



Unraveling the rise and fall of quick commerce in Indonesia: insights from industry experts

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Article Info	Abstract
<p>Keywords: Business Sustainability, Consumer Behavior, Online Grocery Retail, Opportunities and Challenges, Quick Commerce</p>	<p><i>The quick commerce business model experienced significant popularity in Jakarta and its surrounding areas in 2022, offering consumers enhanced convenience through fast delivery services. However, this success was short-lived, with several quick commerce platforms collapsing just months after their launch. This study explores the factors behind the rapid rise and subsequent decline of quick commerce in Indonesia. Using a qualitative approach, in-depth interviews were conducted with two industry experts specializing in e-grocery and digital economics. The interviews were analyzed with NVivo software to identify key themes and patterns. The findings show that quick commerce grew due to pandemic-driven changes in consumer behavior, global trends, and a novel customer experience offering convenient delivery solutions. However, its decline was driven by high costs, low profitability, and difficulties in managing products like fresh produce, which had quality issues and short shelf lives. It also faced strong competition from minimarkets and supermarkets moving online, using existing infrastructure to provide similar services at lower costs. Shifting consumer habits after the pandemic and inconsistent demand further weakened the business model's sustainability. These insights provide theoretical and practical contributions, offering strategies for addressing challenges in emerging business models and ensuring their sustainability in dynamic retail environments.</i></p>

1. INTRODUCTION

The online grocery retail industry has seen remarkable growth, driven by advancements in technology and shifting consumer preferences towards more convenient shopping experiences. One of the key innovations in this sector is the emergence of quick commerce. Quick commerce is an advanced form of e-commerce that delivers physical products within exceptionally short timeframes, often within 30 minutes to an hour of placing the order (Stojanov, 2022). However, the range of products offered by quick commerce is more limited compared to e-commerce, with around 2,000 items primarily focused on groceries and daily necessities (Buldeo Rai, 2023).

In addition to the product range, several key factors differentiate quick commerce from e-commerce. The quick commerce model sets itself apart through its unique service, especially its focus on fast delivery. While conventional e-commerce platforms often take



several days to deliver products, quick commerce is designed to deliver groceries within 15 minutes to an hour (McKinsey, 2022). Furthermore, distinctions between quick commerce and e-commerce extend to the delivery method, the use of storage facilities, and the pricing structure (Forbes, 2022).

The key to quick commerce lies in minimizing the time between purchase and delivery (Paché, 2022). Raj et al. (2024) described the process as starting with the order awaiting assignment to a picker in the storage area called dark store. The picker gathers the items and transfers them to the dispatch staging area, where the orders are organized and assigned to a delivery vehicle. Once the vehicle is prepared, the batch is sent from the fulfillment center for last-mile delivery to the customer.

Quick commerce in Indonesia gained momentum with the launch of Astro, the first company to introduce the service in the Jakarta area in 2021. Following Astro's success, competitors like Dropezy, Bananas, and Radius quickly entered the market in 2022. However, Astro has experienced rapid growth compared to its competitors (Royanti & Astini, 2023), establishing itself as the leading quick commerce platform in Indonesia. In addition to these companies, several online grocery retailers and e-commerce platforms have also launched quick commerce services, including Sayurkilat from Sayurbox, Segari Turbo from Segari, and Tokopedia NOW! from Tokopedia. While most quick commerce services are limited to Jakarta and its surrounding areas, Radius is an exception, serving cities like Tangerang, Semarang, Solo, and Yogyakarta.

The rise of quick commerce in Indonesia was short-lived. Within months of launching, several companies either shut down their quick commerce services or pivoted to other business models. Bananas was the first to close its operations in October 2022 after struggling to establish a viable economic model (Fidinillah, 2022a). Following suit, Dropezy ended its quick commerce operations at the end of 2022, rebranding as Sekilo and shifting its focus to the poultry business (Naqiya, 2024). Similarly, Radius pivoted to social commerce and rebranded as Bakool (Fidinillah, 2022b). More recently, on July 15, 2024, Tokopedia NOW! also shut down its quick commerce service. As a result, only a few companies remain in the sector, with Astro standing as the sole pure quick commerce in Indonesia.

