Research Article

Comparative Analysis of Hotel Cost Efficiency Across Indonesian Regions

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Abstract: The Indonesian hospitality industry is currently facing a post-pandemic "profitability paradox," a phenomenon where increased occupancy rates do not guarantee a proportional increase in net profit margins due to persistent operational cost inflation. This study aims to evaluate operational cost efficiency strategies and their impact on profitability across three star-rated hotels with contrasting locational and market characteristics: @Hom Hotel Kudus (Central Java), Grand Verona Samarinda (East Kalimantan), and FUGO Hotel Banjarmasin (South Kalimantan). This research adopts a descriptive qualitative approach with a comparative multiple-case study design. Data were collected through in-depth interviews with top management, participant observation, and financial document analysis. The results reveal that geographical characteristics and market segments are the primary determinants in selecting efficiency strategies. (1) Hom Hotel Kudus, located in a secondary industrial area, implements Lean Operations strategies through workforce multi-skilling to address market price sensitivity. (2) Grand Verona Samarinda, in the East Kalimantan business hub, focuses on Supply Chain Engineering by localizing raw materials to mitigate high logistical costs. (3) FUGO Hotel Banjarmasin, in the lifestyle segment, adopts Technology-Driven Efficiency to suppress utility costs without degrading the guest experience. The study concludes that sustainable profitability is achieved not through aggressive cost-cutting, but through strategic cost management adaptive to local contexts. These findings provide a new managerial framework for the hospitality industry to shift from a revenue-centric orientation to value optimization.

Keywords: Comparative Study; Hotel Profitability; Indonesian Hospitality Industry; Operational Cost Efficiency; Strategic Cost Management.

1. Introduction

The global hotel industry has undergone significant structural transformation this decade as a result of the economic shock following the COVID-19 pandemic. While various industry reports indicate a relatively positive recovery in occupancy rates, hoteliers are faced with a new reality of increasingly tight profit margin pressures. A phenomenon known as the profitability paradox describes a situation where increased gross revenue (Gross Revenue) along with the return of tourist mobility is not automatically accompanied by an increase in gross operating profit (GOP). This anomaly is primarily driven by surging operating costs, including rising energy tariffs, inflation in food prices, and increases in minimum labor wages, thus eroding hotel financial performance even though occupancy rates are showing a recovery trend (Tan et al., 2025).

In Indonesia, these challenges are further complicated by the geographical characteristics of the archipelagic nation, which create disparities in logistics and operational costs between regions. Star-rated hotels operating on Java generally enjoy relatively mature infrastructure and supply chains, but simultaneously face intense competition, fueling price wars and squeezing profit margins. Conversely, hotels outside Java, such as in Kalimantan, face a high-cost economy due to limited infrastructure and high logistics costs, although certain market

segments may have greater pricing power due to limited supply and specific local market characteristics (Afandy, 2024).

Amidst increasingly tight margin pressures, traditional management approaches focused on maximizing revenue (revenue-centric strategies) have proven inadequate to ensure sustainable profitability. Increased room revenue will not have a significant impact without effective and planned cost management, as rising operating costs can quickly negate any additional revenue generated. This situation urges hotel management to adopt a Strategic Cost Management (SCM) paradigm, which emphasizes proactive cost structure management aligned with each hotel's value proposition, competitive strategy, and market characteristics (Manurung et al., 2025).

However, implementing cost efficiency in the hotel industry presents a paradoxical challenge. Cost control efforts undertaken reactively and without in-depth analysis have the potential to degrade service quality, which can ultimately negatively impact guest satisfaction, customer loyalty, and the hotel's long-term reputation (Treece, 2024). Therefore, the primary challenge facing hotel management is not simply how to reduce operating costs, but how to find a balance between cost efficiency and the quality of service perceived by guests.

Although numerous studies have been conducted on hotel efficiency and profitability, the existing literature still exhibits several limitations. Most previous research is dominated by quantitative approaches, such as Data Envelopment Analysis (DEA) and financial ratio analysis, which are effective in numerically measuring efficiency but less able to explain the managerial processes and strategic decision-making behind these efficiency achievements (Assaf et al., 2021). Furthermore, hotel research in Indonesia remains heavily focused on international chain hotels and major tourist destinations such as Bali and Jakarta, resulting in relatively little attention being paid to the operational dynamics of hotels in second-tier cities and regions outside Java. The lack of cross-regional comparative studies also results in a limited understanding of the differences in cost-efficiency strategies between hotels operating in Java and Kalimantan, despite significant differences in infrastructure, logistics, and market characteristics between the two regions.

Based on these conditions, this study aims to evaluate and compare operational cost efficiency strategies in three star-rated hotels, namely @Hom Hotel Kudus, Grand Verona Samarinda, and FUGO Hotel Banjarmasin, and identify key managerial factors that play a role in balancing cost efficiency and service quality. Through this approach, the study is expected to develop an adaptive and contextual managerial framework to support the optimization of hotel profitability in various regions of Indonesia.

