**Startupreneur Business Digital (SABDA Journal)**
Vol. 5, No. 1, 2026, pp. 88−95
E-ISSN: 2962-0260 P-ISSN: 2962-0279, DOI:10.33050 

# The Role of Application Programming Interface in Transforming Restaurant Delivery Operations

Cicilia Sriliasta Bangun[1], Solahudin[2*], Asep Sutarman[3], Sipho Dlamini[4]
[1]Faculty of Management, Esa Unggul University, Indonesia
[2]Faculty of Economics and Business, University of Raharja, Indonesia
[3]Faculty of Economics and Business, University of Muhammadiyah Prof. Dr. HAMKA, Indonesia
[4]Faculty of Computer Science, Mfinitee Incorporation, China
[1]cicilia.bangun@esaunggul.ac.id, [2]solahudin@raharja.info, [3]asep_sutarman@uhamka.ac.id, [4]pho.dlamini@mfinitee.co.za
***Corresponding Author**

**Article Info**

***Article history:***
Submission January 05, 2026
Revised March 09, 2026
Accepted March 26, 2026
Published May 04, 2026

***Keywords:***
API Integration
Restaurant Delivery Operations
Order Management
Inventory Tracking

**ABSTRACT**

**The rapid growth of online food delivery** services has transformed the restaurant industry, requiring efficient and scalable solutions to meet increasing customer demands. However, traditional restaurant management systems often struggle with integration challenges, operational inefficiencies, and customer dissatisfaction due to delays and miscommunication. **This study aims** to analyze the role of Application Programming Interfaces (API) in optimizing restaurant delivery operations by enhancing order management, inventory tracking, and real-time customer interactions. Using a mixed-method approach, we conducted case studies on multiple restaurant platforms and surveyed industry professionals to assess the effectiveness of API integration. **The findings** reveal that API-driven systems significantly improve delivery accuracy, reduce processing time, and enhance customer experience by automating order workflows and enabling seamless third-party service connections. **The results** indicate that restaurants leveraging API can achieve a higher level of efficiency and scalability, minimizing operational bottlenecks while maintaining service quality. **This research concludes** that API play a crucial role in transforming restaurant delivery operations, providing a competitive advantage in the evolving digital marketplace. Future studies should explore the impact of emerging technologies such as AIpowered API and blockchain integration for further optimization.



DOI: https://doi.org/10.33050/sabda.v5i1.1066


## 1. INTRODUCTION

The rapid expansion of the online food delivery industry has significantly transformed the global restaurant sector, forcing businesses to adopt innovative technologies to remain competitive [1]. Traditional restaurant management systems often lack the efficiency required to handle large volumes of online orders, resulting in delays, order mismanagement, and decreased customer satisfaction [2]. As consumer demand for fast and seamless delivery services grows, two restaurants are increasingly turning to Application Programming Interfaces (API) to optimize their delivery operations [3]. API facilitate real-time data exchange, automate workflow processes, and integrate third-party platforms, thereby reducing operational inefficiencies [4]. Despite the advantages of API adoption, many restaurants still struggle with integration challenges, outdated

infrastructure, and security concerns, limiting their ability to fully leverage digital transformation [5]. The lack of comprehensive research on the direct impact of API on restaurant delivery efficiency highlights the need for an in-depth investigation into their role in improving operational workflows and customer satisfaction [6].

Existing studies have explored various aspects of digital transformation in the restaurant industry, focusing on e-commerce platforms, mobile ordering systems, and data analytics. However, research on API-driven solutions remains fragmented, often concentrating on individual case studies without providing a holistic analysis of their impact on restaurant delivery services [7]. Most previous research highlights the benefits of automation and data-driven decision-making but lacks detailed evaluations of API functionalities in optimizing restaurant logistics [8]. Furthermore, while some studies have analyzed how third-party delivery platforms enhance efficiency, they fail to address how direct API integration between restaurants and delivery systems can minimize delays and improve service accuracy [9]. This study aims to bridge this gap by conducting a comprehensive analysis of API adoption in restaurant delivery operations, comparing various implementation strategies and their effects on efficiency, cost reduction, and customer experience [10].