The phenomenon of the rise and fall of quick commerce also happened in other countries. Previous studies indicate that quick commerce companies in Paris faced similar challenges to those in Indonesia. In 2021, almost ten quick commerce companies launched operations in Paris. By 2022, only three companies remained active in operating dark stores in the city, with Getir holding 61% of the market share. By August 2023, nearly all quick commerce companies had ceased their activities in Paris (Schorung, 2024). A comparable situation occurred in Indonesia, where multiple quick commerce companies launched around the same time. However, the market was soon dominated by a few players, forcing others to shut down. Buldeo Rai et al. (2023) noted that while it is unlikely all quick commerce companies will survive, it is probable that one or a few will continue to operate in each city. This statement aligns with the current state of quick commerce in Indonesia, where Astro is the only remaining pure player. This raises important questions: What factors

contribute to the rise and fall of quick commerce? And, does quick commerce have the potential for long-term sustainability in Indonesia?

Despite the growing interest in quick commerce, existing literature on the subject remains limited. In Indonesia, only a few studies have explored aspects of customer behavior within quick commerce, such as customer purchase decisions (Royanti & Astini, 2023) and customer loyalty (Setiyono et al., 2023). However, there is a notable lack of research examining the rise and fall of quick commerce in the Indonesian market. This study seeks to identify the factors driving the growth and decline of quick commerce, offering a deeper understanding of its dynamics within the specific context of Indonesia, from an expert perspective. By addressing this gap, the study aims to provide valuable insights that contribute both theoretically and practically to the broader understanding of quick commerce in Indonesia.

2. LITERATURE REVIEW

Quick commerce is a distinctive business model that enables products to be delivered within 10 to 30 minutes of an order being placed. It typically involves the delivery of small quantities of items, including office supplies, groceries, and over-the-counter medications (Kapoor et al., 2023). Often considered the third generation of digital trade, quick commerce represents a significant evolution in the way goods are delivered. Stojanov (2022) highlights the differences in the development of digital trade, as illustrated in the table below.

Table 1. The Evolution of Commerce

	Traditional Commerce	E-Commerce	Quick Commerce
Shopping Method	Self-service	Shipping within 2-3 days	One hour delivery or less
Product Availability	All items are physically present	Key items are available	Only a few items are available
Delivery Method	Private vehicles	Delivery by truck	Motorcycles, scooters, bikes
Warehouse	Large retail stores	Large distribution centers	Local stores and storage facilities
Point of Focus		Focus on pricing	Focus on execution speed

Source: Stojanov, 2022

Quick commerce wholesale retailers differ significantly from e-commerce and online grocery stores. According to Setiyono et al. (2023), in Indonesia, the operational of quick commerce do not rely on physical locations or e-commerce websites but operate solely through mobile apps. What makes quick commerce unique is its focus on speed. Often regarded as the next generation of e-commerce, its primary focus is on fast delivery, making quickness its most distinguishing feature.

There are various models of quick commerce currently evolving. Schorung (2024) categorizes these models as follows: The "pure player" model involves a company operating a network of dark stores, where products are stored and orders are prepared before being

delivered by couriers. In contrast, the "3-player" model is a partnership between a quick commerce company and a collaborative platform. In this model, the quick commerce company's dark stores fulfill orders placed through the platform, with deliveries handled by couriers under service contracts. Additionally, a new emerging model links customers with a marketplace, where a "personal shopper" collects items from selected stores on behalf of the customer. Another variant involves hyperlocal food delivery platforms, initially focused on restaurant food deliveries, expanding to include groceries sourced from their own dark stores, thus offering quick commerce services (Rau et al., 2023).

In Indonesia, quick commerce operates through two main models: pure players and hybrid models adopted by traditional online grocery retailers. In the pure player model, the customer journey begins with downloading a dedicated quick commerce mobile app, browsing available products, placing an order, and tracking the order status through the app (Setiyono et al., 2023). Once an order is placed, the quick commerce platform processes it at the nearest dark store to the customer's location. The store's workforce picks and packs the ordered items, which are then handed over to couriers for last-mile delivery directly to the customer's doorstep. In the hybrid model, quick commerce services are only available to customers who live near the retailer's warehouses. Consequently, not all areas served by the online grocery retailer offer quick commerce options—only those within proximity to a warehouse. Despite this limitation, the process of handling customer orders and fulfillment is largely similar to that of the pure player model.

To fulfill customer orders, quick commerce relies on storage facilities known as dark stores. These are small-scale fulfillment centers dedicated to online orders, often repurposed from former retail spaces (Shapiro, 2023). Strategically located in urban areas, dark stores enable fast and efficient delivery (Risberg & Jafari, 2022; Yang et al., 2024). Unlike traditional stores, dark stores are not open to the public and operate as localized hubs at the neighborhood level. They focus exclusively on processing online orders and providing services tailored to specific areas, rather than serving entire cities (Buldeo Rai, 2023; Calzavara et al., 2023; Paché, 2022).