2. Literature Review

This literature review examines recent developments in hospitality management research with a particular focus on operational cost efficiency strategies and their implications for hotel profitability. By synthesizing prior studies across different geographical and market contexts, this review aims to identify and highlight existing research gaps that justify the relevance and contribution of the present study.

Resource-Based View (RBV)

The Resource-Based View (RBV) posits that a firm's sustainable competitive advantage is derived from the possession and effective utilization of resources that are valuable, rare, inimitable, and non-substitutable (Barney, as cited in Wijaya, 2023). Within the context of operational efficiency, managerial capabilities in controlling and optimizing cost structures more effectively than competitors can be regarded as a strategic internal resource. Hotels that are able to deliver comparable levels of service quality while operating with lower cost structures are more likely to achieve sustained competitive advantage, as such capabilities are difficult for competitors to replicate. Recent scholarship has renewed and extended the RBV framework, emphasizing the need to understand how firms create competitive advantages through the acquisition and strategic deployment of resources, particularly in turbulent environments such as the post-pandemic hospitality landscape (Helfat et al., 2023). In the hospitality context specifically, Zaman et al. (2022) demonstrated through an empirical study of 3- and 4-star hotels in Paris that hotels must strategically manage their resources — including human capital, physical assets, and technological infrastructure — to create sustainable competitive advantages that deliver superior value to guests. Their findings confirm that the RBV

framework is particularly relevant for understanding how hotels can efficiently allocate limited resources to remain competitive in the post-COVID-19 era.

Furthermore, the extension of RBV through the Dynamic Capabilities View (DCV) has gained prominence in hospitality research, suggesting that in order to maintain a competitive edge, hotel businesses must develop the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Chasapi et al., 2024). This perspective is especially pertinent to the current study, as hotels in different Indonesian regions face distinct environmental challenges that demand adaptive resource management strategies. Drawing on the RBV framework, recent studies have also found that AI-driven supply chain capabilities can significantly strengthen supply chain agility and resilience, ultimately generating competitive advantages in the hotel industry (Almomani et al., 2025). These developments underscore that operational cost efficiency is not merely a financial exercise, but a strategic capability embedded in the firm's resource configuration.

Strategic Cost Management (SCM)

Shank and Govindarajan define Strategic Cost Management (SCM) as the systematic use of cost information to formulate and identify superior strategies that enable firms to achieve sustainable competitive advantage. In the hospitality industry, SCM extends beyond short-term cost reduction and emphasizes the strategic alignment of cost structures with value creation and competitive positioning (Unifocus, 2024). Giannoukou (2024) reinforced this perspective by noting that effective profit management ensures long-term sustainable profitability, and even organizations achieving strong financial results may benefit from well-implemented cost management initiatives leading to substantial revenue gains.

The implementation of SCM in hotel operations typically involves three interrelated analytical dimensions. First, value chain analysis is employed to map and evaluate all operational activities, from reservation processes to guest check-out, in order to identify inefficiencies and non-value-adding activities. This aligns with the lean management philosophy, which, as Perdomo-Verdecia et al. (2022) identified through a systematic review of hospitality research, focuses on eliminating anything that buyers consider non-value-adding to a product or service. Their review found only thirty-six studies applying lean management in hotels, indicating significant research scarcity despite its potential benefits for the sector. Second, cost driver analysis focuses on understanding the underlying factors that influence cost behavior, such as occupancy rates, seasonal conditions, energy consumption patterns, and equipment inefficiencies. Industry data confirm that labor costs, the single largest cost driver, rose 4.8% in 2024, with hotel operators paying significantly more than pre-pandemic levels for fewer labor hours, making cost driver identification critically important for margin protection (CBRE, 2025). Third, competitive advantage analysis ensures that cost optimization initiatives do not undermine the distinctive service attributes that differentiate a hotel from its competitors.

Research on revenue management during crisis periods further supports the SCM paradigm. Santos et al. (2024) highlighted that simply reducing prices and implementing cost-cutting measures may not lead to long-term revenue recovery; rather, hotels should focus on supplementary offers, quality improvements, and brand image to attract customers and increase occupancy. This finding is consistent with the broader shift in the hospitality industry from a revenue-centric orientation to a profitability-driven approach, where revenue managers increasingly step into asset management roles, emphasizing bottom-line performance through total revenue management and strategic cost control (CBRE, 2024). Through these integrated analyses, SCM enables hotels to pursue cost efficiency while preserving service quality and long-term strategic positioning.

Operational Efficiency in Hotel Management

Operational efficiency in the hotel industry is commonly assessed using the Gross Operating Profit (GOP) margin, which reflects the ability of a hotel to generate operating profit from its total revenue. Globally, GOP margins have shown signs of compression as operating costs outpace revenue growth; industry analysis reveals that expenses above GOP rose 4.1% in 2024 while total hotel revenue grew only 2.3%, hitting full-service properties hardest (CBRE, 2025). This trend has prompted a renewed focus on efficiency measurement and management across all hotel segments.