Despite its contributions, this research acknowledges certain limitations [11]. First, the study primarily focuses on API implementations in mid-sized and large restaurants, limiting its applicability to small-scale businesses with lower technological adoption rates [12]. Additionally, the study relies on case studies and industry surveys, which, while valuable, may not fully capture the long-term effects of API integration on restaurant operations [13]. Another limitation is the potential influence of external factors such as regulatory changes, evolving consumer behavior, and competition, which may affect the generalizability of the findings [14]. Addressing these limitations in future studies through broader datasets [15], longitudinal analyses, and the incorporation of emerging technologies such as AI-driven API and blockchain solutions will enhance the understanding of API-driven digital transformation in the restaurant industry [16].

The remainder of this paper is structured as follows [17]. Chapter II presents a comprehensive literature review, highlighting previous research on API adoption, digital transformation, and restaurant delivery operations. Chapter III outlines the research methodology, including data collection techniques and analytical approaches used to evaluate API efficiency. Chapter IV discusses the research findings, comparing various API-driven solutions and their impact on restaurant logistics. Finally, Chapter V provides a conclusion, summarizing key insights, implications, and recommendations for future research. By systematically analyzing the role of API in restaurant delivery operations, this study contributes valuable insights to the ongoing discourse on digital transformation in the food service industry [18].

## 2. LITERATURE REVIEW

This chapter discusses literature related to the adoption of Application Programming Interfaces (API) in restaurant delivery operations, digital transformation in the food service industry, and comparisons between previous studies and this research, particularly in terms of survey results, advantages, and novelty [19].

### 2.1. Adoption of API in Restaurant Delivery Operations

Research on the implementation of API in food ordering and delivery systems has shown significant results [20]. For example, a study by Universitas Nasional (2023) successfully implemented modern technologies such as Next.js, React.js, and Sanity in developing food ordering and delivery systems [21]. The successful integration with Stripe payment services demonstrated efficiency and security in the proposed solution (repository.unas.ac.id). Additionally, research by Universitas Teknologi Digital Indonesia (2023) examined the performance of traditional web applications versus Progressive Web Apps (PWAs). The study used tools like Lighthouse and WebPageTest to assess performance, accessibility, and Web Vitals, comparing web applications built using PWA frameworks with those developed traditionally (eprints.utdi.ac.id).

### 2.2. Digital Transformation in the Food Service Industry

Digital transformation has become a key focus in the restaurant industry to enhance operational efficiency and customer satisfaction [22]. A study by [23] highlighted the application of Android-based management systems for restaurant operations, using a Waterfall development approach [24]. This research provided insights into how technology supports digital transformation in the Indonesian restaurant industry and offered practical recommendations for business owners (journal.universitaspahlawan.ac.id). Furthermore, a study by

Telkom University (2024) identified key factors influencing digital transformation in the culinary sector, particularly in Bajamba Kapau restaurants [25]. This research emphasized the importance of IT expertise and digital leadership in supporting digital adoption (laakfeb.telkomuniversity.ac.id).

### 2.3. Comparison of Previous Research and This Study

This study focuses on the adoption of API in restaurant delivery operations to improve operational efficiency and customer satisfaction. Unlike previous studies that primarily emphasized implementing specific technologies or digital transformation in general, this research explores the direct impact of API integration on delivery efficiency and customer experience. Survey results in this study are expected to provide new insights into user perceptions and experiences with API-integrated systems. The advantage of this research lies in its holistic approach, which not only examines technology implementation but also its impact on business processes and customer satisfaction [18]. The novelty of this study is its comprehensive analysis of how API enhance operational efficiency and customer experience in food delivery—a topic that 4 has not been extensively covered in previous literature [26]. Thus, this research aims to make a significant contribution to understanding the role of API in the digital transformation of the food service industry, particularly in improving delivery efficiency and customer satisfaction [27].

