

Innovation in Enterprise Resource Planning Implementation to Support Fast-Food Restaurant Performance

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ABSTRACT

Purpose: The rapid expansion of fast-food restaurant chains across Indonesia, with some chains operating more than 700 outlets nationwide, has made the coordination of raw-material supply, food-quality consistency, and customer service increasingly complex. This study analyzes how the implementation of an Enterprise Resource Planning (ERP) system supports the operational performance of a large fast-food restaurant chain by integrating logistics, accounting, and delivery processes.

Methods: A qualitative descriptive method was used, drawing on documentary review and secondary data from internal operational reports and prior published studies on the case company, analyzed through a three-stage business-process mapping, bottleneck-identification, and module-integration framework.

Findings: The findings show that the ERP system strengthens real-time data visibility, shortens decision-making cycles, and improves coordination across procurement, distribution, and quality-control functions, provided that organizational readiness, change-management practice, and staff training are addressed. Where these enabling conditions were weak, resistance to change and poor legacy-system integration limited the benefits obtained.

Originality/value: The study contributes case-based evidence, still scarce in the Indonesian fast-food sector, showing that structured planning and management commitment, rather than the technology alone, determine whether ERP systems translate into sustained competitive advantage in the food-and-beverage industry.

Keywords : Enterprise Resource Planning; Supply Chain Management; Food and Beverage Industry; Operational Performance; Digital Transformation

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1. INTRODUCTION

The fast-food restaurant industry in Indonesia has become one of the most competitive segments of the food-and-beverage sector, driven by the entry of global chains, the rise of digitally native competitors, and shifting consumer expectations for speed, consistency, and convenience (Suhairi et al., 2023). A leading fast-food restaurant chain operating more than 700 outlets across Indonesia, concentrated mainly on Java and Sumatra with continued expansion into airport and urban locations, exemplifies the operational complexity this competition creates (Alvin et al., 2022). Serving such a geographically dispersed network requires the company to manage the procurement, quality, and timely delivery of ingredients ranging from poultry and vegetables to imported potatoes and proprietary spice blends, each of which follows a distinct and often lengthy supply route (Revalina et al., 2024). Any imbalance between

demand and supply at the outlet level threatens both product consistency and customer satisfaction, making supply-chain coordination a strategic priority rather than a purely logistical concern.

Sales and operations planning, closely tied to supply chain management, has increasingly been embedded within Enterprise Resource Planning (ERP) systems that integrate the information, material, and financial flows connecting suppliers, the core company, distributors, and end consumers (Sharma et al., 2021). Prior studies report that ERP adoption in the food-and-beverage industry improves productivity through better cross-unit collaboration (Setiabudi et al., 2021) and strengthens financial oversight by supporting internal audit functions, non-financial performance assessment, and product-level profitability analysis (Febrianto & Soediantono, 2022). Case evidence from other fast-food franchise operations shows that replacing fragmented reporting systems with an integrated ERP platform, supported by modules such as Transaction Processing, Enterprise Collaboration, Process Control, Management Support, and Decision Support systems, allows a company to unify inventory monitoring, accelerate decision-making, and coordinate operations across an entire franchise network (Utama et al., 2019).

Despite this documented potential, most existing studies examine ERP adoption either as a general managerial phenomenon or within manufacturing and service contexts distinct from large-scale, multi-outlet food retailing, where supply-chain uncertainty, perishability, and rapid demand shifts impose additional constraints (Mahadevan, 2021; Qureshi, 2022). Few studies have examined, in an Indonesian setting, how ERP implementation is actually organized and evaluated within a fast-food chain of national scale, and how organizational readiness factors interact with system capability to produce (or limit) operational gains. Therefore, this study analyzes the innovation and implementation of an ERP system within a large Indonesian fast-food restaurant chain, with the objective of describing how the system helps the company address supply-chain challenges, maintain uniform food quality across outlets, and strengthen its competitiveness in a highly contested market.

