

Adaptation of technology-based services and service quality of fast-food businesses in San Jose, Occidental Mindoro

Abeleda, Leigh Andrei M. 

Divine Word College of San Jose, Philippines (leigh.abeleda213@gmail.com)

Galay-Limos, Jenny A.

Divine Word College of San Jose, Philippines (jennygalay05@gmail.com)



ISSN: 2243-7703

Online ISSN: 2243-7711

OPEN ACCESS

Received: 15 April 2025

Revised: 20 May 2025

Accepted: 25 May 2025

Available Online: 27 May 2025

DOI: 10.5861/ijrse.2025.25502

Abstract

This study focused on adapting technologies and their impact on service quality in fast-food businesses in San Jose, Occidental Mindoro. Technology-based services have significantly transformed the fast-food industry by improving operational efficiency and customer service. It surveyed employees and customer observations about self-service kiosks, mobile ordering applications, and digital payment systems and evaluated their effects on customer satisfaction and efficiency. Using a descriptive-correlational research design, data were collected through a survey from 159 employees and 312 estimated daily customers covering four major fast-food chains: Jollibee, McDonald's, Mang Inasal, and Chowking. Technology adaptation disclosed a very high rating level by analyzing the results using weighted means and Pearson's correlations. The ratings of self-service kiosks were low, mainly due to limited availability in some establishments, while mobile ordering applications and digital payments received the highest ratings. The customer satisfaction rating was very high, suggesting that fast-food outlets meet expectations. The technology helped operations and enhanced productivity, and the rating of operational efficiency gained even higher. Regardless of how correlation analysis showed no significant link between technology usage and customer satisfaction, it was more influenced by food quality, employee behavior, and service. This reveals that the adaptation of technology by employees in fast-food businesses makes the service more efficient. It is important to remember that customer satisfaction still depends heavily on how the employees treat them and the food quality. Thus, fast-food businesses may regularly evaluate operational strategies to ensure that adapting technology-based services aligns with the business goals.

Keywords: technology-based services, service quality, customer satisfaction, operational efficiency, fast-food industry

Adaptation of technology-based services and service quality of fast-food businesses in San Jose, Occidental Mindoro

1. Introduction

Technology-based services have become a key factor in modern business operations, especially in the fast-food industry. These services, including digital ordering systems and automated customer service, transform how businesses deal with customers and run their operations (Huseynov, 2023). Adopting technology-based services improves service quality, efficiency, and customer interactions, making it an essential detail of competitive advantage (Talebi & Khatibi, 2023). Fast-food enterprises may continue to adapt to new technologies to remain relevant in the market. In San Jose, Occidental Mindoro, fast-food establishments that use technology-based services will experience increased customer satisfaction and operational efficiency. Digital payment systems, self-service kiosks, and mobile ordering applications are widely used; fast-food restaurants can use these tools to improve their service quality and customer experience (Rastegar et al., 2018).

The challenge they will face is not adapting to technology for their customers and employees. Other customers, especially those not knowledgeable enough about those tools, will prefer the traditional ordering methods to the cashier, for example. The employees may find it hard to adapt to the new tools, leading the business to inefficiencies and failure in order processing. Without proper training and encouragement from the management, the adaptation to technology-based services will face difficulties that can impact overall customer satisfaction and operational effectiveness (Sagar, 2024). The other key issues are workforce displacement and skill gaps. As fast-food businesses use automation and other AI-driven services, other job roles can become redundant, affecting the employees who rely on traditional service methods. Employees must develop technical skills to manage and utilize digital ordering systems and customer engagement platforms. Employees may find themselves unqualified for technological shifts without proper training, which can decrease job satisfaction. The importance of understanding these developments cannot be overemphasized. As AI technologies evolve, they are not just tools but integral parts of decision-making processes, product development, and customer interactions (West, 2018). The researcher believes that failing to study these trends could disadvantage businesses considerably. Moreover, employees must expand their skills to remain competitive in an environment where practice tasks are increasingly automated and human roles are expected to change towards more difficult problem-solving and creative assignments. Through this study, the researcher aimed to equip businesses and employees with the knowledge to stay relevant in a fast-changing technological landscape.

This study of fast-food businesses in San Jose, Occidental Mindoro, examined the role of technology-based services, especially in improving the service quality of the employees and their operational efficiency. By analyzing the businesses' adoption and use of technology-based services, the research aimed to give insights into the advantages and disadvantages of digital transformation in the local fast-food industry.