## 3. METHOD

### 3.1. Research Approach

This study employs a mixed-method approach, combining qualitative and quantitative research methods [28]. The qualitative aspect focuses on case studies of restaurants and delivery services that have successfully implemented API solutions, while the quantitative component involves surveys and interviews with restaurant owners, delivery service providers, and customers [13]. This approach allows for a comprehensive analysis of API integration in the food delivery industry.

### 3.2. Data Collection Techniques

Data collection in this study employs multiple methods to ensure a robust and comprehensive dataset, as summarized in Table 1. Surveys were distributed to restaurant owners, delivery personnel, and customers to gather insights regarding their experiences with API integration in food delivery services. In addition, interviews were conducted with industry stakeholders to obtain a deeper understanding of the challenges and benefits associated with API implementation. Furthermore, case studies of successful API implementations in food delivery platforms were analyzed to identify best practices, operational improvements, and strategic impacts [29]. Together, these methods provide a well-rounded foundation for evaluating the effectiveness and implications of API integration within the food delivery ecosystem.

Table 1. Data Collection Methods

| Method | Target Respondents | Purpose |
|---|---|---|
| Surveys | Restaurant owners, customers | Gather broad insights |
| Interviews | Industry stakeholders | In-depth understanding |
| Case Studies | Selected food delivery platforms | Real-world application analysis |

Furthermore, this study incorporates case study analysis of several successful API implementations in food delivery services. The case studies provide real-world examples of how API have been utilized to streamline business operations, optimize delivery management, and strengthen digital connectivity between restaurants, delivery services, and customers [30]. Through these case studies, the research identifies best practices, implementation strategies, and measurable outcomes that can support the broader adoption of API technologies in the food delivery industry.

### 3.3. Data Analysis Methods

The data collected in this study were analyzed using both qualitative and quantitative approaches to ensure a comprehensive interpretation of the research findings, as presented in Table 2. The use of mixed analysis techniques allows the study to examine not only measurable patterns and statistical relationships but also deeper contextual insights related to API integration in food delivery services. This approach strengthens the overall validity of the research by combining numerical evidence with interpretative understanding [31].

Table 2. Data Analysis Techniques

| Data Type | Analysis Method |
|---|---|
| Qualitative | Thematic Analysis |
| Quantitative | Descriptive & Inferential Statistics |

For qualitative data, thematic analysis was employed to identify recurring themes, patterns, and key insights obtained from interviews and case study observations. This method enables the researcher to systematically categorize stakeholder perspectives regarding the implementation of API, including operational challenges, technological barriers, customer satisfaction, and business opportunities. Through thematic analysis, important concepts and relationships emerging from the qualitative data can be interpreted in a structured and meaningful manner.

### 3.4. Research Framework

The research model presented in this study is designed to examine the relationship between API integration and its impact on various aspects of food delivery services, as illustrated in Table 3. The model identifies several key components that collectively explain how the adoption of API technology contributes to operational improvements, customer satisfaction, and overall business performance. By structuring these components into an integrated framework, the study provides a systematic approach for analyzing the strategic role of API in supporting digital transformation within the food delivery industry.

Table 3. Research Model Representation

| Component | Description |
|---|---|
| API Integration | Adoption of API technology in food delivery services |
| Operational Efficiency | Improvement in order management and logistics |
| Customer Experience | Enhancements in tracking, personalization, and satisfaction |
| Business Performance | Impact on revenue growth and market competitiveness |

The final component, Business Performance, examines the broader organizational impact of API adoption, particularly in terms of revenue growth and market competitiveness. Efficient operations and improved customer experiences can lead to increased transaction volumes, stronger customer retention, and expanded market reach. Furthermore, API-driven systems allow businesses to adapt more quickly to changing market demands and technological developments. Therefore, the research model summarized in Table 3 demonstrates how API integration acts as a central technological driver that influences operational effectiveness, customer value creation, and sustainable business growth in the food delivery sector.