2. LITERATURE REVIEW

Enterprise Resource Planning is an integrated information system that connects the functional units of a company - marketing, operations, finance, human resources, and research and development - into a single platform capable of automating business processes from end to end (Duy, 2025; Hasan, 2018). Within the food-and-beverage industry specifically, ERP links raw-material planning, financial and accounting control, and human-resource management, and has been shown to influence internal audit practice, non-financial performance measurement, and product-level profitability analysis (Febrianto & Soediantono, 2022). Beyond its transactional function, ERP acts as a facilitator of transparent information exchange between suppliers and customers through secured, resource-based communication channels, which reduces the likelihood of misunderstandings that could otherwise translate into operational risk (Indrayani, 2022). In highly competitive food-and-beverage markets, this integrated infrastructure is a key enabler of firm-level agility (Setiabudi et al., 2021).

A second theoretical strand concerns Supply Chain Management (SCM), defined as the network of relationships within and between suppliers, the focal company, distributors, and

consumers that governs the flow of materials, information, and funds needed to meet stakeholder requirements efficiently and effectively (Sharma et al., 2021). The purpose of SCM is to digitalize business processes, align product flow with customer needs, and achieve competitive advantage at the level of the total supply system rather than any single firm (Helo & Hao, 2022). In the fast-food industry, SCM must additionally absorb challenges related to sustainability expectations, shortened technology life cycles, globalization, and volatile consumer demand (Mahadevan, 2021). Continuous investment in supply-chain capability is therefore treated in the literature as a precondition for sustainable competitive advantage, since a poorly integrated supply chain both raises operational risk and erodes the value that could otherwise be created through coordinated changes in form, location, and ownership of goods as they move toward the end consumer (Santoso & Hakimah, 2024).

The intersection of ERP and SCM theory suggests that ERP functions as the technological backbone that operationalizes supply-chain integration: it converts dispersed transactional data from procurement, warehousing, and distribution into a single, real-time source of information that supports coordinated planning across a multi-outlet network (Nwankpa, 2015; Zuma & Sibindi, 2023). At the same time, the literature consistently emphasizes that technology alone is insufficient. Successful ERP implementation depends on top-management commitment, structured change management, and adequate staff training, since resistance to changing established work routines is one of the most frequently reported barriers to realizing the expected benefits of ERP projects (Madininos et al., 2011). This combination of technical and organizational preconditions forms the analytical lens used in the present study to examine ERP implementation in the case company.

3. METHOD

This study uses a qualitative descriptive design intended to develop an in-depth understanding of how an Enterprise Resource Planning system supports the operational processes of a large Indonesian fast-food restaurant chain. Data were collected through documentary review of company-related secondary sources, including internal operational reports referenced in prior academic and industry publications, and through analysis of previously published case studies describing the company's supply-chain structure and ERP-related initiatives.

The analysis followed an application-implementation framework consisting of three stages. First, the existing business process was mapped, with particular attention to raw-material procurement and inter-branch distribution. Second, operational bottlenecks were identified, such as delivery delays and stock imbalances across outlets. Third, the integration of ERP modules - particularly the Supply Chain Management module and demand-forecasting functions built on historical sales data - was analyzed to interpret its effect on operational efficiency and managerial decision-making.

Because the study relies on documentary and secondary data rather than direct human-subject data collection, no primary respondents were involved and no identifiable personal data were processed; the analysis instead safeguards validity through triangulation across multiple independent secondary sources describing the same operational context, and through

cross-checking of factual claims (e.g., supplier names, outlet counts, and process descriptions) against more than one published source before inclusion in the analysis.

4. RESULTS AND DISCUSSION

The case company faces significant challenges in managing a geographically dispersed supply chain while maintaining consistent product quality across outlets. Scalability and adaptability emerge as recurring concerns during ERP roll-out (Anggara et al., 2024), and ERP implementation is identified as the strategic response most consistently associated with improved operational efficiency and cross-departmental integration (Fahrezi & Dewayanto, 2024), largely because it enables real-time data management that supports faster, better-informed decisions in a volatile market. In the food-and-beverage sector more broadly, ERP has been shown to raise supply-chain efficiency by automating production planning, inventory management, and distribution (Awaliya et al., 2023), which reduces waste, improves data accuracy, and shortens response time to market demand (Priyatna, 2024). This is consistent with evidence that ERP helps food companies manage operational complexity while strengthening sustainability practices within supply-chain management (Qureshi, 2022).