Quick commerce offers a wide selection of products to fulfill customers' daily needs, although its range is more limited compared to traditional supermarkets. With approximately 2,000 product options, quick commerce's selection is roughly ten times smaller than that of conventional supermarkets, which typically carry between 20,000 and 30,000 items (Buldeo Rai, 2023). The product variety available through quick commerce includes groceries, household essentials, and personal care items. In Indonesia, the leading quick commerce platforms have also expanded their offerings to include private-label products such as ready-to-eat meals, coffee, snacks, and more.

For quick commerce to thrive in the Indonesian market, achieving customer loyalty is crucial. To enhance customer retention, many quick commerce platforms offer loyalty programs, often based on a points system. Customers earn points with each purchase made through the app, which can then be redeemed for rewards or merchandise, depending on the company's offerings. However, customer loyalty extends beyond just loyalty programs; it is a complex behavior influenced by various factors. Setiyono et al. (2023) investigated the key drivers of loyalty and found that in the Indonesian quick commerce industry, consumers

are more likely to remain loyal when the service quality is high. A positive service experience leads to customer satisfaction, which ultimately fosters long-term loyalty. However, focusing solely on customer loyalty does not address the broader challenges faced by quick commerce in Indonesia. Therefore, this study aims to fill this gap by exploring additional factors contributing to the decline of quick commerce in the region.

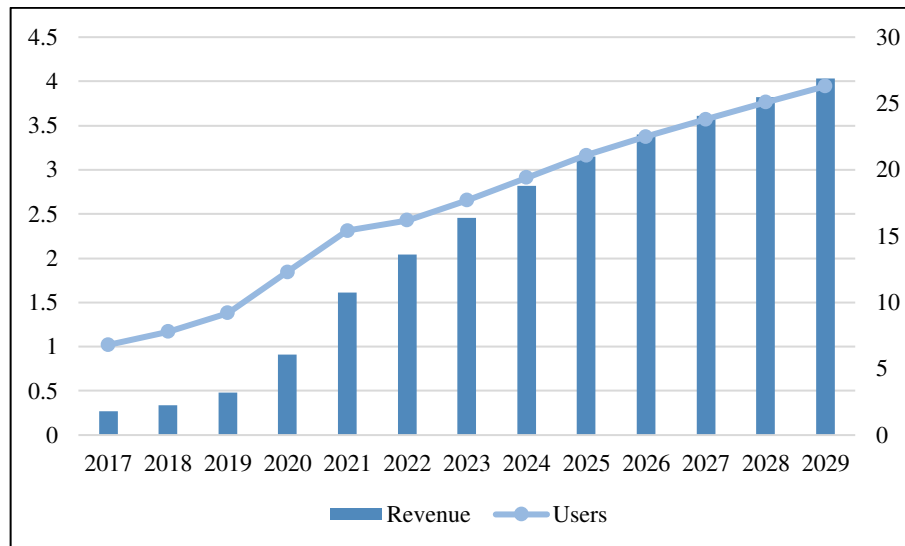


Figure 1. Quick Commerce Growth in Indonesia
(Source: Statista, 2022)

Data from Statista (2022) indicated that quick commerce in Indonesia was expected to experience growth both in revenue and users. The projections were based on data from 2022, during a period when quick commerce was rising in the country. However, in practice, quick commerce faced a decline and did not perform as expected. To date, the reasons behind this decline in Indonesia's quick commerce sector remain unexplored. This study aims to address this gap by analyzing the factors contributing to the downturn, from the perspective of industry experts. The findings are expected to shed light on the drivers behind the rise and fall of quick commerce in Indonesia, providing both theoretical insights and strategic recommendations for quick commerce companies.

3. RESEARCH METHOD

As the study aims to analyze the decline of quick commerce in Indonesia from the perspectives of industry experts, a qualitative research approach was employed. This method allows for in-depth exploration of expert opinions and insights, providing a more comprehensive understanding of the factors contributing to the downturn. The data was collected through in-depth interviews with industry experts, a qualitative technique designed to gather detailed information about participants' subjective experiences. The goal of in-depth interviews is to examine an individual's perspective and the meaning they assign to a specific topic, issue, or process (Rutledge & Hogg, 2020).

The in-depth interviews were conducted using a semi-structured format. This approach is often chosen when the researcher seeks to gain a deeper understanding of a participant's

unique perspective rather than a generalized view of a phenomenon. One key advantage of this method is that it allows the interview to stay focused while still giving the researcher flexibility to explore relevant topics that arise during the conversation, thereby enriching the understanding of the subject being studied (Adeoye-Olatunde & Olenik, 2021).