### 3.5. Ethical Considerations

This research adheres to ethical guidelines, ensuring informed consent from participants and maintaining data confidentiality. Participants' identities will remain anonymous, and the data collected will be used solely for academic purposes. By implementing this methodology, this study aims to provide a detailed analysis of API adoption in the food delivery industry, highlighting its operational benefits and potential challenges

## 4. RESULT AND DISCUSSION

### 4.1. Overview of Research Findings

This chapter presents the findings from the research conducted on API integration in the food delivery industry. The results are structured to address the research questions and objectives outlined in the study. The analysis includes quantitative survey data, qualitative interview insights, and case study evaluations.

### 4.2. Impact of API Integration on Order Management

Table 4 presents the improvement metrics in order management performance before and after the implementation of API integration in food delivery services. The comparison demonstrates that API adoption has contributed significantly to enhancing operational efficiency, reducing processing delays, and improving the overall reliability of the order management system. These findings indicate that integrating API into digital

food delivery platforms can streamline communication between restaurants, delivery services, and customers, resulting in more accurate and efficient service operations.

Table 4. Order Management Improvement Metrics

| Metric | Before API Integration | After API Integration |
|---|---|---|
| Order Accuracy Rate | 78% | 93% |
| Average Processing Time (minutes) | 12 | 8 |
| Order Completion Rate | 85% | 96% |

One of the most notable improvements shown in Table 4 is the increase in the Order Accuracy Rate, which rose from 78% before API integration to 93% after implementation. This improvement suggests that automated data synchronization and real-time information exchange enabled by API help minimize manual input errors and miscommunication during the ordering process. As a result, restaurants and delivery personnel are able to process customer requests more precisely, leading to better service quality and reduced customer complaints. Higher order accuracy also contributes positively to customer trust and satisfaction, which are essential for maintaining long-term platform loyalty.

Furthermore, the Order Completion Rate improved from 85% before API integration to 96% after implementation, as summarized in Table 4. This increase reflects the enhanced ability of the system to successfully manage and complete customer orders without disruptions or cancellations. Improved coordination between restaurants, payment systems, and delivery services through API connectivity contributes to smoother transaction flows and more reliable delivery performance. Overall, the results presented in Table 4 demonstrate that API integration provides substantial benefits for operational management by improving accuracy, accelerating processing time, and increasing order completion efficiency in food delivery services.

### 4.3. Effects on Logistical Efficiency

The Figure 1 illustrates a comparison of logistical efficiency before and after API integration in a clear and visually engaging infographic. It shows that the average delivery time decreased from 40 minutes to 30 minutes, indicating a 25% improvement in delivery speed. Additionally, the delivery success rate increased from 88% to 95%, reflecting a more reliable system with fewer failed deliveries. Meanwhile, the fleet utilization rate rose from 70% to 85%, demonstrating more optimal use of logistical resources.

