

Inventory Management Analysis in Supporting Production Sustainability: A Case Study of a Catering MSME in South Tangerang

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Abstract

The rapid growth of MSMEs (Micro, Small, and Medium Enterprises) in South Tangerang City, projected to reach 114,000 businesses by 2024, demonstrates the sector's significant contribution to the local economy, particularly in culinary fields such as catering services. This study aims to analyze inventory management practices among MSME catering businesses in South Tangerang (UCTS) to support production continuity and enhance customer satisfaction. Proper inventory management is crucial for maintaining raw material quality, reducing storage costs, and ensuring timely service. Employing a qualitative approach with a case study design, the research involved four purposively selected UCTS business owners. Data collection techniques included in-depth interviews, direct observations, and documentation. Findings indicate that inventory is managed selectively based on the nature of the raw materials. Perishable goods such as cassava, chicken, fish, and shrimp are procured daily through long-term relationships with trusted suppliers, while durable items like rice, cooking oil, and spices are stored in limited quantities to anticipate large orders. The success of inventory management is supported by strong communication and mutual trust between business owners and suppliers. The study reveals that effective inventory control helps prevent stockouts, minimize waste, and ensure business continuity. The findings conclude that UCTS businesses have implemented efficient and adaptive inventory strategies aligned with their operational needs. The implications of this study include cost efficiency, smoother production processes, reduced risk of spoilage or obsolescence, enhanced competitiveness, and stronger supply chain relationships. This research is limited to members of the UCTS catering community in South Tangerang and does not include MSMEs from other communities or sectors.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia have become a cornerstone of the national economy, particularly since the COVID-19 pandemic and throughout the ongoing recovery period. These enterprises have significantly contributed to Indonesia's economic resilience and employment absorption. In 2023, the number of MSME business actors reached approximately 66 million units, contributing to 61% of the national Gross Domestic Product (GDP) equivalent to IDR 9,580 trillion and absorbing around 117 million workers, which accounts for 97% of the total workforce (goodstats.id). By 2024, data from the Ministry of Cooperatives and SMEs reported 64.2 million active MSMEs, contributing 61.07% of GDP, equivalent to IDR 8,573.89 trillion, and employing up to 119.6 million people (djpb.kemenkeu.go.id). This data

emphasizes that MSMEs are not merely a statistical majority, but rather the backbone of Indonesia's economic structure and labor market (Apdian et al., 2021).

Structurally, MSMEs are categorized based on their initial capital investment: Micro Enterprises are defined as businesses with a capital of up to IDR 1 billion (excluding land and building assets); Small Enterprises with capital ranging between IDR 1–5 billion; and Medium Enterprises ranging between IDR 5–10 billion. Enterprises with greater capital are categorized as Large Enterprises (ekon.go.id, kadin.id). MSME performance is also being enhanced through digital transformation; for instance, the Indonesian Chamber of Commerce (KADIN) and government target increasing MSMEs' participation in the digital ecosystem from 24 million in 2023 to 30 million by 2024 (kadin.id). Nevertheless, challenges remain, such as limited access to formal financing and a relatively low export contribution, with MSME exports constituting only 15–16% of total national exports, significantly lower than in neighboring ASEAN countries like Thailand and the Philippines (pip.kemenkeu.go.id).

At the local level, the development of MSMEs in South Tangerang City (Tangerang Selatan or Tangsel) has also shown significant growth. According to the Department of Cooperatives and MSMEs, the number of MSME actors reached 90,000 units in 2021, increasing to approximately 114,000 units by 2024, encompassing diverse business sectors such as food and beverages, handicrafts, and services. These businesses are distributed across 7 districts and 54 subdistricts. Among these, MSME catering businesses, which fall under the culinary sector, have shown robust development and performance. These catering businesses are organized into 64 business groups, each with their own community structures and management. One particularly noteworthy issue worth investigating is how these businesses manage their inventory systems, which can significantly impact pricing competitiveness, service reliability, and ultimately business continuity.