Efficiency in hotel operations can be broadly classified into two interrelated dimensions. Technical efficiency refers to a hotel's ability to maximize output from a given set of inputs,

such as increasing the number of rooms cleaned per housekeeping labor hour without compromising service standards. Allocative efficiency, on the other hand, relates to the hotel's ability to select the most cost-effective combination of inputs, for instance by optimizing labor arrangements (contract versus permanent staff) or choosing alternative energy sources such as electricity versus gas (Barros & Mascarenhas, 2005). Together, these dimensions provide a comprehensive framework for evaluating how effectively hotels transform operational resources into financial performance. In a recent study of India's hotel and restaurant sector, Mahajan (2025) applied Data Envelopment Analysis to demonstrate that significant inefficiencies persist in capital allocation, asset management, and operational cost regulation in the post-pandemic period, underscoring the need for scale optimization, workforce rationalization, and technology integration.

The post-pandemic environment has further highlighted the importance of operational efficiency as a determinant of hotel performance. Lee (2025) noted that the post-pandemic RevPAR surge has largely normalized, yet wages and salaries, insurance premiums, utilities, and brand/operator-related expenses continue to climb, resulting in a noticeable compression of gross operating profit. In key markets globally, labor cost increases of 4–6% year-on-year are outpacing revenue growth, eroding GOPPAR and putting pressure on operators to rethink performance drivers (HotStats, 2025). This reality compels hotel managers to move beyond traditional revenue maximization strategies and invest in operational efficiency improvements that can sustainably protect margins.

Geographical Location as a Structural Cost Determinant

Geographical location represents an external and largely uncontrollable factor that significantly shapes a hotel's cost structure and operational strategy. Hotels operating in Java are generally characterized by intense market competition, abundant labor supply, and relatively well-developed logistics and transportation infrastructure. These conditions tend to facilitate cost efficiencies in procurement and staffing, but simultaneously exert downward pressure on prices and profit margins due to high competitive intensity (Nurhadi & Wibowo, 2024). In contrast, hotels located in Kalimantan operate within a markedly different economic and structural context, which is often influenced by extractive industries such as mining and palm oil. This regional profile is associated with higher logistics and transportation costs, limited labor market availability, and greater dependency on external supply chains, all of which contribute to elevated operational costs despite the presence of stronger pricing power in certain market segments.

The role of geography in shaping hotel performance has been increasingly recognized in recent literature. Data from Indonesia's post-pandemic hotel recovery reveal that East Kalimantan maintained consistently high occupancy driven by government relocation programs and long-term project workers associated with the new capital city (IKN Nusantara), turning the province into a steady hospitality hub, while Java-based destinations faced more volatile recovery patterns due to competitive saturation (BPS, as cited in Oka, 2025). Furthermore, Sastri et al. (2025) found through survival analysis that the recovery time of the hotel and restaurant sector in Indonesia varied significantly across provinces, with local economic structures, infrastructure availability, and regional policy environments serving as critical determinants of recovery speed. This cross-regional heterogeneity confirms that operational cost strategies cannot be universally applied but must be tailored to the specific geographical and market contexts in which hotels operate.

The Indonesian hospitality sector's geographical complexity is further reflected in the survey by Horwath HTL and PHRI (2025), which found that government austerity measures introduced in late 2024 disproportionately affected mid-to-upper-tier hotels and regions heavily reliant on government-driven demand, with more than 83% of respondents reporting an unfavorable market start in 2025. These findings reinforce the argument that location-specific factors — including proximity to government centers, industrial hubs, and tourism destinations — fundamentally influence the type and effectiveness of cost efficiency strategies available to hotel managers.

3. Proposed Method

This study employs an interpretivist paradigm with a descriptive qualitative approach to examine how operational cost efficiency is implemented across different hotel contexts. The interpretivist paradigm is grounded in the premise that reality is socially constructed and that understanding human experiences requires exploring the subjective meanings individuals assign to their actions within specific contexts (Pervin & Mokhtar, 2022). This paradigm is particularly appropriate for hospitality research, where managerial decision-making is deeply embedded in local market conditions, organizational culture, and stakeholder interactions that cannot be fully captured through quantitative measurement alone. As Creswell and Poth (2018) noted, qualitative inquiry is ideally suited for exploring complex phenomena within their natural settings, enabling researchers to develop rich, contextualized understandings of the processes under investigation.

A multiple-case study design is adopted to enable comparative analysis of the same phenomenon — cost efficiency — within diverse geographical and market environments represented by three Indonesian cities. According to Yin (2018), the multiple-case study design is preferred when the research questions center around "how" and "why" questions, the researcher has limited control over the events being investigated, and the focus is on a contemporary phenomenon in a real-world setting. Multiple-case studies can be used to either augur contrasting results for anticipated reasons (theoretical replication) or augur similar results across cases (literal replication), thus enhancing the robustness and generalizability of the findings. In the hospitality management field, Khan (2023) emphasized that the case study approach is particularly valuable for addressing rapid changes, diverse stakeholder needs, and the contextual complexities that characterize hotel operations. Furthermore, the qualitative multiple-case study methodology has been recognized as a rigorous approach for investigating under-explored phenomena in tourism and hospitality, especially where foundational understanding is needed before broader quantitative testing can be undertaken (Manfreda et al., 2023).

