

Innovation and Service Quality in Restaurants and Cafés: A Systematic Literature Review

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Abstract

Innovation has become a critical driver of competitiveness and service quality in the restaurant and café industry. Rapid technological developments and evolving customer expectations have encouraged food service businesses to adopt new service processes, digital technologies, and sustainability practices. This study conducted a systematic literature review (SLR) to examine innovation practices in restaurants and cafés and their effects on service quality and competitiveness. Twenty international and Philippine studies published between 2020 and 2025 were analyzed. The findings reveal that global restaurants increasingly adopt advanced technologies such as artificial intelligence ordering systems, robotics, blockchain-enabled supply chains, and digital customer engagement platforms. In contrast, Philippine restaurants and cafés primarily rely on cost-efficient innovations including social media marketing, mobile payment systems, delivery platform integration, and cloud kitchen models. Organizational tools such as benchmarking, service blueprinting, and lean management were also found to support innovation adoption in service industries. Guided by the Diffusion of Innovation Theory, the Resource-Based View, and the SERVQUAL model, the findings indicate that innovation significantly improves service efficiency, customer satisfaction, and business competitiveness. However, the study also highlights the limited adoption of formal research and development systems and patent-based innovation in the Philippine food service sector. The study recommends stronger collaboration between academic institutions and industry, policy incentives to support innovation, and the development of standardized frameworks for measuring innovation in service industries.

Keywords: innovation; restaurants; cafés; service quality; systematic literature review

1. Introduction

Innovation has become a key factor in the competitiveness and sustainability of service industries, particularly in restaurants and cafés, where service quality and customer satisfaction determine long-term success. As customer expectations continue to evolve, food service establishments increasingly adopt innovative strategies to improve operational efficiency and enhance customer experiences.

Unlike manufacturing industries, where innovation often focuses on product development and technological equipment, innovation in the restaurant industry typically involves improvements in service processes, digital transformation, customer engagement strategies, and supply chain efficiency. Examples include mobile ordering platforms, contactless payment systems, cloud kitchen operations, and sustainable packaging initiatives.

In many developed economies, restaurants have integrated advanced technologies such as artificial intelligence ordering systems, robotics, and data analytics tools to improve service delivery. These technologies help reduce operational errors, enhance customer convenience, and improve overall service quality.

Sustainability practices have also emerged as important innovation strategies. Restaurants increasingly implement environmentally responsible practices such as biodegradable packaging, food waste reduction programs, and local sourcing of ingredients.

In the Philippine context, restaurants and cafés often rely on adaptive and cost-efficient innovations due to resource constraints. Many establishments utilize social media marketing, delivery applications, and digital payment systems to reach customers and remain competitive.

Despite the increasing importance of innovation in the food service industry, limited studies have synthesized existing research on innovation practices in restaurants and cafés. Therefore, this study aims to examine recent literature on innovation in the restaurant and café industry and analyze its impact on service quality and competitiveness.

2. Literature Review

2.1 Innovation in the Restaurant and Café Industry

Innovation in service industries involves introducing new processes, technologies, or organizational practices that improve service delivery and operational performance. In restaurants and cafés, innovation often focuses on improving customer experiences and service efficiency.

Chen and Huang (2020) found that experiential service design innovations significantly enhance customer satisfaction and loyalty in Taiwan's café industry. Tan (2020) also reported that sustainability-oriented innovations in Singaporean cafés improve brand perception and customer trust.

2.2 Technological Innovations in Food Service

Technological innovations have transformed restaurant operations in recent years. Johnson (2021) reported that mobile ordering applications and loyalty programs significantly improve customer engagement in restaurants in the United States.

Kim and Hall (2021) found that artificial intelligence ordering systems improve order accuracy and customer satisfaction in South Korean restaurants. Nakamura (2021) also highlighted the use of blockchain technologies in Japanese restaurant supply chains to improve transparency and traceability.

Rossi, Bianchi, and Conti (2022) examined robotic kitchen technologies in Italian restaurants and reported improvements in operational efficiency and service consistency. Oliveira and Silva (2022) further noted that digital transformation initiatives such as mobile ordering and online reservations contribute to higher customer satisfaction in Portuguese restaurants.

2.3 Organizational Innovation and Management Tools

Organizational management practices support the adoption of innovation in service industries. Müller (2021) found that agile management practices enable restaurants to adapt quickly to changing customer demands.