The catering industry's production process follows a conventional Input–Process–Output model, wherein the input includes raw materials, labor, and equipment; the process involves cooking and preparation; and the output is the final food product. Throughout this production chain, inventory management plays a crucial role. Despite this, many MSMEs still struggle with inventory management practices. Research by Lutfiana (2020) found that numerous MSMEs have not implemented techniques such as Economic Order Quantity (EOQ), Safety Stock, and Reorder Point (ROP) effectively. Additionally, a study conducted in Bengkulu reported the lack of accurate stock opname procedures among local MSMEs (pkm.lpkd.or.id).

MSME catering businesses face unique challenges in managing their inventory. First, the diversity of raw materials, including vegetables, meats, seafood, spices, and condiments each with different shelf lives poses a challenge in maintaining quality (Febriani et al., 2025). Second, limited

storage space forces many businesses to make frequent purchases and avoid overstocking. Third, demand fluctuations caused by seasonal events, holidays, and irregular customer orders necessitate a responsive inventory strategy. Fourth, high perishability of food products increases the risk of spoilage and wastage without proper control. Fifth, storage costs for raw materials and finished goods significantly impact profitability, making efficient inventory practices essential (Rachman et al., 2022).

Academic literature has highlighted that effective inventory management systems significantly improve operational performance and business profitability. A study on a snack-producing MSME in Karawang found that the absence of EOQ and safety stock led to minimal and unoptimized inventory levels. However, implementing EOQ and safety stock improved operational efficiency and product availability. Similarly, a study of a batik-producing MSME in Purworejo (Jazid Bastomi Batik) revealed that inventory control was lacking, and applying EOQ, ROP, and safety stock calculations was necessary to meet demand without overstocking (Agustino & Setiawan, 2019).

Moreover, digital inventory systems have proven to be beneficial for MSMEs. For example, a 2023 case study by Angellin et al. on a frozen food MSME implementing a web-based inventory and sales system showed increased data accuracy, reduced human error, and faster management processes (researchgate.net). In the catering sector, the Rizqy Agung Catering enterprise implemented an open-source ERP system (Odoo) using the Quickstart method, enabling real-time stock tracking and integration across procurement, production, and order systems (Alfaro & Rábade, 2009).

Given the theoretical framework and empirical evidence, this research focuses on examining inventory management practices among MSME catering businesses in South Tangerang (UCTS). This study aims to answer the following research questions: (1) How is inventory management practiced among UCTS members?, and (2) How does inventory management support the sustainability of catering businesses? By exploring the implementation of EOQ, ROP, and digital inventory systems, the study seeks to provide practical recommendations to enhance inventory control and business resilience among MSME caterers in South Tangerang.

The significance of this study lies not only in its academic contributions but also in its practical implications. Accurate and efficient inventory management can minimize dead stock, reduce storage costs, prevent stockouts during high demand periods, and maintain food quality. The research findings are expected to benefit business owners, MSME communities in South Tangerang, and local policy-makers in designing training programs or technical assistance initiatives. Through an integrative approach grounded in inventory management theory and

supported by digital practices this study offers a timely and relevant contribution to enhancing the competitiveness of catering MSMEs in the post-pandemic economic recovery era.

METHODS

This study employs a qualitative approach with a case study design, as it aims to gain an in-depth understanding of inventory management phenomena within the context of micro, small, and medium enterprises (MSMEs) in the catering sector. The qualitative approach was chosen because it enables the researcher to explore meanings, processes, and the social and economic dynamics that occur within the business units being studied in a contextual and comprehensive manner. The case study design, as one type of qualitative approach, is considered appropriate for examining specific phenomena occurring within a particular social environment or system, especially when the boundaries between the phenomenon and the context are not clearly evident (Chih-Pei & Chang, 2017). According to Creswell (2021), a case study allows researchers to obtain a deep understanding of individuals, groups, or institutions through intensive investigation of a single case or several cases over a specific period of time. Therefore, this approach is well-suited to the research objective, which focuses on the inventory management practices of catering business actors within the MSME setting in South Tangerang.