The research objects were selected through purposive sampling based on regional representation and hotel classification. Purposive sampling is a non-probability sampling technique in which researchers intentionally select cases that are information-rich and relevant to the research questions, ensuring that the selected cases can illuminate the phenomenon under study from diverse perspectives (Creswell & Poth, 2018). The cases include @Hom Hotel Kudus (three-star, Central Java), operating in a price-sensitive industrial and religious tourism market; Grand Verona Samarinda (three-star, East Kalimantan), located in a provincial capital with strong government and business demand and high logistical costs; and FUGO Hotel Banjarmasin (four-star, South Kalimantan), serving affluent leisure and business segments and integrated with a shopping mall in a major commercial hub. These three cases were deliberately chosen to represent the diversity of geographical contexts and market segments that characterize Indonesia's hospitality landscape, reflecting the heterogeneity documented by Sastri et al. (2025), who found that recovery times and operational challenges varied significantly across Indonesian provinces depending on local economic structures and infrastructure.

Data were collected from primary and secondary sources, a triangulation strategy that strengthens the credibility and dependability of qualitative findings. Primary data were obtained through semi-structured in-depth interviews with key informants, including General Managers and department heads (finance, kitchen, and housekeeping), with a total interview duration of approximately 12 hours. Semi-structured interviews are widely recognized as one of the most effective data collection techniques in qualitative hospitality research, as they allow researchers to probe deeply into managerial experiences while maintaining sufficient flexibility to pursue emergent themes (Kallio et al., 2016). The selection of key informants from multiple organizational levels and functional areas aligns with the principle of engaging participants who possess direct knowledge and decision-making authority regarding the phenomenon under study (Yin, 2018). Secondary data consisted of anonymized profit and loss statements (2023–2024), standard operating procedures, and guest reviews from Online Travel Agent (OTA) platforms. The inclusion of multiple data sources reflects the case study methodological principle that phenomena should be viewed and explored from multiple perspectives to enhance data quality based on the principles of idea convergence and the confirmation of findings (Baxter & Jack, 2008).

Data analysis followed the interactive model of Miles, Huberman, and Saldaña (2014), involving three concurrent flows of activity: data condensation, cross-case data display, and conclusion drawing/verification. Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming the raw data to make them more manageable and analytically meaningful. Cross-case data display involves organizing condensed data into matrices, charts, or networks that facilitate pattern recognition and comparative analysis across cases. Conclusion drawing and verification entail interpreting the displayed data to identify regularities, patterns, explanations, and causal flows, while continuously testing these conclusions against the data for validity. This interactive and iterative analytical framework is particularly well suited for multiple-case study designs, as it enables systematic comparison while preserving the contextual richness of each individual case (Miles et al., 2014). The use of cross-case synthesis, as recommended by Yin (2018), further strengthened the analytical process by enabling the identification of common patterns and divergent strategies across the three hotel cases.

The trustworthiness of the findings was enhanced through source triangulation and method triangulation, ensuring consistency between managerial perspectives, financial records, and observational data. Source triangulation involves comparing data collected from different informants (e.g., General Managers versus department heads) to identify convergent and divergent viewpoints, while method triangulation involves cross-verifying findings derived from different data collection techniques (e.g., interviews, document analysis, and observation) (Denzin, 2017). Lincoln and Guba's (1985) criteria for trustworthiness — credibility, transferability, dependability, and confirmability — were applied throughout the research process. Credibility was achieved through prolonged engagement with the research sites and member checking with key informants. Transferability was supported through thick description of the research contexts and findings, enabling readers to assess the applicability of the results to other settings. Dependability was ensured through systematic documentation of research procedures, while confirmability was maintained through the use of a clear audit trail linking raw data to findings (Bloomberg & Volpe, 2022).

4. Results and Discussion
Research Results
Case 1: @Hom Hotel Kudus

As a three-star hotel operating in a second-tier city, @Hom Hotel Kudus faces tight pricing margins and high cost sensitivity. Interview data indicate that the most significant financial pressure stems from fixed costs, particularly labor expenses and electricity, while occupancy levels fluctuate considerably in line with production schedules of major manufacturing companies in the region. This pattern is consistent with the broader structural challenge observed globally, where labor remains the largest expense line in hotel profit-and-loss statements and has increased steadily in the post-pandemic era (Lee, 2025). In Indonesia specifically, hotels in secondary cities face compounded pressure as the Average Daily Rate (ADR) struggles to keep pace with rising operational costs, limiting the ability of managers to absorb cost increases through pricing adjustments (Sastri et al., 2025).

To address these constraints, management has adopted a lean organizational structure combined with a multi-skilling strategy. Departmental silos are minimized, and employees are trained to perform multiple roles across functions. For instance, Front Office staff possess basic housekeeping competencies, while security personnel assume bellboy and valet responsibilities during low-demand periods. This flexible deployment of human resources allows the hotel to adjust labor utilization dynamically in response to demand volatility. The approach is consistent with the principles of lean management in hospitality, which Perdomo-Verdecia et al. (2022) identified as an under-researched yet promising avenue for hotel efficiency improvement. Their systematic review of 36 studies revealed that lean tools such as multi-skilling, value stream mapping, and waste elimination — when appropriately adapted to service contexts — can deliver significant operational benefits, including reduced cycle times, lower labor costs, and improved resource allocation.