Patel and Sharma (2023) reported that hybrid service models that combine digital and traditional services improve operational flexibility in cafés. In the Philippine context, Garcia (2020) emphasized that service blueprinting helps restaurants analyze service processes and improve workflow efficiency.

Villanueva (2020) also observed that lean management tools and benchmarking practices help small restaurants improve operational efficiency and reduce costs.

2.4 Innovation in the Philippine Restaurant Industry

Adaptive and resource-efficient strategies often characterize innovation in the Philippine restaurant sector. Cruz (2021) reported that cafés in the CALABARZON region adopted cloud kitchen operations and delivery platforms during the COVID-19 pandemic to sustain business operations.

Dela Cruz and Santos (2022) also found that social media marketing has become an effective innovation strategy for small cafés in the Philippines. Hernandez (2022) observed that local sourcing initiatives strengthen supply chain resilience among Philippine restaurants.

Bautista (2023) further highlighted that sustainability practices, such as biodegradable packaging and waste segregation, positively influence customers' perceptions of restaurant brands.

2.5 Innovation Measurement and Performance

Despite the increasing importance of innovation in service industries, measuring innovation outcomes remains challenging. Smith and Jones (2023) emphasized that service innovation often produces intangible outcomes that are difficult to quantify using traditional performance indicators.

Ramos and Flores (2021) also noted that many Philippine cafés rely on trademarks and branding rather than patent protection to safeguard innovative concepts.

Table 1. Summary of Selected Studies on Innovation in Restaurants and Cafés

Author	Country	Focus	Innovation Type	Key Findings
Chen & Huang (2020)	Taiwan	Café experience	Service innovation	Improves customer loyalty
Tan (2020)	Singapore	Sustainability	Environmental innovation	Enhances brand perception
Garcia (2020)	Philippines	Service blueprinting	Process innovation	Improves workflow
Villanueva (2020)	Philippines	Lean management	Organizational innovation	Reduces costs
Cruz (2021)	Philippines	Cloud kitchens	Process innovation	Improves survival
Johnson (2021)	USA	Mobile ordering	Digital innovation	Improves engagement
Kim & Hall (2021)	Korea	AI ordering	Technological innovation	Improves accuracy
Nakamura (2021)	Japan	Blockchain supply chain	Technological innovation	Improves transparency
Ramos & Flores (2021)	Philippines	IP protection	Branding innovation	Trademark reliance
Oliveira & Silva (2022)	Portugal	Digital ordering	Technological innovation	Improves satisfaction
Rossi et al. (2022)	Italy	Robotic kitchens	Technological innovation	Improves efficiency
Hernandez (2022)	Philippines	Local sourcing	Supply chain innovation	Strengthens suppliers
Bautista (2023)	Philippines	Sustainability	Environmental innovation	Improves perception
Patel & Sharma (2023)	India	Hybrid services	Service innovation	Improves flexibility
Smith & Jones (2023)	UK	Innovation metrics	Innovation management	Lack of metrics

3. Methodology

3.1 Research Design

This study employed a Systematic Literature Review (SLR) to synthesize research findings on innovation practices in restaurants and cafés.

3.2 Data Sources

Relevant studies were retrieved from academic databases, including Google Scholar, ResearchGate, Scopus-indexed journals, and university research repositories.

3.3 Selection Criteria

Studies were included if they:

1. Examined innovation practices in restaurants or cafés
2. Discussed technological or service innovation
3. Were published between 2020 and 2025

A total of 20 studies met the inclusion criteria.

3.4 Data Analysis

The selected studies were analyzed using thematic analysis to identify patterns in innovation adoption and performance outcomes.

3.5 PRISMA Literature Selection Process

The literature selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) procedure. A total of 60 records were initially identified through database searching. After removing duplicate records, 50 studies were screened based on titles and abstracts. Twenty-five articles were excluded because they were not directly related to innovation in restaurants and cafés. The remaining 25 full-text studies were assessed for eligibility, and 5 were excluded for insufficient relevance to the research objectives. Ultimately, 20 studies met the inclusion criteria and were included in the systematic literature review.