This research will be conducted from August to September 2024, with the research location situated in the city of South Tangerang, Banten Province. The location was selected based on its high potential for MSME development and the presence of an active MSME catering community known as UCTS (UMKM Catering Tangerang Selatan). The study involves catering business actors who have received formal assistance from the local government, as well as those who have not. This is intended to provide a diverse portrayal of the actual conditions of inventory management in day-to-day business practices. Taking into account the available time and the depth of analysis desired, the research is focused on a single city with representative MSME characteristics.

Informants for this study were selected using purposive sampling, a technique that involves the deliberate selection of individuals deemed to possess knowledge, experience, and direct involvement with the phenomenon under investigation. In this case, the informants chosen were four catering MSME actors in South Tangerang who are members of the UCTS community. Informant selection considered variations in business scale, experience, and coaching background to ensure the data collected reflects the diversity of inventory management practices in the field. This technique aligns with qualitative research guidelines that emphasize selecting participants based on relevance and the depth of information they can provide (Chih-Pei & Chang, 2017).

Data sources in this case study refer to Creswell (2021) guideline, which states that qualitative case studies should ideally use multiple sources of evidence to enhance the validity of findings.

Therefore, this research employs three main data collection techniques: documentation, in-depth interviews, and direct observation. Documentation is used to obtain secondary data in the form of administrative documents, activity reports, MSME development program evaluations, as well as relevant news clippings and media articles. These documents serve as supporting data to strengthen the findings from interviews and observations, and to ensure the accuracy of the names of organizations or events mentioned by informants.

Interviews were conducted using a semi-structured and open-ended format, allowing the researcher to gather factual information while also gaining insights into the informants' opinions or perceptions regarding strategies and challenges in managing inventory within their catering businesses. These interviews aimed to understand the subjective experiences of entrepreneurs in managing raw materials, anticipating demand, and addressing issues related to space and storage cost limitations. The interviews were conducted face-to-face and recorded with the informants' consent to ensure data accuracy.

Meanwhile, direct observation was carried out by visiting each MSME's place of business, observing daily operational activities particularly the processes of raw material handling, storage, production, and food distribution. This observation provided contextual information that might not emerge during interviews, such as physical warehouse conditions, inventory recording methods, and worker interactions. Observational data were documented as field notes and supported with photographs when possible.

Data analysis in this research was carried out thematically and interpretively through the processes of data reduction, data presentation, and conclusion drawing. The primary analytical strategy used is explanation building, as described by Creswell (2021), which involves constructing an understanding of a phenomenon by explaining the relationships among categories or patterns identified in the data. The researcher sought to identify the links between inventory management phenomena, business continuity, and the operational challenges faced by MSME actors. This process involved active interpretation by the researcher based on theoretical frameworks and previous findings. Interview data were transcribed verbatim and coded using an inductive approach to identify key themes that reflect real-world practices. The validity of findings was strengthened through data triangulation, which involved comparing the results of interviews, documentation, and observations, and conducting member checks with key informants.

Through this methodological approach, the study aims to generate a deep understanding of inventory management practices in catering MSMEs in South Tangerang, and to formulate policy recommendations and strategies for sustainable capacity-building among business actors.

RESULTS AND DISCUSSION

Field Findings on Inventory Management

Inventory management is a vital aspect of operations in Micro, Small, and Medium Enterprises (MSMEs), especially those in the culinary sector such as home-based catering businesses. Based on field findings gathered through interviews with four MSME actors in the food sector in South Tangerang, it is evident that although their inventory management tends to be conventional and simple, it already reflects efforts to organize and control raw material stocks effectively. This is crucial, as poor inventory management can lead to losses, either due to food waste from unused materials or an inability to fulfill customer orders due to shortages of raw materials (Hanis & Fernando, 2024).