As a result, the hotel has successfully reduced its manning ratio to 0.4 employees per room, significantly lower than the industry average of 0.6–0.7 for comparable three-star hotels. This operational efficiency translated into a 12% reduction in payroll costs compared to

the budget, demonstrating the effectiveness of lean staffing and multi-skilling practices in sustaining cost efficiency without compromising core service delivery. These results align with benchmark data from the Asian Productivity Organization (APO, 2023), which reported that budget and mid-tier hotels across Asia increasingly adopt lean-out approaches through work-force flexibility and cross-functional training to reduce per-room labor costs, particularly in markets where revenue per worker remains constrained.

Case 2: Grand Verona Samarinda

Located in Samarinda, Grand Verona faces structural high-cost pressures typical of Kalimantan-based operations. Approximately 60% of dry food supplies and in-room amenities are sourced from Java (Surabaya and Jakarta), significantly increasing the cost of goods sold (COGS) due to logistics and transportation expenses. This dependence on distant supply chains represents a vulnerability that has been well documented in the hospitality supply chain literature. As Al-Aomar and Hussain (2023) noted in their systematic review, hotels that rely heavily on imported or long-distance supplies are disproportionately exposed to supply disruptions, fuel price volatility, and lead-time variability — challenges that are especially pronounced in archipelagic nations like Indonesia where inter-island logistics remain costly and unreliable.

In response, management adopted a supply chain localization strategy, recognizing that freight costs were largely uncontrollable. The Executive Chef implemented menu engineering by prioritizing locally sourced ingredients, substituting imported frozen marine fish with abundant local freshwater species such as *Patin* and *Haruan*. In addition, the hotel formed a joint purchasing consortium with other local hotels to enhance bargaining power with regional vegetable suppliers. This collaborative procurement model reflects a growing trend in hospitality supply chain management, where local sourcing is increasingly recognized not only as a cost-containment measure but also as a strategy that simplifies logistics, reduces lead times, and enhances flexibility in the event of supply disruptions (Vocke, 2024). Furthermore, the consortium approach resonates with Duarte Alonso et al.'s (2025) findings from Vietnam's hospitality sector, where inter-organizational relationships with local suppliers were found to contribute positively to both cost performance and innovation through open knowledge exchange and mutual resource sharing.

This strategy proved effective in mitigating cost volatility. Despite national food price inflation, the hotel maintained a stable food cost ratio of 32%, while reducing dependency on maritime logistics by approximately 40%. These findings highlight the strategic role of localized supply chains in managing cost efficiency within high-logistics-cost environments. The results are corroborated by industry evidence from Boston Consulting Group, which reported that hospitality executives who redesigned procurement processes to rationalize goods variety and prioritize local sourcing achieved food and beverage cost reductions of 5% to 15% (as cited in NetSuite, 2025).

Case 3: FUGO Hotel Banjarmasin

FUGO Hotel Banjarmasin positions itself as a four-star lifestyle hotel, where high guest expectations regarding comfort and amenities result in substantial energy consumption. Consequently, utility costs represent the second-largest expense component after labor costs. This finding is consistent with industry-wide data indicating that energy consumption can account for up to 25% of a hotel's total operating costs, representing a significant area of potential savings (Peris, 2025). The challenge for lifestyle and upper-tier hotels is particularly acute, as guest expectations for comfort — continuous air-conditioning, high-quality lighting, and extensive amenity use — create inherent tension between service standards and energy efficiency goals.

Rather than reducing service quality, management pursued a technology-driven efficiency strategy by investing in energy-saving systems. A Building Management System (BMS) was implemented to automatically regulate air-conditioning in public areas based on occupancy sensors, while Energy Saving Devices (ESD) in guest rooms ensured full power shutdown when rooms were unoccupied. The integration of IoT-enabled sensors with centralized BMS platforms has been increasingly recognized as one of the most effective strategies for hotel energy optimization. According to Korjani et al. (2024), modern Building Energy Management Systems that leverage IoT devices, cloud computing, and machine learning can optimize energy usage while simultaneously improving occupant comfort and reducing

operational costs. Industry research further suggests that BMS-enabled hotels can achieve energy efficiency improvements of 10–30%, with payback periods as short as 3–10 months for IoT-based solutions (CIM, 2025). In addition, service digitalization through QR-code menus and in-room tablets eliminated printing costs and reduced paper waste. The adoption of QR codes in hospitality has accelerated since the COVID-19 pandemic, driven by guest preferences for contactless interactions. Recent evidence indicates that over 70% of travelers now expect their accommodations to offer technology amenities, and guest satisfaction scores can decline by as much as 50% with just a five-minute delay in service processes that digital tools can eliminate (Uniqode, 2024).