Statement of the Problem - This study investigated the impact of adapting technology-based services on the service quality of fast-food businesses in San Jose, Occidental Mindoro. Specifically, it sought to answer the following questions: (1) What is the level of adaptation of technology based adapted by the fast-food businesses in San Jose, Occidental Mindoro? (2) What is the level of service quality of Jollibee, McDonald's, Mang Inasal, and Chowking in terms of customer satisfaction and operational efficiency? (3) Is there a significant relationship between the adaptation of technology-based and the service quality of fast-food businesses in San Jose, Occidental Mindoro?

Significance of the Study - This study provided information on how adapting technology-based services affected the fast-food chains in San Jose, Occidental Mindoro. This research aimed to guide local fast-food businesses in understanding and adapting to technological changes, helping them remain relevant and sustainable

in an evolving marketplace. This study will benefit the following: First, for the entrepreneurs, this study will help small business owners in San Jose, Occidental Mindoro. It will develop strategies to enhance competitiveness in the adaptation-based services in an AI-driven economy. Second, to the employees, accompanied by technology, the nature of work changes. This research highlighted the skills and capabilities of the employees to remain competitive. It offers guidance to current employees on how to adapt to technological systems and to job seekers on the types of training and upskilling needed to excel in future job markets. Third, this research will advise the community and educational institutions about the changes in an AI-driven economy by identifying critical skills needed to adapt technology-based services. Fourth, for future researchers, this study will contribute to the academic literature on emerging technologies, business sustainability, and workforce dynamics, focusing on local economies such as San Jose and Occidental Mindoro. Fifth, to the fast-food chains and business establishments, this study will assist fast-food chains and other business establishments in understanding how it will enhance their operational efficiency by adopting technology-based services.

Scope and Delimitation of the Study - This study focuses on the impact of technology adaptation on the service quality of fast-food businesses in San Jose, Occidental Mindoro. It explores how fast-food chains adapt new strategies to stay relevant and how employees can acquire skills to adapt to new technological systems. The study is limited to fast-food businesses in San Jose, Occidental Mindoro, focusing on their strategies, employee skills, and technological integration.

2. Methodology

Research Design - This study utilized a descriptive-correlational design to describe the level of technology adaptation and the status of service quality. Moreover, correlational research was used to determine if there is a significant relationship between the two variables.

Respondents of the Study - The participants in this study consisted of both management and employees from selected fast-food chains in San Jose, Occidental Mindoro. Including perspectives from both groups provided a different view of how the adaptation of technology-based services affected various organizational levels. The employees and their customers, who served as respondents, were from Jollibee, McDonald's, Mang Inasal, and Chowking. Moreover, the respondents of this study among the 269 employees, a sample size of 159 was selected, while for the 1,632 customers, the sample size was 312. The sample size was also determined using Slovin's formula, applying a 5% margin of error and a 95% confidence level. The researcher used stratified random sampling to select participants from different roles within each fast-food establishment. This ensured representation from both management and employees. This approach gave comparative insights into their experiences and viewpoints regarding adapting technology-based systems.

Research Instrument - The research instrument comprises three sets of adapted questionnaires drawn from Özşahin et al. (2022) for the adaptation of technology-based systems, Liu et al. (2021) for customer satisfaction, and Tanwar and Prasad (2017) for operational efficiency. The adapted questionnaires were checked and validated by experts in the field of research from the senior high department in DWCSJ to ensure the consistency of the presented items with the variables.

Data Gathering Procedure - The researcher made a letter of request to ask permission from the company's management to conduct the study. Upon receiving approval, the researcher scheduled the data collection process in coordination with the management to ensure minimal disruption to the daily operations of the establishments. Once approved, the researcher distributed the survey questionnaires to the employees using stratified random sampling. The survey was conducted in less than one week. The survey questionnaires were distributed face-to-face, and the research ensured the confidentiality of the respondents throughout the process.

Statistical Treatment of the Data - In this study, descriptive analysis was used to assess the survey data and determine the level of technology-based system adaptation and the service quality of fast-food businesses in San Jose, Occidental Mindoro. Moreover, Pearson's r-moment correlation was used to determine the relationship

between the level of technology adaptation and service quality.

Ethical Consideration - The researcher first sought permission from the fast-food business's management before conducting the study. Survey questionnaires were utilized as part of the data collection process. Participation in the study was voluntary, and no respondent was compelled to answer the provided questionnaires. The researcher ensured that personal information obtained from the respondents remained confidential and was not shared with any other individuals or entities.