The first informant is a home-based catering entrepreneur who has been operating her business for over five years. On a daily basis, she fulfills regular orders from approximately 12 households, along with general orders that can reach 20–30 portions of food per day. Given this daily volume, she plans raw material procurement each day based on demand estimates. She stated that she usually prepares raw materials one day in advance to anticipate potential challenges such as the limited availability of certain ingredients in the market. Additionally, she always prepares backup stock, for example by purchasing 1–2 kilograms more fish than needed, to accommodate sudden orders or her own household needs. This practice reflects the concept of safety stock, a strategy to maintain reserve inventory to avoid stockouts (Jayaram et al., 2014).

She also emphasized the importance of maintaining the quality and freshness of food ingredients. She noted that items like squid cannot be substituted with frozen or lower-quality alternatives. If the ingredients are unavailable at her usual market, she is willing to visit other markets to ensure the quality and taste standards promised to customers are upheld. This action illustrates that, even at a small scale, attention to raw material quality remains a top priority. In operations management theory, this is considered a form of quality management that can enhance business competitiveness, as customers are more satisfied with consistent food taste and appearance (Mat et al., 2023).

The menu prepared by the first informant usually consists of four dishes, which are selected based on the availability of ingredients from the market or regular suppliers. In this regard, she does not use a digital forecasting system but relies on her experience and intuition, shaped by her habits and knowledge of customer consumption patterns. This system illustrates a form of local knowledge typical among micro-enterprises, where decision-making is often based not on statistical data but on experience and direct market interaction. Such strategies are common among

MSMEs in developing countries lacking access to sophisticated management information systems (Hidayati et al., 2025).

The second informant is a producer of traditional cassava-based foods, specifically sawut with various flavors such as rainbow, palm sugar, and pandan. She explained that her main ingredient, cassava, is never stocked in large quantities. Instead, it is purchased on the same day as production because cassava quickly deteriorates in taste and texture if stored too long. As a solution, she partners with several local farmers who supply her regularly. She also mentioned that she uses specific types of cassava, such as mentega cassava, which has a texture and flavor suitable for sawut. From a supply chain management perspective, this practice highlights the critical role of supplier relationships in ensuring production continuity. Long-term relationships with local farmers enable the informant to obtain high-quality raw materials at relatively stable prices while minimizing the risk of supply delays (Sara et al., 2025).

Furthermore, the second informant often collects the cassava herself from the farmers' fields to ensure its freshness and quality. This indicates that in micro-enterprises, the business owner plays a central and multifunctional role not only as a manager but also as a buyer, quality controller, and day-to-day operator. This role flexibility is one of the adaptive strengths of MSMEs, although it may also become a limitation when the business scales up and requires a more structured system (Atmika et al., 2022).

The third informant runs a larger catering business focusing on lunch boxes and participation in food bazaars. She often handles orders ranging from 100 to 300 portions at once. Consequently, her inventory management is more complex than the previous two informants. She explained that dry and long-lasting ingredients such as rice, cooking oil, flour, and dried spices are stored in bulk in her home warehouse. This storage strategy aligns with lean inventory principles, where inventory is kept only for fast-moving and long-shelf-life items. For fresh ingredients like chicken, fish, and vegetables, she prefers ordering from trusted suppliers who understand her quality requirements. She maintains informal contracts with several market vendors and chicken farmers to secure competitive prices and consistent quality. This demonstrates that MSMEs are not merely passive buyers in the raw material market but are also capable of building trust-based, long-term supply networks.

Interestingly, this informant has begun using simple digital tools such as mobile apps to manage inventory and record expenditures. This shift illustrates a behavioral change in MSME financial and logistics management from traditional to data-based approaches, albeit at a small scale. The use of information technology in inventory management, though basic, already shows great potential in improving business efficiency and transparency (Putra & Saraswati, 2022, p. 78).