The participants in this study were carefully selected industry experts with significant knowledge and experience in quick commerce. To ensure the quality and relevance of insights, the following selection criteria were applied:

1. Participants were required to have direct involvement in or a deep understanding of the quick commerce market in Indonesia.
2. Participants were demonstrated credibility through their professional roles, qualifications, or contributions to the field.

Based on these criteria, the study included two industry experts as participants. The first expert specializes in e-commerce and e-grocery services, with direct experience in quick commerce operations. The second expert is a digital economics analyst with extensive knowledge of the growth and challenges of quick commerce in Indonesia.

The in-depth interviews were conducted via video conferencing, with each session lasting approximately 30 minutes per participant. This approach provided a flexible and efficient way to engage with industry experts while maintaining a focused discussion. The interviews explored multiple dimensions of quick commerce, including customer behavior, internal operational challenges, external market dynamics, and the overall outlook for the future of quick commerce in Indonesia. The experts shared insights based on their experience and observations, offering valuable perspectives on the factors driving the growth, limitations, and sustainability of the quick commerce industry.

The results of the in-depth interviews were transcribed to ensure accurate documentation of the experts' responses. Once transcribed, the data were systematically analyzed using NVivo, a qualitative data analysis software. NVivo was utilized to organize, code, and identify key themes and patterns emerging from the interviews.

The analysis process in NVivo followed a systematic approach to ensure comprehensive data examination. First, interview transcripts were imported into NVivo and skimmed to identify recurring patterns and key points. Primary themes were then created based on these observations, and individual codes were categorized under their relevant themes to organize the data. Following this, an in-depth analysis was conducted to explore relationships and extract insights aligned with the study's objectives. Finally, the findings were synthesized into a detailed report, highlighting key patterns and actionable insights. The overall research design for this study is illustrated in the figure below.

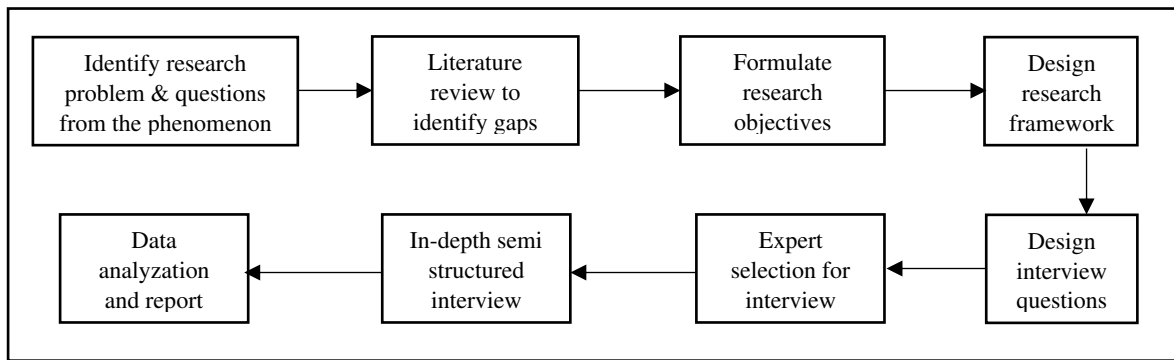


Figure 2. Research Design

4. RESULT AND DISCUSSION

In 2022, quick commerce in Indonesia faced a critical period of both opportunities and challenges. The growing demand for convenience in online grocery shopping created opportunities for rapid expansion, However, this potential was accompanied by considerable challenges that put the industry's resilience to the test.

Opportunities Driving Quick Commerce Growth

In 2020, the COVID-19 pandemic significantly restricted offline shopping in Indonesia, driving a shift toward online platforms, including grocery shopping. Concerns about virus exposure, both outside the home and through incoming items, combined with the convenience and time-saving benefits of online shopping, fueled this behavioral change. Many individuals adopted strict self-isolation practices, while government-enforced social distancing measures and large-scale social restrictions further accelerated the transition. Supported by advancements in digital technology, several startups launched online grocery platforms, paving the way for the quick commerce business model. This model emerged as a strategic response to market constraints and a valuable opportunity in the evolving retail landscape.

Although the COVID-19 pandemic has largely subsided, many customers continue to show interest in online grocery shopping. According to a report by Google (2022), about 65% of online grocery shoppers intend to maintain their current usage levels, while 19% are considering increasing their reliance on the service. This sustained interest underscores the enduring convenience of online grocery shopping and presents a valuable opportunity for quick commerce to thrive.

Quick commerce has demonstrated significant growth and development in several countries. Before 2021, this business model was still absent in Indonesia, sparking interest among entrepreneurs to adopt it. The proven track record of quick commerce in international markets also attracted investors to explore opportunities in this sector. These trends have contributed to the emergence and popularity of quick commerce in Indonesia.

