



Strategic Analysis of Food Raw Material Procurement Using the TOWS Matrix

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Abstract

This study aims to analyze the internal and external factors affecting the procurement system of food raw materials at Bale Lazara Resto Palembang and formulate appropriate procurement strategies using the TOWS Matrix approach. This research employs a qualitative descriptive method, utilizing data collection techniques including in-depth interviews with key informants (General Manager, Head Chef, and purchasing staff), direct observation, and documentation studies of internal company records. Data analysis was conducted through the stages of data condensation, data display, and conclusion drawing, complemented by quantitative assessments using IFAS and EFAS matrices. The findings reveal that Bale Lazara Resto has a weak internal position with a total IFAS score of 1.85, characterized by weaknesses in manual stock management systems, low human resource efficiency, and non-technical interference in kitchen operations. Conversely, the external position is strong with an EFAS score of 2.85, driven by opportunities from the growing culinary lifestyle trends, digital delivery platform expansion, and social media promotion potential. The strategic position falls within Quadrant III of the Cartesian diagram (Turnaround Strategy) and Cell IX of the IE Matrix (Harvest or Divest), indicating that the company faces significant internal constraints despite favorable market opportunities. The TOWS Matrix analysis prioritizes WO strategies, focusing on digitalizing stock management systems through POS implementation, standardizing kitchen SOPs, and enhancing workforce professionalism to capture opportunities in the digital food delivery market. This research contributes practical strategic recommendations for culinary businesses facing similar operational challenges and theoretical insights into the application of TOWS Matrix in the food and beverage industry context.

Introduction

The success of restaurant operations heavily depends on the efficiency of logistics management, particularly in the provision of food materials (Chan et al., 2025; Rodriguez et al., 2025; Hari et al., 2026). Raw material procurement is not merely a purchasing activity but a strategic process to ensure the availability of quality stock to support smooth production processes. According to Assauri, effective procurement management aims to provide the right materials at the right time and at minimum cost without compromising established quality standards. In the culinary industry, such as at Bale Lazara Resto, the main challenges often encountered are fluctuating raw material prices in the market and consistency of quality from suppliers (Assauri, 2020; Kerdipitak, 2022; Kotler & Keller, 2018).

Bale Lazara Resto Palembang, established on August 15, 2024, is a culinary business located on Jalan Sukarela, Sukarami District, Palembang City, South Sumatra. The restaurant combines traditional Nusantara culinary concepts with recreational equestrian facilities,

creating a unique destination for local residents and tourists. The restaurant offers various menus ranging from breakfast options like Lontong Medan and Batagor to buffet menus such as Pindang and Soto Ayam Lamongan, as well as a la carte selections.

Preliminary observations reveal several challenges in the procurement system at Bale Lazara Resto. There is high dependence on specific suppliers without strong alternative options. Additionally, the recording system requires improvement, making it difficult to accurately forecast raw material needs. These problems, if left unaddressed, could result in operational cost overruns and decreased profit margins. Therefore, a strategic evaluation is needed to map internal strengths and weaknesses, as well as external opportunities and threats facing the company (Santoso & Ayu, 2026; Kaban et al., 2026; Qorry et al., 2026).

The TOWS Matrix analysis was chosen for this study because it can generate various alternative action strategies that are more tactical compared to conventional SWOT analysis (Kaylani & Alrifai, 2026; Yuningsih et al., 2026; Reinhardt et al., 2026). According to Wheelen, the TOWS Matrix provides a framework for matching external opportunities and threats with internal strengths and weaknesses, enabling organizations to identify the most relevant strategies for implementation in raw material procurement (Karo & Hamonangan, 2021; Kojongian et al., 2025; Wheelen et al., 2015).

This research aims to answer two main questions: (1) What are the internal factors (strengths and weaknesses) and external factors (opportunities and threats) that influence the raw material procurement system at Bale Lazara Resto Palembang? (2) How can appropriate raw material procurement strategies be formulated at Bale Lazara Resto Palembang using TOWS Matrix analysis?