She recognizes that using technology can reduce human error and assist in more accurate weekly purchasing and production planning.

The fourth informant owns a home-based catering service that prepares 40 to 50 portions daily. Her menu is highly varied, with 6 to 8 different dishes per day depending on customer demand and ingredient availability. She stated that her operations heavily rely on deep understanding of menu cycles, customer preferences, and past experiences. Thus, despite the variety, she can devise efficient raw material purchasing strategies, such as choosing base ingredients that can be used in multiple dishes. This strategy aligns with commercial kitchen management, which emphasizes ingredient efficiency how one ingredient can be transformed into various dishes to minimize waste and increase profit margins (Thakkar et al., 2012).

This informant also applies weekly menu and purchasing planning, using daily records to track material usage efficiency. She avoids purchasing materials in excessive quantities to prevent waste or quality degradation. This inventory management approach reflects a planning model focused on cost and quality control. Balancing cost efficiency and service quality is a key indicator of successful inventory management in culinary businesses. Therefore, the practices employed by this informant are highly relevant for replication by other MSMEs with similar scale and business characteristics.

From the four informants, it can be concluded that inventory management practices among MSME catering businesses in South Tangerang are generally manual and experience-based. However, they already incorporate essential principles of inventory management such as stock control, supplier selection, raw material quality management, and production planning. Although not fully digitalized, these businesses have developed effective working patterns to maintain production continuity and customer satisfaction. This proves that with adaptive, relational, and experience-based approaches, MSMEs can survive and grow in a competitive business ecosystem.

Challenges in Raw Material Inventory Management among Catering MSMEs in South Tangerang

Raw material inventory management is a vital aspect of ensuring production continuity, especially for Micro, Small, and Medium Enterprises (MSMEs) operating in the food service or catering sector. In the context of Catering MSMEs in South Tangerang (UCTS), challenges in managing raw materials arise from various interrelated aspects, ranging from external factors such as market price fluctuations, supply uncertainty, and limited access to large suppliers, to internal factors including limited working capital, storage capacity, and weak inventory information and

planning systems. All these elements form a multidimensional challenge that requires adaptive strategies grounded in local context to be sustainably addressed.

One of the primary challenges faced by catering MSME actors in South Tangerang is the unpredictable fluctuation in raw material prices. Staple ingredients such as chicken, eggs, rice, and fresh vegetables often experience price changes influenced by seasons, supply shortages, inflation, and government policies related to food export-import or distribution. In such conditions, MSMEs have weak bargaining power due to their relatively small purchasing scale compared to hotels, large restaurants, or supermarkets. As a result, they must accept volatile market prices and find it difficult to set stable selling prices. This directly impacts profit margin uncertainty and makes financial planning inconsistent. As explained by Firmansyah et al (2024), fluctuations in food ingredient prices are one of the main causes of losses in micro-scale culinary businesses.

In addition to price issues, dependency on a single supplier also poses a serious challenge in raw material procurement systems. Many catering MSMEs rely on only one or two familiar suppliers and lack broader supplier networks. When distribution disruptions occur such as delivery delays, stockouts, or sudden price hikes business owners have no alternatives to quickly obtain replacement materials. This can disrupt production schedules, delay food deliveries to customers, and harm the business's reputation. According to Atmika et al (2022), dependence on a single supplier increases operational risk and can cause delays in meeting customer demand.

Furthermore, limited working capital significantly influences how raw material inventories are managed. Many catering MSMEs lack adequate financial systems to purchase in bulk or store inventory long term. As a result, they adopt a daily purchasing system (just-in-time), which heavily depends on daily market availability. While this can reduce storage costs, it is highly vulnerable to sudden supply disruptions or price spikes. Additionally, the daily purchasing system consumes time and energy, as owners must constantly engage in procurement activities instead of focusing on more strategic managerial tasks. A study by Warsito et al., n.d.) emphasized that capital limitations are a major obstacle in MSME supply chain management, especially in procurement and inventory.