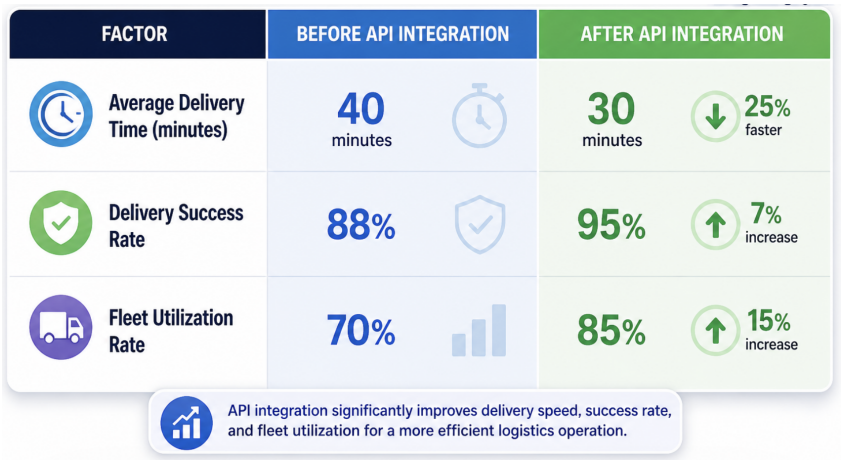


Figure 1. Logistical Efficiency Comparison

Overall, the image highlights that API integration significantly enhances operational efficiency in terms of speed, reliability, and resource utilization within the logistics system.

### 4.4. Customer Experience Enhancement

The Table 5 presents a comparison of customer experience metrics before and after API integration, highlighting notable improvements in service quality and customer behavior. The customer satisfaction rate increased significantly from 60% to 78%, indicating that users had a more positive experience after the system

enhancement. In addition, while there was no recorded value before integration, the complaint reduction rate shows a 40% decrease afterward, suggesting that the system became more effective in addressing or preventing customer issues. Furthermore, the repeat order rate rose from 50% to 70%, reflecting stronger customer loyalty and a higher likelihood of customers returning to use the service again.

Table 5. Customer Experience Metrics

| Metric | Before API Integration | After API Integration |
|---|---|---|
| Customer Satisfaction Rate | 60% | 78% |
| Complaint Reduction Rate | - | 40% decrease |
| Repeat Order Rate | 50% | 70% |

Overall, the table emphasizes that API integration has a meaningful impact on enhancing customer experience by increasing satisfaction, reducing complaints, and strengthening customer loyalty. These improvements collectively contribute to a more competitive and sustainable business performance, as satisfied customers are essential for long-term growth and

### 4.5. Summary of Research Findings

The results demonstrate that API integration significantly enhances restaurant order management, logistics, and customer experience. The combination of automation, AI-driven optimization, and real-time tracking has streamlined operations and improved service quality. These findings provide actionable insights for food delivery businesses looking to improve efficiency through technology adoption

## 5. MANAGERIAL IMPLICATIONS

The findings of this study offer important managerial insights for restaurant operators and delivery service providers in optimizing their operations through API integration. The improvement in order accuracy and reduction in processing time indicate that API-driven automation can significantly enhance order management systems. Managers are encouraged to integrate API with existing Point of Sale systems and third-party platforms to enable real-time data synchronization and reduce operational errors caused by manual processes. From an operational standpoint, the results demonstrate that API integration contributes to more efficient logistics management. The reduction in delivery time and increased fleet utilization suggest that real-time tracking and intelligent routing systems can improve delivery coordination and minimize delays. This highlights the need for managers to invest in digital logistics infrastructure that supports data-driven decision-making and operational responsiveness.

In terms of customer-related outcomes, the increase in satisfaction rates, reduction in complaints, and higher repeat order rates underline the strategic value of API in enhancing customer experience. Providing real-time order updates and personalized services can strengthen customer trust and loyalty. Managers should therefore focus on adopting customer-centric digital solutions that improve transparency and engagement throughout the delivery process. The successful implementation of API technologies also requires organizational readiness. This includes strengthening IT capabilities, ensuring system compatibility, and equipping employees with the necessary digital skills. Without adequate preparation, the potential benefits of API integration may not be fully realized, making internal alignment a critical factor in digital transformation initiatives.

At the same time, potential challenges such as data security risks, integration complexity, and initial investment costs need to be carefully managed. A gradual implementation approach focusing on high-impact areas, such as order processing and delivery tracking, can help organizations reduce risks while maximizing the benefits of API adoption. Overall, API integration should be viewed as a strategic enabler that not only improves operational efficiency but also enhances service quality and long-term competitiveness in the restaurant delivery industry.