Literature Review

Raw Material Procurement Management

Procurement is defined as the entire process of acquiring goods and services, starting from needs identification to payment completion and relationship maintenance with suppliers. In restaurant operations management, procurement is not merely a supporting function but determines the sustainability of production processes. Assauri emphasizes that procurement is one of the most vital operational functions as it concerns the availability of necessary materials, where inefficiency in this area can lead to significant production cost increases (Assauri, 2017, 2020; Rodriguez, 2018).

The success of procurement at Bale Lazara Resto is measured through achieving the 6T indicators. Optimal procurement indicators include: (1) Right Quality – raw materials must meet established technical specifications; (2) Right Quantity – procurement must be at precise volumes; (3) Right Time – raw materials must arrive according to operational schedules; (4) Right Price – obtaining the best price through competitive market analysis; (5) Right Source – ensuring raw materials come from legal, hygienic suppliers; and (6) Right Place – raw materials must be delivered to points that facilitate kitchen access while meeting storage sanitation standards (Baily et al., 2008; Srai & Lorentz, 2019; Weigel & Ruecker, 2017; Yuniarti et al., 2023).

Types of Raw Materials in the Culinary Industry

Based on shelf life and handling requirements, raw materials in the culinary industry are classified into three main groups (Rahmania et al., 2025; Setiawan et al., 2024). First, perishable goods have very high damage risk if not handled properly within a short time, including animal products, green vegetables, and dairy products. Second, semi-perishable goods have relatively longer durability, lasting several weeks to a month when stored properly,

including wet kitchen spices, tubers, and eggs. Third, non-perishable goods or groceries have long shelf life through processing, drying, or airtight packaging, including dry staples, packaged ingredients, and dry spices.

TOWS Matrix Analysis

The TOWS Matrix is a strategic planning instrument designed to synchronize external and internal factors to formulate various logical alternative strategies. Historically, this model was first introduced by Heinz Weihrich as a development from SWOT analysis. According to David, the TOWS Matrix serves as a "matching tool" that forces managers to create relationships between external threats and opportunities with internal strengths and weaknesses (Fred R David, 2016; Karo & Hamonangan, 2021).

The fundamental difference between SWOT and TOWS lies in their directional logic. SWOT generally uses an "Inside-Out" approach, starting analysis from internal factors (Algi et al., 2024). In contrast, TOWS uses an "Outside-In" approach, requiring researchers to map external dynamics first before determining how internal capabilities can respond to these dynamics (Morena et al., 2025). The output from TOWS consists of Actionable Strategies, explicitly generating four strategy groups (SO, WO, ST, and WT) that logically combine internal and external variables.

Strategy Formulation Using TOWS Matrix

Strategy formulation through the TOWS Matrix involves four combinations. SO Strategies (Strengths-Opportunities) use internal strengths to capture external opportunities, representing the most ideal position. WO Strategies (Weaknesses-Opportunities) focus on minimizing internal weaknesses by leveraging available external opportunities. ST Strategies (Strengths-Threats) apply internal strengths to avoid or reduce the impact of external threats. WT Strategies (Weaknesses-Threats) represent defensive positions aimed at reducing internal weaknesses while avoiding external threats (Mardner, 2018; Wang et al., 2023; Aly et al., 2025; Ennaji et al., 2025)

Methods

Research Design

This study employs a qualitative descriptive approach. This method was chosen to provide systematic, factual, and accurate descriptions of facts and relationships among phenomena (Yuniarti et al., 2025) occurring in the raw material procurement process at Bale Lazara Resto. According to Sugiyono, qualitative research is used to study natural object conditions where the researcher serves as the key instrument (Sugiyono, 2018).

Research Location and Object

The research was conducted at Bale Lazara Resto located on Jalan Sukarela, Sukarami District, Palembang City, South Sumatra. The research object is the raw material procurement system, including the processes, policies, and strategies implemented by management in procuring food raw materials for restaurant operations.