Limited storage capacity is another common technical challenge faced by catering MSMEs in urban areas like South Tangerang. Most home-based catering businesses only have basic storage facilities, such as small refrigerators or single-door freezers, which are inadequate for storing large volumes of raw materials. This restricts their ability to purchase economically at scale or stockpile supplies when market prices are low. Moreover, limited space poses a risk of cross-contamination between raw materials and finished products if not properly managed. This affects not only food quality but also food safety. According to the National Food and Drug Agency (Thamagasorn &

Pharino, 2019), many MSME food operators have yet to implement proper storage standards in accordance with sanitation and safety principles.

Another challenge lies in the lack of information technology utilization in inventory planning and control. Most catering MSMEs in South Tangerang still rely on manual record-keeping using notebooks or simple written logs without leveraging software or digital applications to monitor stock levels, plan purchases, or analyze demand trends. This makes it difficult to make data-driven decisions and often results in unnecessary overstocking or stockouts. In fact, by using basic inventory applications or digital spreadsheets, MSMEs could significantly improve inventory management efficiency. As highlighted by Sunday & Joseph (2017), digitizing inventory systems among MSMEs has been proven to increase efficiency by up to 40% and reduce raw material wastage.

In terms of human resource (HR) capacity, many MSME actors lack adequate knowledge in supply chain or inventory management. Some even operate their businesses informally or self-taught without ever receiving formal training on raw material logistics. As a result, decision-making tends to be instinctive and not based on rational analysis. For example, when deciding how much to purchase, MSMEs often rely on rough estimates based on past habits or experience, rather than analyzing actual demand or projecting weekly needs. This lack of planning leads to high wastage levels, whether through spoilage, expiration, or over-purchasing. A study by Shamsudin et al (2025) confirmed that logistics and inventory control training significantly improves efficiency and business resilience among MSMEs.

Another pressing challenge is the high uncertainty of customer demand, especially for catering MSMEs without fixed subscription contracts and who rely heavily on daily orders or seasonal events such as weddings, corporate meetings, and social gatherings. In such scenarios, business owners find it difficult to accurately forecast raw material needs due to extreme demand fluctuations. This creates a dilemma: whether to purchase limited quantities to avoid waste, or buy in bulk with the risk of unsold stock. This uncertainty is worsened by rapidly changing consumer trends, preferences for healthier food, and price competition among catering providers. According to Rusmina et al (2025), demand volatility is a major factor contributing to inefficiency in MSME food and beverage supply chains.

An additional significant challenge is the lack of collaboration among MSME actors in managing shared supply chains. In many cases, businesses operate in silos without collective procurement efforts. Yet, if multiple catering MSMEs within the same area collaborated to purchase raw materials in bulk or shared access to large suppliers, they could obtain better prices and more stable supplies. Unfortunately, such collaborative ecosystems have not yet developed

optimally, due to low trust among entrepreneurs, lack of cooperative platforms, or absence of facilitation by local governments. Afandi et al (2025) noted that horizontal partnerships among MSMEs can strengthen bargaining power with suppliers and enhance logistical efficiency.

These various challenges impact not only operational efficiency but also the competitiveness and sustainability of catering MSMEs themselves. Inefficient raw material management leads to increased production costs, decreased product quality, and lower customer loyalty. In the long run, this affects MSMEs' ability to survive amid intensifying market competition, especially with the rise of online food delivery services offering competitive pricing and fast service. Therefore, it is essential for MSME actors to start improving their raw material management systems through more systematic approaches, adoption of appropriate technologies, and openness to partnerships and innovation.

