hybrid entrepreneurial orientation – maintaining survival through traditional practices while progressively experimenting with digitalisation.

A similar pattern is evident among kirana stores in India, which combine long-standing community-based models with partial digital adoption (Yang, 2023), and among nanostores in Latin America, which integrate informal practices with digital innovation (Quinones et al., 2021). This suggests that nanostores in Bandung are not isolated cases but part of a broader emerging-market phenomenon in which micro-retailers simultaneously negotiate tradition and innovation as complementary forces shaping business evolution.

6.5 Hybrid Strategies as a Response to Q-Commerce

The synthesis of these findings highlights hybrid strategies as the key adaptive mechanism for nanostores. These strategies combine both traditional and digital practices across several dimensions:

- Promotion. Traditional word-of-mouth communication is complemented by WhatsApp broadcasts or occasional social media use.
- Distribution. Manual, on-demand delivery supplemented by the selective use of online transportation or delivery services.
- Customer Service. Community-based trust relationships are strengthened through digital communication channels.
- Pricing. Flexible, market-based price adjustments supported by simple digital promotions (discounts, bundling).

This hybrid orientation reflects what Rosário et al. (2022), Yang (2023), and Quinones et al. (2021) describe as hybrid entrepreneurship, in which entrepreneurs balance continuity and change by blending traditional practices with emerging opportunities. Such a model enables entrepreneurs to mitigate the risks associated with innovation by maintaining stable income streams while simultaneously experimenting with new business ideas.

For nanostore entrepreneurs in Bandung, hybridity is not merely a strategic choice but a survival necessity, allowing them to remain relevant and resilient in the disruptive transformations of the retail landscape.

6.6 Theoretical and Practical Implications

Theoretically, this study contributes to the literature on microentrepreneurship by demonstrating that the adoption of Q-commerce in emerging markets is ambivalent, selective, and socially embedded, rather than universal or linear. Practically, the findings suggest that interventions aimed at supporting nanostores should go beyond mere technology provision. Effective policies must strengthen social capital, community-based networks, and micro-logistics systems tailored to the operational scale of small retailers.

The relationship between the study’s key findings and the Identified hybrid strategies in responding to Q-commerce in Bandung, Indonesia, is summarised in the following figure.

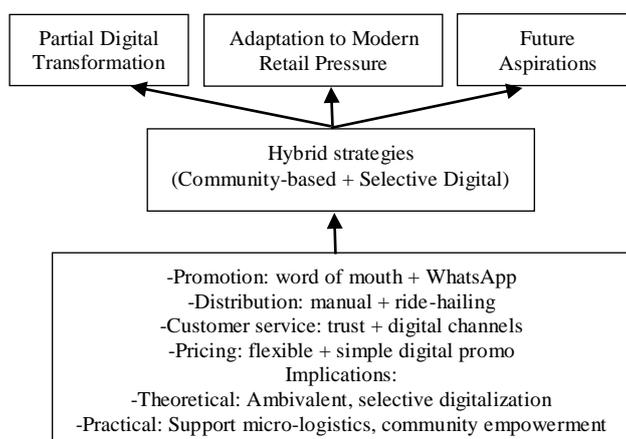


Figure 3. Conceptual framework of nanostore hybrid strategies in responding to Q-commerce

Source: research result

Figure 3 illustrates how nanostores confront Q-commerce through three key themes – partial digitalisation, adaptation to modern retail pressures, and future aspirations – which are synthesised into hybrid strategies (traditional + selective digital approaches), ultimately generating both theoretical and practical contributions.

7. CONCLUSIONS

This study explored how nanostore entrepreneurs in Bandung, Indonesia, interpret and respond to the emergence of quick commerce (Q-commerce). The findings revealed three dominant themes: partial digital transformation, adaptation to modern retail pressures, and future aspirations. Collectively, these themes illustrate that Q-commerce is not perceived merely as a technological shift but as an ambivalent socio-economic phenomenon – offering opportunities for market expansion while simultaneously introducing challenges related to capital, logistics, and competition.

Crucially, nanostores employ hybrid strategies, combining traditional community-based practices with selective digital adoption. This hybridity underscores that micro-entrepreneurship in emerging markets is neither fully traditional nor fully digital, but exists along a continuum of adaptation shaped by local capacities, social embeddedness, and cultural norms.

This study does not claim that nanostores must fully adopt Q-commerce tools to survive. Instead, it highlights how selective, low-cost strategies – such as WhatsApp promotion and community-based trust – can offer resilience.

The real value lies in understanding adaptation as a spectrum, not a binary. Some entrepreneurs embrace delivery services, while others rely on personalised service. Both models are valid within their resource limits.

7.1 Theoretical Contributions

1. Reframing digital transformation in micro-retail. This study positions digital adoption not as a linear technological shift, but as a flexible, socioculturally embedded process shaped by local norms, community ties, and varying entrepreneurial capacities.
2. Extending the micro-entrepreneurship literature. This study demonstrates that digital adoption among microentrepreneurs in emerging markets is gradual, selective, and community-driven, thereby enriching existing theories of digital entrepreneurship.
3. Confirming the ambivalence of Q-commerce. By highlighting both opportunities and constraints, the findings contribute to the growing discourse on Q-commerce as a disruptive, yet unevenly accessible, innovation.
4. Advancing the concept of social embeddedness. The reliance on trust-based community relationships reinforces and extends prior findings on the centrality of social embeddedness for retail survival in developing economies.
5. Bridging hybrid entrepreneurship theory. The identification of hybrid strategies aligns with and extends the hybrid entrepreneurship framework, illustrating how entrepreneurs negotiate continuity and change under conditions of resource scarcity.

7.2 Practical Contributions

1. Practically, support for nanostores must extend beyond basic training by incorporating micro-logistics assistance, peer-based knowledge sharing, and context-aware digital onboarding.
2. For nanostore entrepreneurs, the study offers actionable guidance on hybrid strategies – combining community trust, flexible pricing, and WhatsApp-based promotions – to sustain competitiveness against modern retail formats.
3. For policymakers, the findings underscore the need for interventions that strengthen social capital, facilitate micro-logistics solutions, and deliver context-specific digital support aligned with nanostores’ operational realities.
4. For digital platforms and ecosystem actors, the study identifies opportunities to develop more inclusive services, such as simplified ordering tools, low-cost delivery options, and features that leverage community networks.

7.3 Limitations and Future Research

This study has several limitations. First, it focuses on nanostores in Bandung, which may limit the generalisability of the findings to other urban or rural contexts within Indonesia or beyond. Second, the sample size (30 participants) and the qualitative approach provide depth but not breadth, making the results exploratory rather than representative.

Future research should:

- Conduct comparative studies across regions or countries (e.g., comparing nanostores in Indonesia with kirana stores in India or bodegas in Latin America).
- Employ mixed-method designs to quantitatively test the patterns identified in this study.
- Use longitudinal approaches to trace how nanostore strategies evolve as the concept of Q-commerce matures.
- Explore consumer perspectives alongside entrepreneurial ones to better capture the dynamics of supply–demand adaptation.
- Future research should focus more on how local ecosystems shape digital practices, rather than imposing generalised innovation frameworks.
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ACKNOWLEDGEMENTS

This work was supported and funded by the “Directorate of Research and Community Service, Directorate General of Research and Development, Ministry of Higher Education, Science, and Technology, Republic of Indonesia”. (Grant number DIPA-139.04.1.693320/2025 and implementation contract no. 190/R7/PE.01.03/2025 dated May 28, 2025).

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