3. Results and Discussions

Table 1

Mean Level of Adaptation of Technology-Based Services

INDICATORS (Adaptation of Technology-Based Services)	WM	Verbal Description
1. Using self-service kiosks enhances my job performance.	2.97	High Level
2. I find mobile ordering apps useful in my daily tasks.	3.64	Very High Level
3. Learning to operate digital payment systems is easy for me.	3.54	Very High Level
4. I find self-service kiosks to be flexible to interact with.	3.79	High Level
5. My interaction with mobile ordering apps is clear and understandable.	3.84	Very High Level
6. I find it easy to get digital payment systems to do what I want them to do.	3.84	Very High Level
7. Using self-service kiosks improves my productivity.	2.89	High Level
8. I find mobile ordering apps easy to use.	3.65	Very High Level
9. I have the necessary resources to use digital payment systems.	3.55	Very High Level
10. I have the knowledge necessary to use self-service kiosks.	2.96	High Level
COMPOSITE MEAN	3.34	Very High Level

Legend: 3.26–4.00 Very High Level, 2.51–3.25 High Level, 1.76–2.50 Low Level, 1.00–1.75 Very Low Level

The composite mean of 3.34, categorized as a “Very High Level,” indicates that employees view technology as helpful in their daily tasks. Mobile ordering apps (3.64) and digital payment systems (3.55–3.65) received the highest ratings. Employees appreciate the convenience of speeding up transactions and enhancing customer interactions. According to Isharyani et al. (2023), traditional retailers must quickly accept and adopt technology to remain in the competitive retail market, as retail technology swiftly affects consumers' purchasing behaviors and expectations. This study may be the first to use the Technology-to-Performance Chain (TPC) to assess conventional merchants' technological adaptation in an expanding market. A qualitative study was conducted on traditional shops in a developing country. Most conventional retail's ongoing technologies are the product of adaptation, which involves merging current technologies to meet local conditions or improving technological uptake. These contextual changes create additional benefits associated with retail technology adoption. However, research into how technology is applied in large-scale and conventional retail forms in underdeveloped countries is scarce. Further research is required to lower implementation costs and maximize the possibilities of technology in traditional retail contexts. Successful technology adoption among retailers in developed countries encourages the limited introduction of interactive tools in conventional retailers, such as inventory management or accounting software, mobile applications, handheld devices (billing POS), e-commerce, and mobile payment (Isharyani et al., 2023; Ugbebor et al., 2024). However, the most common barriers to traditional retailers adopting retail technology are a lack of capital for investment, an inability to find specific technology that meets their needs, and a lack of human resources with the knowledge or skills to operate complex technology (Seethamraju & Diatha, 2019). Self-service kiosks received comparatively lower ratings (2.89–3.07), falling under the “High Level” rather than the “Very High” category. Although employees realize their potential benefits, the challenges remain. One reason for the lower scores is the absence of self-service kiosks in certain fast-food chains in San Jose, Occidental Mindoro, such as Mang Inasal and Chowking.

Table 2 shows the mean level of service quality in terms of customer satisfaction. A composite mean of 3.45, considering a “very high level” of satisfaction, indicates that customers view these fast-food businesses as accommodating. According to a study linked to Kristiawan et al. (2021), one efficient technique to assess service quality is to analyze the customer journey, which is frequently depicted through a service roadmap. This trip is

critical to the plan, providing enterprises with a methodical strategy for identifying potential service disruptions and improving overall operational efficiency. Fast-food customers in San Jose, Occidental Mindoro, value timely service and staff behavior highly. Although technology enhances efficiency, the findings highlight that human interaction is vital to customer satisfaction.

Table 2*Mean Level of Service Quality in terms of Customer Satisfaction*

INDICATORS (Customer Satisfaction)	Weighted Mean	Verbal Description
1. The fast food provides its services at the promised time.	3.48	Very High Level
2. Employees in the fast-food industry instill confidence in customers.	3.4	Very High Level
3. The fast food has modern-looking equipment.	3.43	Very High Level
4. The fast food gives customers individual attention.	3.44	Very High Level
5. Employees are never too busy to help customers.	3.45	Very High Level
6. The fast food provides its services as promised.	3.44	Very High Level
7. Employees are consistently courteous with customers.	3.46	Very High Level
8. The fast food has convenient operating hours.	3.46	Very High Level
9. Employees have the knowledge to answer customer questions.	3.45	Very High Level
10. The fast food provides prompt service to customers.	3.47	Very High Level
COMPOSITE MEAN	3.45	Very High Level

Legend: 3.26–4.00 Very High Level, 2.51–3.25 High Level, 1.76–2.50 Low Level, 1.00–1.75 Very Low Level