In Indonesia, Astro was the first to introduce the quick commerce business model to the market. Initially, its services were limited to certain areas in Jakarta. However, within a short period, Astro expanded its operations to cover a broader area, including Depok, Tangerang,

and Bekasi. Following Astro's success, several startups, such as Dropezy, Bananas, and Radius, launched their own quick commerce services in 2022. Among these, three of the four pure quick commerce players operated primarily in Jakarta and its surrounding areas, while Radius focused on cities outside Jakarta. This period marked the emergence and rapid growth of quick commerce in Indonesia.

The introduction of fast delivery services, ranging from 15 minutes to an hour, revolutionized the shopping experience for consumers in Indonesia, creating a novel customer experience. Quick commerce offers customers a new online grocery shopping experience marked by its services and values. The promise of 15-minute delivery, which initially appeared almost unbelievable, was successfully implemented by quick commerce platforms.

In addition to speed, quick commerce offers a broad product range, including groceries, cooking packages, household product, and other daily necessities, catering to diverse customer needs. These services were further enhanced by introductory promotions, such as significant discounts and free delivery with no minimum purchase. Such incentives not only encouraged first-time users to try the service but also fostered a sense of value and satisfaction that kept customers returning. The reliability and efficiency of these services impressed many users, prompting them to recommend quick commerce to their relatives. This word-of-mouth effect became a powerful driver for the rapid growth and popularity of the quick commerce model.

Challenges Behind Quick Commerce Decline

One of the challenges in quick commerce is achieving profitability. Expanding and growing quick commerce services requires substantial funding and strong financial performance. As an emerging business model, detailed information on the operational strategies and best practices of quick commerce remains scarce. As a result, businesses often adopt the model through direct implementation. However, once operational, quick commerce encounters numerous complex challenges, particularly those related to the products offered.

This complexity arises from the diverse nature of its product offerings, which are categorized into fast-moving consumer goods (FMCG) and fresh produce. FMCG drives high sales volumes but operates on narrow profit margins, whereas fresh produce offers higher profitability but entails greater risks due to its short shelf life. Achieving sustainable profitability in quick commerce requires a strategic balance between these two categories, leveraging FMCG for volume growth while optimizing fresh produce to enhance profit margins.

Fresh produce, being agricultural in nature, often suffers from quality inconsistencies, making it difficult to maintain significant sales volume. To address this, quick commerce must prioritize delivering consistent product quality to build customer trust—a critical factor in increasing fresh produce sales and achieving long-term profitability. However, building customer trust requires time, making it challenging to achieve the necessary sales volume for profitability within a short timeframe.

To reduce risks, quick commerce may limit warehouse inventory and source products directly from suppliers at unit prices. However, insufficient purchase volumes can weaken their bargaining power, as negotiating lower prices from suppliers typically requires large-scale orders. Consequently, achieving high purchase volumes is crucial for maintaining profitability in the quick commerce model.

Quick commerce faces substantial operational costs, particularly in establishing and managing dark stores to support online order fulfillment. Building dark stores often requires significant investment, as operations are typically developed from scratch. To meet the promise of 15-minute delivery, these facilities must be strategically located across multiple areas, further driving up costs. Managing fresh produce with a short shelf life adds another layer of complexity. The storage of fresh produce incurs higher expenses due to its perishable nature, and each dark store must maintain sufficient stock to fulfill customer orders. This requirement not only increases financial pressure but also heightens the risks associated with inventory management. Additionally, dark stores require a dedicated workforce to pick, pack, and deliver products, further contributing to the overall operational costs necessary to maintain an efficient fulfillment system. These challenges underscore the significant financial and logistical hurdles faced by quick commerce in sustaining its business model.

Last-mile delivery represents another significant cost in the online grocery business, being both essential and expensive. During its initial launch in Indonesia, quick commerce attracted customers by offering free delivery. However, this approach proved unsustainable without adequate order volumes to offset the high delivery costs. Consequently, delivery fees were introduced for orders below a specific value. While necessary for financial sustainability, this strategy presents a challenge: imposing delivery fees risks discouraging customers, ultimately reducing overall demand.

Quick commerce also faces intense competition in the grocery sector, not only from e-commerce and e-grocery platforms but also from minimarkets and supermarkets offering similar services through online applications. In Indonesia, minimarkets such as Alfagift, Midi Kring, and Klik Indomaret provide delivery services via their apps, often including fresh produce and comparable features, with lower minimum purchase requirements than quick commerce platforms.