Data Sources

Primary data were obtained directly from original sources through in-depth interviews with key informants, including the General Manager, Head Chef, purchasing staff, and kitchen personnel. Direct observation of procurement activities at the location was also conducted. Secondary data were obtained through documentation studies of company records, such as purchase reports, supplier lists, and relevant inventory records.

Data Collection Techniques

Data collection employed triangulation techniques combining three methods. Observation was conducted non-participatively, observing physical environment conditions and operational activities. Semi-structured interviews were conducted with key informants to obtain information not visible through observation. Documentation studies collected general, non-confidential documents including company profiles, menu lists, and visual documentation of operations.

Data Analysis Techniques

Data analysis followed the interactive model of Miles, consisting of data condensation, data display, and conclusion drawing (Miles et al., 2023). Additionally, quantitative assessments using IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrices were conducted to evaluate internal and external strategic factors (Karo Karo et al., 2025; Karo & Hamonangan, 2021).

Result and Discussion

Bale Lazara Resto Palembang merupakan usaha kuliner yang mulai beroperasi pada 15 Agustus 2024 dengan konsep restoran tradisional Nusantara yang dipadukan dengan fasilitas rekreasi berkuda. Karakter utama restoran ini terletak pada penggunaan arsitektur tradisional berbahan kayu jati serta penyajian menu khas Nusantara. Konsep tersebut menjadi kekuatan pembeda karena restoran tidak hanya menawarkan pengalaman makan, tetapi juga menghadirkan suasana rekreatif yang dapat menarik pelanggan keluarga, komunitas, dan pengunjung yang mencari pengalaman kuliner berbasis suasana.

Sistem pengadaan bahan baku di Bale Lazara Resto dilakukan melalui koordinasi antara bagian dapur dan bagian administrasi atau purchasing. Proses pengadaan dimulai dari identifikasi stok oleh staf dapur, penyusunan daftar kebutuhan, verifikasi formulir pemesanan, pemesanan kepada pemasok, penerimaan barang, pemeriksaan kualitas dan kuantitas, serta penyimpanan bahan sesuai karakteristiknya. Meskipun alur ini sudah menunjukkan adanya mekanisme kerja yang terstruktur, hasil penelitian menunjukkan bahwa sistem tersebut masih memiliki kelemahan mendasar karena pencatatan stok masih dilakukan secara manual. Kondisi ini menyebabkan data persediaan tidak selalu akurat, memperbesar risiko kesalahan pemesanan, dan menyulitkan manajemen dalam memperkirakan kebutuhan bahan baku secara tepat.

Table 1. Raw Material Procurement Process at Bale Lazara Resto

Stage	Procurement Activity	Main Issue Identified
1	Stock identification by kitchen staff	Stock data are still checked manually
2	Preparation of raw material needs list	Needs estimation depends heavily on staff judgment
3	Verification of order forms	Verification is not fully supported by digital records
4	Ordering from suppliers	Dependence on regular suppliers remains high
5	Goods receipt and inspection	Quality and quantity checks are conducted but not systematically documented
6	Storage of raw materials	Storage follows material characteristics but stock control remains weak

The internal factor analysis shows that Bale Lazara Resto has several strengths that can support its procurement strategy. The most important strength is the restaurant's commitment to using premium quality raw materials. This factor supports product consistency and helps maintain

the authenticity of taste. The restaurant also benefits from loyal relationships with regular suppliers, which provides flexibility in urgent procurement situations. In addition, its strategic location strengthens customer accessibility and supports the logistics process.

However, the weaknesses found in this study are more dominant than the strengths. Manual stock management is the most serious weakness because it affects almost all procurement activities, from forecasting needs to controlling food costs. Owner intervention in complimentary items and excessive menu variation also creates inefficiency because it disrupts cost calculation and increases the risk of food waste. High employee turnover, non technical intervention in kitchen operations, and low staff professionalism during peak hours further weaken operational stability.