These initiatives resulted in annual utility cost savings of approximately 15–20%. Furthermore, service digitalization improved operational speed and contributed to higher guest satisfaction scores on Online Travel Agent platforms. This case illustrates how technology-enabled efficiency can enhance cost performance while simultaneously strengthening service quality and guest experience. The dual benefit of digital transformation — operational cost reduction coupled with enhanced guest satisfaction — has been increasingly documented in the literature. Sadek (2022, as cited in Herlambang et al., 2024) demonstrated that hotels leveraging digital technologies to improve guest interactions tend to achieve higher satisfaction rates and, consequently, increased guest loyalty, while Youssofi et al. (2024) found that digitalization enhances the intended guest experience through psychological mechanisms that create perceptions of convenience, personalization, and efficiency.

Discussion

Cross-Case Analysis: The Influence of Location on Strategy

The findings of this study confirm that "location determines strategy" — no single approach is effective in all situations. This insight is theoretically grounded in contingency theory, which asserts that organizational structure and strategy must fit together with the external environment if an organization is to survive and perform optimally (Drazin & Van de Ven, 1985, as cited in Okumus et al., 2020). In the hospitality context, contingency theory has been widely applied to explain how environmental factors — including market structure, resource accessibility, and competitive intensity — shape the strategic choices available to hotel managers (Okumus et al., 2020). The present study extends this theoretical tradition by demonstrating that the same overarching objective (cost efficiency) manifests through fundamentally different strategic pathways depending on the geographical and market context in which each hotel operates. Hongpukdee et al. (2024) similarly found in their study of Thai hotels that contingency factors such as organizational size, competitive intensity, and environmental uncertainty significantly influenced the adoption and effectiveness of management accounting practices — findings that resonate strongly with the differentiated strategies observed across the three cases in this study.

Table 1. The Influence of Location on Strategy.

Dimension	@Hom Hotel Kudus	Grand Verona Samarinda	FUGO Hotel Banjarmasin
Market Characteristics	Price-Sensitive (Budget Segment)	Business & Government	Lifestyle & Leisure
Primary Cost Drivers	Labor Costs (Payroll)	Logistics Costs (Materials)	Energy Costs (Utilities)
Strategic Focus	Human Resource Efficiency	Supply Chain Efficiency	Technology-Based Efficiency
SCM Approach	Cost Reduction	Value Engineering	Process Innovation

In the Kudus case, where increasing the Average Room Rate (ARR) is structurally constrained by the price sensitivity of the local market, a defensive strategy focusing on workforce optimization and multi-skilling emerges as the most rational approach. This finding is consistent with CBRE's (2025) observation that when ADR can no longer offset labor or operator-driven cost growth, margin protection cannot depend on revenue alone — hotels must instead redesign their labor models to align staffing patterns with actual demand rather than following standardized service protocols. In contrast, the primary challenge in Samarinda lies in material accessibility, positioning supply chain innovation as the critical efficiency lever. The decision to localize sourcing and form purchasing consortia represents what Porter (1985) termed "value engineering" — a process of systematically analyzing the functions of

goods and services to achieve necessary performance at the lowest total cost. Meanwhile, in Banjarmasin, where guests demonstrate a higher willingness to pay, cost efficiency must be pursued through "invisible" technological interventions that preserve the perception of luxury. This approach aligns with what Chasapi et al. (2024) described as dynamic capabilities in hospitality — the ability to sense environmental changes, seize opportunities through technology adoption, and reconfigure organizational resources without disrupting the guest-facing value proposition.

The cross-case comparison reveals that the Resource-Based View (RBV) provides a complementary explanatory framework. Each hotel has leveraged its unique bundle of internal resources and capabilities — human capital flexibility at @Hom Kudus, local supplier networks at Grand Verona, and technological infrastructure at FUGO — to construct competitive advantages that are valuable, rare, and difficult to imitate in their respective market contexts (Helfat et al., 2023). The fact that the most effective efficiency strategy differs fundamentally across the three cases reinforces the theoretical argument that sustainable competitive advantage in hospitality emerges not from adopting universal best practices, but from the strategic alignment between a hotel's distinctive internal capabilities and its external operating environment (Zaman et al., 2022).

Impact of Efficiency on Profitability

The findings reveal differentiated effects of efficiency strategies on profitability across cases. First, regarding Gross Operating Profit (GOP), the Kudus hotel records a relatively high GOP margin due to its lean cost structure, although the absolute nominal value remains limited by the constrained ADR achievable in a price-sensitive market. This paradox — high margin efficiency coupled with low nominal profitability — reflects the broader pattern documented by HotStats (2025), where even healthy RevPAR is no longer translating into healthy GOP because the operating model in many markets has become more expensive than the underlying revenue can support. For budget-segment hotels like @Hom Kudus, the challenge is even more pronounced: every incremental increase in labor or utility costs directly reduces GOP when there is no pricing headroom to absorb the increase.