A key differentiator between quick commerce and minimarket operations lies in their operational cost structures. Quick commerce relies on dark stores, small-scale warehouses specifically designed for fulfilling online orders, which must be built from scratch. These dark stores require significant capital investment in infrastructure, inventory management systems, and staff for picking, packing, and delivery. Additionally, to fulfill the promise of ultrafast delivery, quick commerce operators must strategically establish multiple dark stores in densely populated areas, further escalating costs.

In contrast, minimarkets and supermarkets leverage their existing physical stores as fulfillment centers for online orders. This eliminates the need to invest in building new facilities, significantly reducing their operational costs. Their already-established networks and infrastructure allow them to cover larger customer bases without the additional expense of creating dedicated delivery hubs. Moreover, their economies of scale in purchasing and

distribution enable them to offer competitive pricing, placing quick commerce platforms at a cost disadvantage.

While fast delivery enhances the shopping experience, it is not always a constant necessity for consumers. In urban areas with a high concentration of busy professionals, quick commerce can be a valuable solution. However, in rural areas where lifestyles are typically slower, quick commerce may not hold the same relevance. Additionally, quick commerce becomes essential during urgent situations requiring immediate delivery. However, such instances are occasional and do not foster consistent consumer behavior, resulting in a more segmented demand for quick commerce services.

Quick commerce has the potential to sustain operations and achieve profitability by targeting selected areas. These areas typically consist of upper-middle-class neighborhoods characterized by customers with higher income levels and busy lifestyles. In such markets, customers are generally more willing to pay slightly higher prices for convenience, as their economic stability reduces the sensitivity to cost. However, this strategy presents a paradox. Many upper-middle-class households employ domestic helpers who can handle grocery shopping offline, reducing the necessity for quick commerce services. As a result, quick commerce often serves as a secondary option, primarily used in urgent situations requiring rapid delivery rather than as a primary shopping method. This limited demand highlights the challenges in scaling quick commerce operations even in seemingly ideal market segments.

Following the decline of the COVID-19 pandemic, consumer behavior has become segmented. While some individuals have returned to preferring offline shopping, others have shifted their habits toward a stronger preference for online shopping. Despite the sustained prevalence of online commerce, this shift in consumer habits has led to a slowdown in the growth of online commerce services, including quick commerce.

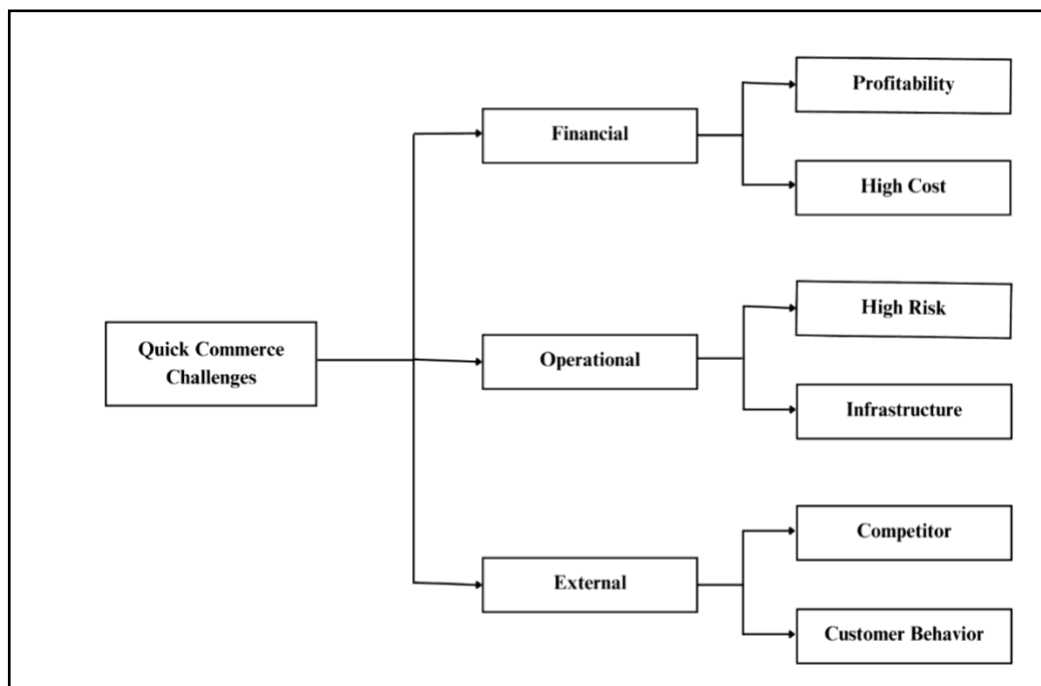


Figure 3. Quick Commerce Challenges

Additional Insight from Experts

Experts suggest that quick commerce is an evolution of the concierge model used by platforms such as Gomart, Grabmart, and Happyfresh. In this business model, the products are not directly provided by the platform but are sourced from stores or supermarkets, a fact that is communicated to the customers. Customers can choose where to shop, and items are then selected and delivered by couriers. This approach eliminates the risks and costs associated with stocking inventory, maintaining warehouses, or building hubs, leaving last-mile delivery as the primary expense. Quick commerce improves upon this model by integrating dark stores, where the platform operates its own warehouses and manages its inventory to directly fulfill online customer orders