Table 2. IFAS Matrix of Bale Lazara Resto

Internal Factor	Weight Score
Consistency of premium quality raw materials	0.40
Emotional relationship and loyalty with regular suppliers	0.20
Strategic restaurant location	0.15
Total Strength Score	0.75
Manual stock management system	0.30
Owner policy on complimentary items and excessive menu variation	0.15
High employee turnover	0.20
Non technical intervention in kitchen operations	0.30
Low staff professionalism during peak hours	0.15
Total Weakness Score	1.10
Total IFAS Score	1.85

The total IFAS score of 1.85 indicates that the internal condition of Bale Lazara Resto is weak. The total weakness score of 1.10 is higher than the total strength score of 0.75, which means that internal problems are currently more influential than internal advantages. This finding suggests that the restaurant cannot rely only on its product quality and supplier relationships. Without improving stock management, staff discipline, and kitchen coordination, the restaurant's strengths will not be sufficient to support sustainable operational performance.

The external factor analysis shows a more favorable condition. Bale Lazara Resto operates in a market environment that still provides meaningful opportunities. The growing culinary lifestyle trend creates demand for restaurants that offer not only food but also atmosphere and experience. The expansion of digital delivery platforms also opens opportunities to reach customers beyond the physical restaurant space. Social media promotion provides another opportunity because visual culinary content can help strengthen brand awareness at relatively low promotional cost.

At the same time, the restaurant faces serious external threats. Competition in the Palembang culinary market is intense, especially as new restaurants continue to offer similar concepts, attractive prices, and more aggressive promotion. Raw material price fluctuation also threatens profit margins, particularly when procurement planning is not supported by accurate stock records. Rapid changes in consumer taste may also reduce customer loyalty if the restaurant does not innovate carefully and consistently.

Table 3. EFAS Matrix of Bale Lazara Resto

External Factor	Weight Score
Growing culinary lifestyle trends	0.80

Digital delivery platform expansion	0.60
Social media promotion support	0.45
Total Opportunity Score	1.85
High competition intensity	0.40
Raw material price fluctuation	0.30
Rapid changes in consumer taste	0.30
Total Threat Score	1.00
Total EFAS Score	2.85

The EFAS score of 2.85 shows that the external environment is relatively strong and still provides opportunities for growth. The opportunity score of 1.85 is higher than the threat score of 1.00, indicating that the restaurant has room to develop if it can respond properly to market trends. However, these opportunities will be difficult to capture if internal weaknesses remain unresolved. In other words, the main issue is not the absence of market potential, but the restaurant's limited internal capacity to manage that potential effectively.

The strategic position was calculated by comparing internal and external factor scores. The internal coordinate was obtained by subtracting the total weakness score from the total strength score, resulting in minus 0.35. The external coordinate was obtained by subtracting the total threat score from the total opportunity score, resulting in 0.85. This position places Bale Lazara Resto in Quadrant III, which reflects a turnaround strategy. This means that the restaurant faces attractive market opportunities but is still constrained by weak internal management.

Table 4. Strategic Position Calculation

Dimension	Calculation	Result
Internal position	0.75 minus 1.10	minus 0.35
External position	1.85 minus 1.00	0.85
Strategic quadrant	Negative internal and positive external	Quadrant III
Recommended strategy	Internal improvement to capture opportunities	Turnaround Strategy

The turnaround position indicates that Bale Lazara Resto should not prioritize aggressive expansion before correcting its internal weaknesses. The restaurant needs to focus first on improving procurement control, stock recording, kitchen coordination, and employee service capacity. Expansion through digital platforms and social media promotion may create additional demand, but this demand can become a burden if the kitchen and procurement systems are not prepared to handle higher order volume.

The TOWS Matrix shows that the most relevant strategy is the WO strategy. This strategy focuses on reducing weaknesses by using available opportunities. The most urgent recommendation is the implementation of a digital stock management system or Point of Sales system that can record sales, monitor inventory, and support more accurate procurement planning. This system is important because digital delivery platforms can increase order volume, and manual stock recording will not be adequate to manage that complexity.