The Strategic Role of Inventory Management in Supporting Production Continuity in MSMEs

Inventory management in micro, small, and medium enterprises (MSMEs) plays a highly vital role, especially in the context of production continuity. The sustainability of production depends not only on the availability of labor and capital but also on how inventory is managed systematically, efficiently, and adaptively. In the business reality of MSMEs in South Tangerang, as observed in the case of UMKM Catering Tangerang Selatan (UCTS), the ability to manage raw materials and operational needs sustainably is a key indicator of their success in maintaining production continuity and meeting fluctuating consumer demands.

In general, inventory management includes planning, procurement, storage, and control of raw materials, auxiliary materials, and finished goods. According to Nomleni (2022), inventory management is a systematic effort to maintain a balance between production needs and material availability, with the primary goal of minimizing inventory costs without disrupting operations. In the context of MSMEs, which operate on a small scale and with limited resources, inventory management becomes increasingly critical as irregular stock levels can directly lead to financial losses, resource waste, and even potential customer loss.

The findings of this study indicate that effective inventory management significantly supports production continuity. Interviewed MSMEs tend to prioritize simple but adaptive inventory systems, such as using manual records, empirical experience, and intuitive forecasting to determine the quantity and timing of procurement. This aligns with findings by Utami et al (2018), who stated that most MSMEs in Indonesia still use conventional methods for managing inventory

due to limited access to technology and modern management training. While simple, this approach remains effective in dynamic, flexible, and small-scale business contexts.

However, conventional approaches also come with several challenges. One major issue is the inaccuracy in demand forecasting, which can lead to overstocking or stockouts. These conditions disrupt the production process, as delays in procuring raw materials can reduce the quality of service to customers. On the other hand, excessive inventory increases storage costs and may lead to material spoilage especially in catering businesses that deal with perishable food items. Research by Atmika et al (2022) supports this finding, noting that culinary MSMEs face high risks in raw material management, as most of their supplies have short shelf lives and are vulnerable to market price fluctuations.

Interviews with business owners revealed that their inventory management relies more on years of experience than on technology-based predictive tools. They prefer to purchase raw materials in quantities estimated to meet daily or weekly orders. This strategy allows for high flexibility and reduces the risk of waste but also increases administrative workload due to the need for routine manual recording and evaluation. MSME operators also acknowledged that this strategy only works under stable demand conditions. When there is a sudden surge in orders, they often struggle to meet demand due to limited stock and tight procurement timeframes.

From a supply chain theory perspective, these conditions indicate that MSMEs are still in the early stages of developing an integrated internal logistics system. Muenjitnoy et al (2024) explain that successful supply chain management, including inventory management, depends greatly on accurate information flow, responsive procurement systems, and efficient coordination between parties. In many MSMEs, these functions are not yet fully integrated due to limitations in human resources and technology. Therefore, interventions such as training in technology-based inventory management and assistance from the government or industrial partners are needed.

The success of inventory management is also closely related to the MSMEs' ability to establish good cooperation with local suppliers. Findings show that MSMEs with strong and stable relationships with suppliers are generally better able to ensure the availability of quality raw materials at competitive prices. Such long-term relationships enable entrepreneurs to receive priority deliveries and flexibility in payments key elements in sustaining production. Research by Azharudin & Basri (2024) states that trust-based relationships between MSMEs and suppliers contribute significantly to operational smoothness and cost efficiency.

On the other hand, challenges arise when MSMEs must manage inventory in times of crisis or uncertainty, such as during the COVID-19 pandemic or drastic increases in basic material prices. Several MSME operators revealed that they had difficulty anticipating price hikes and supply

delays. In such conditions, inventory management becomes more reactive than proactive, meaning they must quickly adjust the type and quantity of raw materials purchased according to market conditions. These findings are consistent with research by Fadiah et al (2025), which emphasized the importance of operational flexibility for MSMEs in responding to unpredictable market changes and external conditions.