Expert also suggest that quick commerce must innovate in its products, offerings, and services to stay competitive. One approach is to offer unique products that are rarely found elsewhere. Astro, as the sole remaining pure quick commerce player, has adopted this strategy by introducing private label products. Another potential innovation involves implementing interactive live shopping with features such as bargaining tools. This not only provides customers with a fresh and engaging shopping experience but also strengthens customer engagement and loyalty.

5. CONCLUSION

In 2022, quick commerce in Indonesia experienced both rapid growth and significant challenges, marking a pivotal moment in its development. The pandemic-driven shift towards online shopping created an environment ripe for the emergence of quick commerce. Pioneers like Astro and other startups seized this opportunity by introducing fast delivery services and adopting innovative business models that quickly gained popularity among consumers.

However, sustaining this growth proved challenging. Profitability emerged as a critical issue, complicated by the operational complexities of managing diverse product categories like FMCG and fresh produce, each with unique challenges. Fresh produce, in particular, posed risks due to its short shelf life and quality inconsistencies, requiring substantial investments in inventory management and customer trust-building. Operational costs, including the establishment of dark stores and the high expense of last-mile delivery, further strained the financial viability of quick commerce.

Additionally, the landscape of quick commerce became increasingly competitive, with minimarkets and supermarkets offering similar services through established networks and online platforms. This competition, coupled with the segmented nature of post-pandemic consumer behavior, contributed to a decline in the sector's growth. While urban consumers embraced quick commerce for its convenience, rural areas and inconsistent usage patterns limited its broader appeal.

Based on the study, several strategic recommendations are proposed for quick commerce companies to address existing challenges. Experts highlight the importance of innovation in product offerings, such as the introduction of private-label products and interactive live shopping features to enhance customer experience and engagement. quick

commerce players can differentiate themselves by offering unique or niche products not commonly found on competing platforms, thereby creating a distinct market advantage. Introduce live shopping events on their apps with interactive features such as real-time promotions, bargaining option, and customer chats to boost user participation. Leveraging data analytics and artificial intelligence in inventory management can help optimize stock levels, minimize waste, and improve operational efficiency, particularly for perishable goods. Implementing a hybrid business model that blends quick commerce with traditional e-commerce services could provide greater flexibility by balancing fast delivery with more cost-effective options. Furthermore, introducing subscription-based programs for loyal customers—with benefits like free delivery, exclusive discounts, and early access to new products—can improve customer retention and long-term profitability. These strategies, if well-executed, can strengthen competitive positioning and foster sustainable growth in the quick commerce industry.

This study has several limitations that future research could address. First, since the findings are based on expert opinions within the quick commerce industry in Indonesia, the insights and explanations may not be fully applicable to other countries with different market dynamics. Second, future research could focus on examining customer satisfaction and loyalty by analyzing relevant variables, as these factors play a crucial role in ensuring the long-term sustainability of quick commerce. Lastly, while this study primarily explores the perspectives and observations of industry experts, future research could delve into non-customer perceptions to better understand the reasons behind their reluctance to engage with quick commerce services.

6. REFERENCES

- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*, 4(10), 1358–1367. <https://doi.org/10.1002/jac5.1441>
- Buldeo Rai, H. (2023). Dark Stores as a Post-Pandemic Omnichannel Strategy. In *The Routledge Handbook of Urban Logistics* (pp. 134–146). Routledge. <https://doi.org/10.4324/9781003241478-13>
- Buldeo Rai, H., Mariquivoi, J., Schorung, M., & Dablanc, L. (2023). Dark stores in the City of Light: Geographical and transportation impacts of ‘quick commerce’ in Paris. *Research in Transportation Economics*, 100. <https://doi.org/10.1016/j.retrec.2023.101333>
- Calzavara, M., Finco, S., Persona, A., & Zennaro, I. (2023). A cost-based tool for the comparison of different e-grocery supply chain strategies. *International Journal of Production Economics*, 262. <https://doi.org/10.1016/j.ijpe.2023.108899>
- Fidinillah, M. (2022a, October 14). *Bananas Mau Pivot dari Quick Commerce, Mulai Tutup Semua Dark Store*. Tech in Asia. <https://id.techinasia.com/bananas-mau-pivot>
- Fidinillah, M. (2022b, December 20). *Radius Rebranding Jadi Bakool, Raih Modal dari Insignia Ventures dkk*. Tech In Asia. <https://id.techinasia.com/bakool-pendanaan-awal-usai-rebranding>
- Forbes. (2022, April 22). *Quick Commerce: An Ever-Changing E-Commerce Prospect*. Forbes. <https://www.forbes.com/sites/forbestechcouncil/2022/04/22/quick-commerce-an-ever-changing-e-commerce-prospect/?sh=4de9befc1476>