In contrast, the Banjarmasin hotel incurs higher initial depreciation costs from technology investments but achieves the most stable Revenue per Available Room (RevPAR) growth by consistently maintaining service quality. This finding illustrates the strategic logic of what Giannoukou (2024) termed the "profit flow method" — an approach where cost efficiency is measured not merely by expense reduction but by the efficiency with which revenue converts into operating profit over time. The BMS and digitalization investments at FUGO represent upfront capital expenditures that depreciate over multiple fiscal periods, but their contribution to stable RevPAR and sustained guest satisfaction creates compounding profitability benefits that exceed the initial outlay. Industry data support this logic: the 2024 Lodging Technology Study reported that 76% of hotel decision-makers identified increasing employee productivity as a top technology priority, and that technology-driven efficiency was directly correlated with stronger guest loyalty scores, which in turn drive repeat bookings and lower customer acquisition costs (Hospitality Technology, 2024).

Second, in terms of profit stability, Grand Verona Samarinda demonstrates the strongest resilience to external fluctuations. By reducing its dependence on Java-based logistics, the hotel becomes less vulnerable to fuel price increases and maritime supply disruptions. This supply chain de-risking strategy resonates with the broader post-pandemic shift in hospitality procurement, where resilience and local sourcing have replaced pure cost minimization as the dominant procurement priorities (Vocke, 2024). The hotel's stable 32% food cost ratio, maintained despite national food price inflation, demonstrates that supply chain localization functions as both a cost management tool and a risk mitigation mechanism — a dual benefit that has been increasingly recognized in the green supply chain management literature (Al-Aomar & Hussain, 2023).

Quality–Cost Equilibrium Point

The discussion highlights that cost-cutting strategies have a clear saturation point beyond which efficiency becomes counterproductive. In the Kudus case, excessively intensive multiskilling practices begin to generate employee burnout, which may increase turnover and negatively affect service friendliness. This finding is strongly supported by recent empirical evidence from the hospitality sector. Salama et al. (2022) demonstrated that work stress and job

burnout have a significant positive relationship with turnover intention among hotel employees, with burnout partially mediating the stress–turnover pathway. Similarly, Baquero et al. (2023) found in their study of UAE hotel employees that the impact of burnout on psychological distress and subsequent intention to quit varies significantly depending on financial well-being and organizational support structures. In the Indonesian context specifically, annual workforce turnover in hotels ranges between 11% and 38% (Mantik et al., 2022, as cited in Tri Adiyono et al., 2024), underscoring the real cost implications of burnout-inducing efficiency strategies. The HVS (2025) report further cautioned that outdated staffing models — where labor hours are tied to standard operating procedures rather than actual guest demand — represent one of three primary structural pressures eroding hotel profitability, implying that the solution lies not in simply reducing headcount but in intelligently redesigning how labor is deployed.

These findings support theoretical arguments that aggressive cost efficiency, when pursued in isolation, can undermine long-term service performance. The tension between cost reduction and service quality has been theoretically framed as a "quality–cost equilibrium" — a threshold beyond which further cost compression diminishes the guest value proposition and ultimately erodes the revenue base that profitability depends upon. Giannoukou (2024) provided empirical support for this concept through her profit flow analysis, demonstrating that hotels achieving the highest profitability were those that maintained a deliberate balance between cost control and service investment, rather than those that pursued the most aggressive cost reduction. Santos et al. (2024) similarly found that during economic crises, hotels that combined revenue management with selective cost optimization outperformed those that relied predominantly on across-the-board cost cutting.

Conversely, the value engineering approaches adopted in Samarinda and Banjarmasin demonstrate that efficiency and quality can be mutually reinforcing — a phenomenon that Perdomo-Verdecia et al. (2022) identified as the hallmark of lean management philosophy, where the objective is waste elimination rather than value elimination. In Samarinda, substituting imported ingredients with fresh local products simultaneously enhances food quality and reduces cost — the freshwater *Patin* and *Haruan* are not merely cheaper alternatives but are regarded by local consumers as superior in taste and freshness compared to frozen imported marine fish. This outcome exemplifies what lean practitioners term *muda* elimination: removing the waste embedded in unnecessarily complex supply chains without diminishing the end-product value perceived by the customer.

In Banjarmasin, service digitalization through QR-code menus and in-room tablets accelerates service delivery without compromising — and in many instances enhancing — the guest experience. The digitalization paradox in hospitality, as Youssofi et al. (2024) noted, is that technology initially perceived as depersonalizing can actually enhance the perceived guest experience by creating convenience, reducing wait times, and enabling personalization. The FUGO case provides empirical support for this paradox: guests did not perceive the removal of printed menus and manual ordering processes as a reduction in service quality; rather, the digital alternatives were associated with higher satisfaction scores on OTA platforms, suggesting that the efficiency gains were transparent — or even beneficial — from the guest perspective. El-Said and Smith (2023) observed a similar pattern in their study of hospitality resilience management, where hotels that implemented new technologies to minimize personal contact and streamline service delivery during and after the COVID-19 crisis achieved both cost savings and improved guest perceptions of service modernity.

These findings collectively reinforce the notion that true efficiency lies in eliminating waste rather than eliminating value. The distinction between *strategic costs* that enhance guest value and *non-strategic costs* that represent operational waste (Manurung et al., 2025) emerges as the critical managerial competency that separates sustainable efficiency improvement from destructive cost-cutting. Hotels that successfully navigate this distinction — as demonstrated by the three cases in this study — are able to achieve what may be termed "value-preserving efficiency": cost structures that are lean without being fragile, and service models that are efficient without being diminished.