Table 5. TOWS Matrix Strategy Formulation

Strategy Type	Strategic Formulation
SO Strategy	Strengthen the image of authentic taste through social media promotion and use the strategic location as a pick up point for digital delivery services

WO Strategy	Implement a POS and digital stock system, standardize kitchen SOPs, train employees in excellent service, and use low cost creative content to reach wider customers
ST Strategy	Develop periodic menu innovation and build long term relationships with alternative suppliers to reduce price fluctuation risk
WT Strategy	Conduct operational cost audits, restructure kitchen duties, reduce inefficient menu variations, and improve service quality before competitors capture the main market

The findings show that Bale Lazara Resto has promising market opportunities but still faces serious internal weaknesses. The most important finding is that procurement problems are not only related to supplier availability, but also to the absence of an accurate internal control system. Manual stock recording, unstable employee performance, excessive menu variation, and non technical intervention in kitchen operations create operational inefficiency that directly affects food cost control. Therefore, the results of this study support the need for a turnaround strategy that prioritizes internal operational improvement before market expansion.

The main strategic priority is digitalization of stock management, standardization of kitchen procedures, improvement of employee professionalism, and tighter control of menu variation. These actions are necessary to ensure that the restaurant can capture opportunities from culinary lifestyle trends, online delivery platforms, and social media promotion without worsening existing operational weaknesses. Through these improvements, Bale Lazara Resto can strengthen its procurement efficiency, reduce food waste, stabilize operational costs, and improve its competitiveness in the Palembang culinary market.

The analysis results reveal that Bale Lazara Resto faces a classic strategic paradox: significant market opportunities exist, but internal operational weaknesses prevent optimal opportunity capture. The manual stock management system emerges as the most critical weakness, directly impacting operational efficiency and cost control.

The restaurant's strength in premium quality raw materials provides a solid foundation for differentiation in a competitive market. However, this strength cannot be fully leveraged without addressing weaknesses in recording systems and workforce efficiency (Amrullah et al., 2016; Karo et al., 2024). The owner's policy interventions in complimentary items and excessive menu variations create additional cost burdens that could otherwise be allocated to improving operational systems.

The strong external position, particularly regarding digital delivery platform opportunities, presents immediate avenues for growth. However, the manual stock system cannot effectively handle the volume and complexity of orders from multiple platforms. This mismatch between external opportunity and internal capability explains the strategic imperative for prioritizing WO strategies.

The restaurant's location in Palembang's culinary center provides logistical advantages, but these benefits are diminished by inefficient stock management and coordination problems. The high employee turnover rate further compounds these issues, as consistent operational practices cannot be maintained with constantly changing personnel.

The strategic recommendations emphasize digital transformation as the foundation for improvement. Implementing a POS system would address multiple weaknesses simultaneously: providing real-time stock visibility, enabling accurate sales forecasting, reducing manual recording errors, and supporting digital order integration. This technological

investment must be accompanied by SOP standardization to ensure consistent implementation across shifts and personnel changes.

Conclusion

Based on the research and data analysis, Bale Lazara Resto still faces weak internal conditions, as shown by an internal factor score of 1.85. This indicates that the restaurant has significant problems in operational control, stock management, and human resource efficiency. However, the external factor score of 2.85 shows that the Palembang culinary market still offers moderate opportunities, especially through culinary lifestyle trends, digital delivery services, and social media promotion, although competition remains intense.

The SWOT Cartesian Diagram places Bale Lazara Resto in Quadrant III, which supports a Turnaround Strategy. This means that the restaurant has promising market opportunities but is still constrained by internal weaknesses. The Internal External Matrix also places the business in Cell IX, indicating the need for retrenchment or fundamental operational improvement before pursuing wider business growth.

Therefore, the priority strategy is the WO Strategy, which focuses on overcoming weaknesses by using available opportunities. Bale Lazara Resto should prioritize digital stock management, implement a Point of Sales system, standardize kitchen SOPs, improve employee productivity, and focus on flagship menus. These efforts should be supported by creative social media promotion to strengthen competitiveness in the Palembang culinary market (Hasan et al., 2025; Karo & Aziz, 2024; Theresia Simangungsong et al., 2025).

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