- Google. (2022). *e-Conomy SEA 2022 Report*.
https://economysea.withgoogle.com/intl/id_id/home/
- Kapoor, A., Sindwani, R., & Goel, M. (2023). Exploring quick commerce service experience: a moderated mediated investigation using SEM and fsQCA. *Total Quality Management and Business Excellence*, 34(13-14), 1896-1919.
<https://doi.org/10.1080/14783363.2023.2213653>
- McKinsey. (2022, August 17). *Quick commerce pushes the limits on grocery delivery*.
<https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/quick-commerce-pushes-the-limits-on-grocery-delivery>
- Naqiya, A. (2024, January 2). *Dropezy pivot ke bisnis unggas, ubah nama jadi Sekilo*. Tech in Asia. <https://id.techinasia.com/dropezy-pivot-sekilo-bisnis-unggas>
- Paché, G. (2022). Dark Store Expansion: Ultrafast Logistics for Q-Commerce. *IUP Journal of Supply Chain Management*, 19(3), 61-72.
- Raj, G., Roy, D., de Koster, R., & Bansal, V. (2024). Stochastic modeling of integrated order fulfillment processes with delivery time promise: Order picking, batching, and last-mile delivery. *European Journal of Operational Research*, 316(3), 1114-1128.
<https://doi.org/10.1016/j.ejor.2024.03.003>
- Rau, J., Altenburg, L., & Ghezzi, A. I. (2023). How the Quick Commerce Business Model Delivers Convenience in Online Grocery Retailing. *Springer Proceedings in Business and Economics*, 78-85. https://doi.org/10.1007/978-3-031-31836-8_10
- Risberg, A., & Jafari, H. (2022). Last mile practices in e-commerce: framework development and empirical analysis of Swedish firms. *International Journal of Retail & Distribution Management*, 50(8/9), 942-961. <https://doi.org/10.1108/IJRDM-10-2021-0513>
- Royanti, I., & Astini, R. (2023). Analysis of E-Grocery Purchase Decisions Mediated by E-Trust in Indonesia Quick Commerce. *International Journal of Innovative Science and Research Technology*, 8(8). www.ijisrt.com
- Rutledge, P. B., & Hogg, J. L. C. (2020). In-Depth Interviews. In *The International Encyclopedia of Media Psychology* (pp. 1-7). Wiley.
<https://doi.org/10.1002/9781119011071.iemp0019>
- Schorung, M. (2024). Quick commerce and the evolving business models of the food retail industry - Investigating the quick commerce supply chain and the urban impacts of dark stores. *Transportation Research Procedia*, 79, 305-312.
<https://doi.org/10.1016/j.trpro.2024.03.041>
- Setiyono, A. E., Chandrawatisma, C., Helga, R., Fanandi, S., & Heriyati, P. (2023). ANTECEDENTS OF E-LOYALTY AS RESEARCH FOR THE QUICK COMMERCE INDUSTRY. *Interdisciplinary Social Studies*, 2(8).
- Shapiro, A. (2023). Platform urbanism in a pandemic: Dark stores, ghost kitchens, and the logistical-urban frontier. *Journal of Consumer Culture*, 23(1), 168-187.
<https://doi.org/10.1177/14695405211069983>
- Statista. (2022). *Statista Market Insight*. <https://www.Statista.Com/Outlook/Emo/Online-Food-Delivery/Grocery-Delivery/Indonesia>.
- Stojanov, M. (2022). Q-COMMERCE-THE NEXT GENERATION E-COMMERCE. *Business Management*, 17-34.
- Yang, X., Ostermeier, M., & Hübner, A. (2024). Winning the race to customers with micro-fulfillment centers: an approach for network planning in quick commerce. *Central European Journal of Operations Research*, 32(2), 295-334.
<https://doi.org/10.1007/s10100-023-00893-x>