## 6. CONCLUSION

The findings of this study indicate that API integration significantly enhances operational efficiency in restaurant delivery services. Through automation, improved order management, optimized logistics, and enhanced customer experiences, API have streamlined food delivery operations, reducing errors and increasing

service speed. The quantitative and qualitative analysis confirms that businesses adopting API technology experience substantial improvements in accuracy, processing times, and overall customer satisfaction, reinforcing the importance of technological adoption in the food delivery industry. This research successfully answers the primary research questions by demonstrating that API integration improves order accuracy, reduces delivery delays, and enhances customer experiences. However, despite these advantages, certain limitations exist, including challenges in API standardization, security concerns, and the initial costs associated with implementation. Additionally, while the study provides comprehensive insights, it focuses primarily on the operational aspects and does not explore long-term financial impacts in depth. For future research, it is recommended to explore the economic implications of API adoption in the food delivery industry, including cost-benefit analyses and return on investment evaluations. Additionally, further studies should examine the potential of AI-driven API and machine learning models to enhance personalization and predictive analytics in delivery services. Expanding the research scope to include a comparative study of different API providers could also 8 provide valuable insights into best practices for seamless technology adoption in the food service sector.

## 7. DECLARATIONS

### 7.1. About Authors

Cicilia Sriliasta Bangun (CS) https://orcid.org/0000-0002-6329-9180
Solahudin (SH) https://orcid.org/0009-0002-0801-5410
Asep Sutarman (AS) https://orcid.org/0009-0002-1029-7963
Sipho Dlamini (SD) -

### 7.2. Author Contributions

Conceptualization: CS; Methodology: SH; Software: AS; Validation: SD; Formal Analysis: CS and SH; Investigation: AS; Resources: SD.; Data Curation: AS; Writing Original Draft Preparation: CS and SH; Writing Review and Editing:AS and SD; Visualization: DM; All authors, CS, SH, AS and SD, have read and agreed to the published version of the manuscript.

### 7.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

### 7.4. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## REFERENCES

[1] S. B. Iqbal, "Ahar24: A modern restaurant food delivery management system," 2024.
[2] A. Gill, "Accelerating digital transformation during covid with online ordering websites."
[3] K. Lane and A. Asthana, *The API-First Transformation*. Postman, Incorporated, 2022.
[4] M. Swink, K. Hu, and X. Zhao, "Analytics applications, limitations, and opportunities in restaurant supply chains," *Production and Operations Management*, vol. 31, no. 10, pp. 3710–3726, 2022.
[5] M. S. Khan, S. Hameed, A. A. Jaleel, and A. S. Dahri, "Designing the future of service in technology-driven innovation: Service delivery revolutionizing," in *Converging Economic Policy, Corporate Strategy, and Technology for Emerging Economies*. IGI Global Scientific Publishing, 2025, pp. 113–134.
[6] C. C. Wong, L. Y. Chong, S. C. Chong, and C. Y. Law, "Qr food ordering system with data analytics," *Journal of Informatics and Web Engineering*, vol. 2, no. 2, pp. 249–272, 2023.
[7] D. Mohammad, "Evaluating the suitability of the mern stack in the development of food delivery applications," 2023.
[8] D. Bumblauskas, A. Mann, B. Dugan, and J. Rittmer, "A blockchain use case in food distribution," *International Journal of Information Management*, vol. 52, p. 102008, 2020.
[9] H. Sundmaeker, C. Verdouw, S. Wolfert, and L. P. Freire, "Internet of food and farm 2020," in *Digitising the Industry Internet of Things*. River Publishers, 2022, pp. 129–151.