5. Comparison

This study occupies a distinctive position within the landscape of hotel cost efficiency literature, which is predominantly dominated by quantitative approaches focused on single efficiency dimensions. Recent state-of-the-art studies such as Assaf et al. (2021) employed information entropy-based Data Envelopment Analysis to measure the technical efficiency of hotels in the United Kingdom, Hongpukdee et al. (2024) applied a large-scale survey (n=312) to examine the influence of management accounting practices on hotel financial performance in Thailand, and Iryani et al. (2024) utilized longitudinal panel data to analyze competitive strategies of hotels in Indonesia. While these quantitative approaches are effective in identifying statistical patterns, they are less capable of explaining *why* and *how* specific strategies are selected and implemented across different contexts. This study addresses this gap by adopting a comparative multiple-case study design across three hotels in three provinces, enabling an in-depth analysis of managerial decision-making processes that cannot be captured by DEA models or panel regression.

In terms of scope, state-of-the-art studies generally focus on a single efficiency dimension in isolation: Al-Aomar and Hussain (2023) examined green supply chain management exclusively, Karvounidi et al. (2024) focused on energy efficiency through BMS and IoT technologies, Salama et al. (2022) explored the impact of burnout on hotel employee turnover, while Perdomo-Verdecia et al. (2022) in their systematic review identified that lean management in hotels remains severely under-researched with minimal empirical evidence. This study simultaneously integrates three dimensions — labor (lean operations), supply chain (localization), and technology (technology-driven efficiency) — within a single comparative framework, demonstrating not only *what* works but also *when* and *where* specific strategies are most effective.

The geographical context also distinguishes this study significantly. Most influential hotel efficiency studies have been conducted in developed countries — Giannoukou (2024) in Greece, Santos et al. (2024) in Portugal, El-Said and Smith (2023) in Egypt — or in mainland Southeast Asian contexts such as Thailand and Vietnam (Duarte Alonso et al., 2025). The archipelagic context of Indonesia, particularly the logistics cost disparity between Java and Kalimantan, has never been explored in the hotel efficiency literature. The finding that inter-island logistics costs constitute a cost driver of comparable significance to labor costs represents an empirical contribution absent from studies conducted in continental contexts.

Theoretically, comparative studies generally employ single frameworks — contingency theory, TAM, or social exchange theory in isolation. This study integrates contingency theory with the resource-based view to provide a dual explanation: why hotels in different locations select different strategies, and how the unique resources of each hotel enable the implementation of those strategies. This integration gives rise to the concept of "value-preserving efficiency" — efficiency that eliminates waste without eliminating value — an integrative framework that transcends the prevailing cost-cutting versus service quality dichotomy in the existing literature (Giannoukou, 2024; Santos et al., 2024). Accordingly, this study contributes measurably across six dimensions simultaneously: methodology, efficiency scope, geographical context, theoretical framework, conceptual novelty, and the integration of quantitative metrics within qualitative narratives.

6. Conclusions

Based on the cross-case analysis and discussion, this study concludes that operational cost-efficiency strategies in the hotel industry are highly contingent upon geographical location and market segmentation. The same strategic objective — cost efficiency — manifests through fundamentally different pathways depending on the environmental and market conditions in which each hotel operates. Hotels operating in Java's secondary industrial cities tend to prioritize labor efficiency through lean organizational structures and workforce multi-skilling, driven by intense price competition and structurally constrained room rates that limit the ability to absorb cost increases through pricing adjustments. Conversely, hotels in Kalimantan — characterized by high inter-island logistics costs and infrastructural constraints — focus on supply chain localization and utility efficiency as their primary levers. @Hom Hotel Kudus achieved a manning ratio of 0.4 employees per room with a 12% payroll reduction; Grand Verona Samarinda reduced maritime logistics dependency by 40% while maintaining a stable

32% food cost ratio; and FUGO Hotel Banjarmasin realized 15–20% utility savings through Building Management Systems and service digitalization.

Furthermore, efficiency strategies exert a positive impact on profitability when implemented through a Strategic Cost Management approach that deliberately aligns cost control with value creation. The evidence from all three cases demonstrates that hotels combining selective cost optimization with service investment achieve more sustainable profitability outcomes than those pursuing aggressive across-the-board cost-cutting. The Samarinda and Banjarmasin cases confirm that efficiency and quality can be mutually reinforcing — locally sourced ingredients simultaneously improved food quality and reduced costs, while digital service tools enhanced guest satisfaction scores alongside expense elimination. This phenomenon is captured in the concept of "value-preserving efficiency" that emerges from this study: cost structures that are lean without being fragile, and service models that are efficient without being diminished.

In contrast, the Kudus case reveals the existence of a quality–cost equilibrium threshold — a saturation point beyond which intensified multi-skilling generates employee burnout and turnover risk, ultimately undermining the service performance that profitability depends upon. Managerial success therefore hinges on the ability to accurately distinguish between strategic costs that enhance guest value and non-strategic costs that represent operational waste, protecting the former while aggressively reducing the latter.

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