To address these situations, some business owners have tried to develop buffer stock systems, particularly for non-perishable items. This strategy aims to ensure production continuity despite supplier delays. However, implementing buffer stocks must be done with careful calculations, as it impacts working capital needs and storage space. Therefore, it is important for MSMEs to have a basic understanding of techniques such as Economic Order Quantity (EOQ) and safety stock, as described by Mangla et al (2015) in his book on operations and supply chain management. Nevertheless, the MSME actors studied admitted that they do not yet fully understand these concepts due to limited access to relevant literature and management training.

The role of local governments in supporting inventory management is also a crucial aspect in ensuring MSME production continuity. Governments can provide technical assistance, logistics management training, and access to supply chain information systems. Research by Lestari et al (2022) mentions that one form of strategic government intervention is providing shared digital systems that MSMEs can use to record inventory, forecast material needs, and connect with trusted suppliers. In South Tangerang, such support is still in the development stage, but several MSMEs that have participated in mentoring programs reported benefits, particularly in achieving more structured inventory documentation.

This discussion shows that inventory management is not only about the physical availability of materials but also about the systems, strategies, and policies that accompany it. Efforts to maintain production sustainability require good coordination between operations management, financial management, suppliers, and even customers. In the context of developing MSMEs, synergy between business intuition and systematic support from the government and mentoring institutions becomes a key factor for success in managing inventory effectively.

In conclusion, strategic inventory management forms the foundation of MSME production continuity. Despite facing various limitations, MSME actors demonstrate high creativity and adaptability in managing raw materials and operational needs. Capacity building through training, information technology, and collaboration with external parties must continue to be developed so that inventory management is not only operationally efficient but also able to ensure business competitiveness and sustainability in the long term.

CONCLUSION

Based on the findings and discussion regarding inventory management at UMKM Catering Tangerang Selatan (UCTS), it can be concluded that the practice of managing raw material inventory has been carried out optimally and effectively. This is reflected in the business actors' success in establishing harmonious and sustainable partnership relations with suppliers. Intense and continuous communication enables the business to obtain fresh raw materials with good texture quality, delivered on time according to production needs. The trust built with suppliers serves as a crucial foundation for the operational continuity of UCTS, where business actors receive priority service in material selection and enjoy flexibility in delivery, ultimately strengthening their ability to meet customer demand consistently and on time.

Furthermore, the inventory management practices implemented have proven effective in minimizing the risk of waste caused by the spoilage of perishable raw materials. Strategies employed include carefully regulating storage quantities and utilizing refrigeration facilities with temperature standards tailored to each type of material. These measures ensure the durability of raw materials without compromising the taste and nutritional value of the food products. As a result, the sustainability of the catering business is maintained due to the guaranteed quality and hygiene of the menus served, thereby increasing customer satisfaction and trust in the services provided.

In addition, proper raw material management allows business actors to obtain competitive prices from suppliers. Long-term relationships and good communication offer advantages such as access to special pricing, without sacrificing material quality. This has a positive impact on the operational cost structure and enables business actors to set catering menu prices that remain affordable to customers without reducing profit margins. This cost efficiency allows UMKM to compete healthily in the local market and reach a broader customer segment.

Moreover, the raw material management system implemented by UCTS also demonstrates efficiency in information handling. Without the need to establish a complex technology-based information system, the flow of information between suppliers and business actors remains accurate and smooth. This indicates that successful inventory management does not rely solely on technology, but also on effective communication patterns, commitment, and professionalism within business relationships. With this simple yet effective system, UCTS can maintain business continuity, sustain customer loyalty, and respond to orders promptly and accurately.

Overall, the research findings indicate that success in managing raw material inventory in small-medium catering enterprises is determined by four main pillars: (1) strategic and sustainable partnerships with suppliers; (2) efficiency in organizing and storing raw materials to maintain quality; (3) the ability to obtain competitive prices and quality materials; and (4) effective

communication of information between parties without requiring a complex digital system. These four elements are key to maintaining production continuity, service quality, and the competitiveness of small to medium-scale catering businesses in urban areas such as Tangerang Selatan.

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