[10] L. Zhang and D. Kim, "A peer-to-peer smart food delivery platform based on smart contract," *Electronics*, vol. 11, no. 12, p. 1806, 2022.
[11] N. Chung, "Thinking food delivery platforms infrastructurally," *New Technology, Work and Employment*, 2024.
[12] D. Roy, E. Spiliotopoulou, and J. de Vries, "Restaurant analytics: Emerging practice and research opportunities," *Production and Operations Management*, vol. 31, no. 10, pp. 3687–3709, 2022.
[13] G. Yenduri, M. Ramalingam, G. C. Selvi *et al.*, "Gpt: A comprehensive review," *IEEE Access*, 2024.
[14] Z. Li and G. Wang, "The role of on-demand delivery platforms in restaurants," 2020, available at SSRN 3813891.
[15] P. Setia, F. Soh, and K. Deng, "Platformizing organizations," *Oxford Research Encyclopedia of Business and Management*, 2020.
[16] Y. Paliwal, O. H. Shukla, and V. K. Sehgal, "Restro ai tech management system," 2024.
[17] S. Aheleroff, N. Mostashiri, X. Xu, and R. Y. Zhong, "Mass personalisation as a service in industry 4.0," *Advanced Engineering Informatics*, vol. 50, p. 101438, 2021.
[18] H. Riaz, V. Davidaviciene, H. Ahmed, and I. Meidute-Kavaliauskiene, "Optimizing customer repurchase intention," *Sustainability*, vol. 14, no. 19, p. 12936, 2022.
[19] N. K. Chowdhary, "Dining 4.0: Revolutionizing the food and beverage industry with smart technologies," 2024, available at SSRN 4839314.
[20] L. Qi, W. Lin, X. Zhang, W. Dou, X. Xu, and J. Chen, "A correlation graph based approach for personalized and compatible web apis recommendation," *IEEE Transactions on Knowledge and Data Engineering*, vol. 35, no. 6, pp. 5444–5457, 2022.
[21] J. Gibas, J. Pomykacz, and J. Baranowski, "Bayesian modeling of travel times on the example of food delivery," *Electronics*, vol. 13, no. 17, p. 3387, 2024.
[22] A. Gill, "Developing a restaurant analytics dashboard for operational insights."
[23] S. U. Baskaran and S. Gokila, "Zomato etl for chain of orders using random forest algorithm," in *2024 7th International Conference on Circuit Power and Computing Technologies (ICCPCT)*. IEEE, 2024, pp. 1049–1056.
[24] C. Alaimo, J. Kallinikos, and E. Valderrama, "Platforms as service ecosystems," *Journal of Information Technology*, vol. 35, no. 1, pp. 25–48, 2020.
[25] L. Wewege, J. Lee, and M. C. Thomsett, "Disruptions and digital banking trends," *Journal of Applied Finance and Banking*, vol. 10, no. 6, pp. 15–56, 2020.
[26] A. Seghezzi and R. Mangiaracina, "On-demand food delivery: Investigating the economic performances," *International Journal of Retail & Distribution Management*, vol. 49, no. 4, pp. 531–549, 2021.
[27] M. Huang and B. P. Yen, "Driving forces for digital transformation: Case studies of q-commerce," 2021.
[28] M. Mandviwalla and R. Flanagan, "Small business digital transformation in the context of the pandemic," *European Journal of Information Systems*, vol. 30, no. 4, pp. 359–375, 2021.
[29] S. Hermes, T. Riasanow, E. K. Clemons *et al.*, "The digital transformation of the healthcare industry," *Business Research*, vol. 13, no. 3, pp. 1033–1069, 2020.
[30] R. A. Sunarjo, M. H. R. Chakim, S. Maulana, and G. Fitriani, "Management of educational institutions through information systems for enhanced efficiency and decision-making," *International Transactions on Education Technology (ITEE)*, vol. 3, no. 1, pp. 47–61, 2024.
[31] R. Kurniaji, N. Azizah, and M. Yusup, "The influence branding of social media to improve digital business in training and consulting on instagram," *Startupreneur Business Digital (SABDA Journal)*, vol. 3, no. 2, pp. 171–180, 2024.