Implementation is nevertheless not without friction. Employee resistance to new systems and workflows is among the most frequently cited obstacles in ERP projects (Good, 2024), which underscores the importance of adequate training and effective internal communication for a smooth transition (Chinta, 2022). The success of the case company's ERP initiative is similarly bound to the strength of top-management support and the thoroughness of strategic planning; without full leadership commitment, ERP projects carry a high risk of failure (Multiable, 2024), and effective planning must include a clear business-needs analysis, vendor selection appropriate to the fast-food industry, and a deliberate organizational change-management strategy (Food Industry Executive, 2023).

Evaluating the implementation further shows that ERP substantially improves supply-chain performance through process automation, reduced lead time, lower operating cost, and improved delivery accuracy (Asif, 2024), enabling faster inter-departmental coordination and a quicker response to shifting market demand (Fadila et al., 2025). At the same time, integrating ERP with legacy systems remains difficult where process misalignment and weak top-management backing persist (Zuma & Sibindi, 2023), and employee resistance can still constrain outcomes when not matched by effective change-management initiatives (Helo & Hao, 2022). This confirms that implementation success depends jointly on planning quality, vendor and process fit, and organizational change management (Akrong et al., 2022; Maditinos et al., 2011), rather than on the technical sophistication of the ERP platform alone.

Interpreting these findings together, ERP implementation in the case company functions as a strategic response to supply-chain complexity and market dynamism rather than merely an information-technology upgrade. As an integrated platform, ERP strengthens cross-departmental coordination and accelerates decision-making (Jenkins, 2024), a pattern consistent with evidence that ERP adoption improves supply-chain performance through automation, cost reduction, and delivery efficiency (Asif et al., 2024) and enables real-time performance monitoring that reduces costly operational errors in food production (Nowara Infotech, 2024). Improved transparency and accountability across procurement and distribution functions further reduce miscommunication and increase responsiveness to shifting customer demand

(Wahono, 2024), consistent with findings that an integrated ERP platform supports real-time data processing, analytical reporting, and cross-functional collaboration (Arujisaputra, 2025).

Table 1 summarizes how the three ERP-supported functional areas identified in this case relate to their operational role and the organizational conditions required for each to succeed.

Table 1. ERP-Supported Functional Areas and Operational Outcomes

<i>ERP Functional Area</i>	<i>Operational Role Identified in the Case</i>	<i>Success Precondition</i>
<i>Supply Chain / Procurement Module</i>	Coordinates raw-material flow and demand forecasting across 700+ outlets	<i>Reliable historical sales data; supplier integration</i>
<i>Financial & Accounting Module</i>	Supports internal audit, cost control, and per-product profitability analysis	<i>Standardized chart of accounts across units</i>
<i>Human Resource / Change Management</i>	Manages staff training and adoption of new workflows	<i>Top-management commitment; structured training</i>

Source: Synthesized by the authors from company-related secondary sources (2025).

5. CONCLUSIONS

This study shows that Enterprise Resource Planning has a significant role in supporting the operations and performance of a large Indonesian fast-food restaurant chain, whose scale of more than 700 outlets nationwide creates substantial supply-chain, distribution, and quality-consistency challenges. By integrating inventory management, accounting, logistics, and distribution into a single platform, ERP enables faster, data-driven decision-making and closer cross-departmental collaboration, allowing production teams, for example, to know immediately how much raw material is available and how much must be prepared for anticipated demand. The evidence further indicates, however, that these benefits are conditional: they materialize only where organizational readiness, top-management commitment, structured change management, and adequate staff training accompany the technology, whereas weak readiness leaves resistance to change and legacy-system misalignment as persistent barriers. Fast-food operators considering similar system investments should therefore treat ERP adoption as an organizational transformation program rather than a purely technical deployment, and future research could usefully extend this qualitative case analysis with quantitative performance data collected directly from post-implementation operations.

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