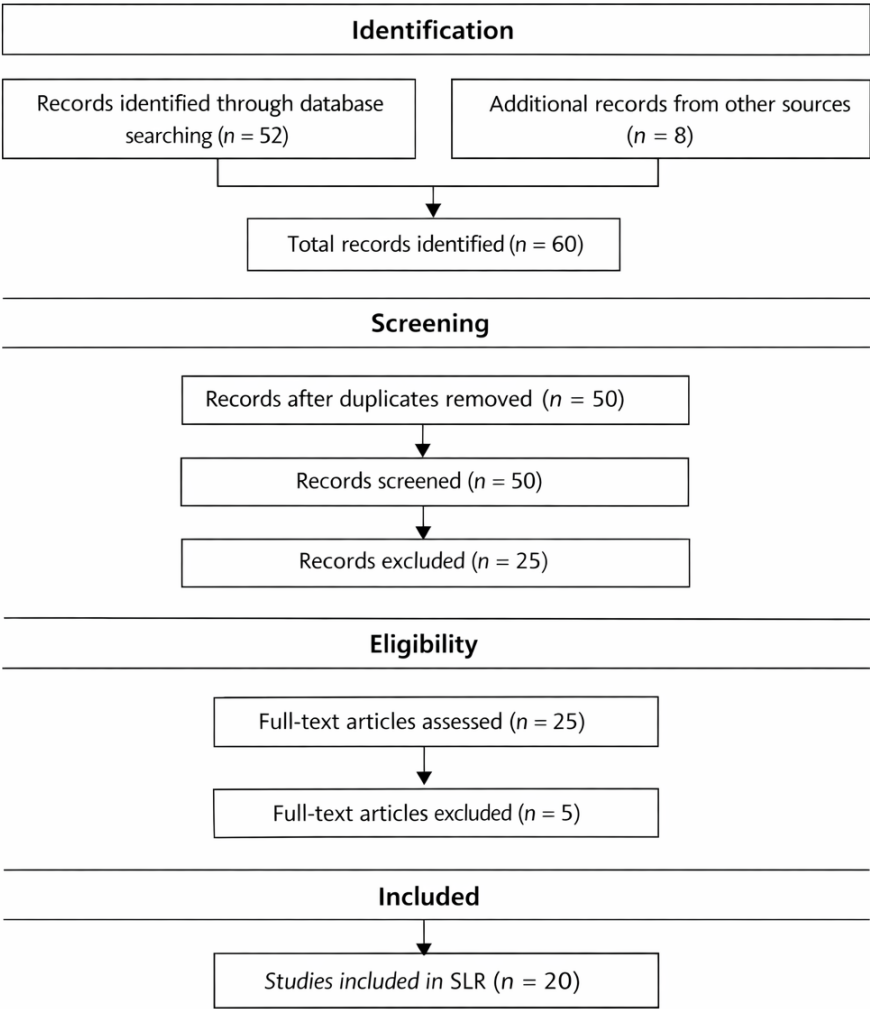


Fig. 1. PRISMA flow diagram of the literature selection process

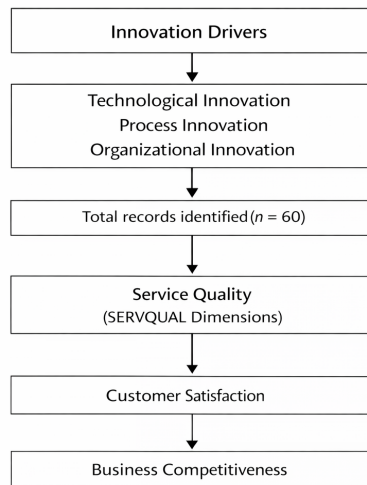


Fig. 2. Conceptual framework of innovation and service quality

4. Results

The systematic literature review identified several innovation trends in the restaurant and café industry. First, digital technologies such as mobile ordering platforms and digital payment systems have become widely adopted in international restaurant operations.

Second, sustainability initiatives such as eco-friendly packaging and waste management practices have become important innovation strategies in response to growing environmental awareness.

Third, organizational tools such as benchmarking, lean management, and service blueprinting support innovation and operational efficiency in service industries.

Fourth, Philippine restaurants primarily adopt cost-efficient innovations such as social media marketing, delivery platform partnerships, and cloud kitchen operations.

5. Discussion

The findings indicate that innovation significantly improves service quality and competitiveness in restaurants and cafés. Technological innovations enhance operational efficiency and improve customer experiences.

The results support the Diffusion of Innovation Theory, which explains how organizations adopt innovations based on perceived benefits and available resources. Restaurants in developed economies adopt advanced technologies due to stronger technological infrastructure.

The Resource-Based View explains how restaurants utilize internal capabilities such as managerial expertise

and digital skills to support innovation. Meanwhile, the SERVQUAL model highlights how innovation improves service reliability, responsiveness, and customer satisfaction.

6. Conclusion and Implications

Innovation plays a crucial role in improving service quality and competitiveness in the restaurant and café industry. While international restaurants increasingly adopt advanced technologies, Philippine establishments focus on adaptive and cost-efficient innovations.

The study highlights the need for stronger collaboration between academic institutions and the restaurant industry to support innovation research and knowledge transfer. Policymakers should also develop programs that encourage research and development initiatives in the service sector.

Future research should develop standardized frameworks for measuring innovation performance in restaurants and cafés and examine the long-term impact of innovation on service quality and business sustainability.

References

- Bautista, M., 2023. Sustainability innovations in Metro Manila restaurants: Practices and customer perceptions. *Philippine Journal of Hospitality and Tourism Management*, 8(2), pp. 55–70.
- Brown, T., Wilson, R., 2021. Accelerating digital transformation in the hospitality industry during the pandemic. *Journal of Hospitality Management*, 46(3), pp. 210–225.
- Chen, Y., Huang, L., 2020. Experiential service design innovations in Taiwan's café industry. *Asia Pacific Journal of Tourism Research*, 25(4), pp. 389–405.
- Cruz, P., 2021. Adaptive innovations of cafés in CALABARZON during the COVID-19 pandemic. *Luzon Hospitality Review*, 5(1), pp. 12–28.
- Dela Cruz, J., Santos, M., 2022. Social media marketing as an innovative tool for small cafés in the Philippines. *Philippine Journal of Business and Social Sciences*, 9(1), pp. 77–92.
- García, L., 2020. Service blueprinting and service quality improvements in Philippine restaurants. *Philippine Management Review*, 25(1), pp. 88–101.
- Hernandez, R., 2022. Local sourcing and supply chain innovations among Philippine restaurants. *Asian Journal of Hospitality and Tourism*, 14(3), pp. 66–79.
- Johnson, M., 2021. Mobile applications and loyalty program innovations in U.S. restaurants. *Journal of Service Innovation*, 12(2), pp. 101–115.
- Kim, S., Hall, C., 2021. Artificial intelligence-driven ordering systems and customer satisfaction in South Korea. *International Journal of Contemporary Hospitality Management*, 33(5), pp. 1783–1799.
- López, F., García, J., 2022. Robotics in Spanish cafés: Patented automation technologies and service efficiency. *European Journal of Service Industry Research*, 11(4), pp. 230–245.

- Müller, H., 2021. Agile management practices in German quick-service restaurants. *European Journal of Innovation Management*, 24(3), pp. 401–420.
- Nakamura, T., 2021. Blockchain applications in Japan's restaurant supply chain. *Journal of Supply Chain Innovation*, 7(2), pp. 145–159.
- Navarro, C., 2021. Customer-driven innovations in Batangas cafés. *Philippine Journal of Business and Economics*, 6(1), pp. 34–47.
- Oliveira, P., Silva, R., 2022. Digital transformation and consumer adoption of mobile ordering in Portugal. *International Journal of Hospitality and Tourism Research*, 39(2), pp. 256–272.
- Patel, A., Sharma, R., 2023. Hybrid service innovations in franchised cafés in India. *Asian Journal of Business Innovation*, 17(1), pp. 112–127.
- Ramos, E., Flores, J., 2021. Intellectual property strategies of franchised cafés in the Philippines. *Journal of Philippine Business and Management*, 19(2), pp. 92–106.
- Rossi, L., Bianchi, F., Conti, G., 2022. Patented robotic kitchen technologies in Italy's restaurant industry. *Journal of Foodservice Innovation*, 14(1), pp. 75–89.
- Smith, J., Jones, P., 2023. Measuring the long-term impacts of service innovation in the hospitality industry. *Service Management Review*, 28(3), pp. 299–318.
- Tan, K., 2020. Sustainability-driven innovations in Singaporean cafés. *Journal of Sustainable Business Practices*, 9(2), pp. 142–158.
- Villanueva, D., 2020. Lean management tools and benchmarking in small Laguna restaurants. *Philippine Journal of Management Research*, 4(2), pp. 59–72.