Table 3*Mean Level of Service Quality in terms of Operational Efficiency*

INDICATORS (Operational Efficiency)	Weighted Mean	Verbal Description
1. Our organization effectively utilizes technology to enhance productivity.	3.62	Very High Level
2. Communication within the organization is clear and efficient.	3.61	Very High Level
3. Employees receive adequate training to perform their tasks efficiently.	3.57	Very High Level
4. Leadership in our organization effectively guides operational processes.	3.6	Very High Level
5. The organization adapts well to changes in the external environment.	3.53	Very High Level
6. Resources are allocated efficiently to maximize output.	3.55	Very High Level
7. Decision-making processes are streamlined and effective.	3.59	Very High Level
8. The organizational structure supports an efficient workflow.	3.53	Very High Level
9. Performance metrics are used effectively to improve operations.	3.6	Very High Level
10. Continuous improvement is a focus within our operational strategies.	3.7	Very High Level
COMPOSITE MEAN	3.59	Very High Level

Legend: 3.26–4.00 Very High Level, 2.51–3.25 High Level, 1.76–2.50 Low Level, 1.00–1.75 Very Low Level

Table 3 discloses the mean level of service quality in terms of operational efficiency. With a composite mean of 3.59, categorized as "Very High Level," top-rated factors include continuous improvement (3.70), effective use of technology (3.62), and strong leadership (3.60). These findings suggest that businesses are effectively integrating technology while maintaining well-managed operations. According to Perez et al. (2019), achieving operational efficiency entails using various skills and methods to provide high-quality products and services to customers in a cost-effective and timely manner. Production, distribution, inventory management, and resource usage are critical components of operational efficiency. The most essential aspects vary depending on the type of business, whether manufacturing, distribution, or retail. Small firms must prioritize outstanding efficiency to compete with larger companies that benefit from economies of scale and greater bargaining power with suppliers. These insights declare that operational efficiency is needed to succeed in fast-food businesses that invest in technological tools and strong management practices.

The statistical results reveal no significant correlation between technology adoption and customer satisfaction (-0.082 , $p = 0.149$). This implies that although technology contributes to service enhancement, it is not the primary factor influencing customer satisfaction. Customer happiness, like the findings of Aftab & Sarwar (2016), emphasizes the crucial importance of service quality in establishing customer loyalty and satisfaction, which is one of the most essential variables in determining an organization's performance and

greater efficiency. The SERVPERF instrument (Cronin and Taylor, 1992) as cited by Jain & Gupta (2004), defines customer satisfaction, which includes customer performance perceptions and performance importance, both of which assess service quality. The SERVPERF instrument is based on the SERVQUAL instrument by Parasuraman et al. (1985, 1988) as cited by Karmacharya (2022), which measures service quality as the difference between perceptions and expectations. SERVQUAL shows that a positive gap indicates satisfaction and a negative one indicates dissatisfaction. Customer satisfaction is measured in this study using the SERVPERF instrument based on meal quality, service quality, and price-value ratio, as is customary in fast food restaurant literature. The study includes a full overview of variable choices and their underlying literature. According to Kotler and Armstrong (1995), as cited by Dimiyati & Subagio (2016). Marketers are constantly looking for new ways to provide value and satisfaction to their customers, demonstrating the importance of customer satisfaction. Conversely, a strong and significant correlation was found between technology adoption and operational efficiency (0.367, $p = 0.001$). According to Ishak et al. (2021), implementing digital solutions can help restaurants increase their efficiency by expediting order administration, automating billing, lowering client wait times, improving operational workflows, and avoiding errors in everyday operations.

Table 4*Correlation Coefficients and P-values for Hypothesis Testing*

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
Adaptation of Technology-Based → Service Quality (Customer Satisfaction)	-0.082	0.007	1.968	1.448	0.149	Not Significant
Adaptation of Technology-Based → Service Quality (Operational Efficiency)	0.367	0.134	1.968	6.944	0.001	Highly Significant
Adaptation of Technology-Based → Service Quality	0.277	0.077	1.968	5.076	0.001	Highly Significant

Legend: pd: $p\text{-value} < 0.001$ Highly Significant; $p\text{-value} < 0.05$ Significant

Furthermore, the significant correlation between technology adoption and service quality (0.277, $p = 0.001$) suggests that, although technology may not directly influence customer satisfaction, it positively impacts service quality by enhancing operational efficiency. According to the Malaysia (2022) report, service activities are an important component in all economic sectors. Their effectiveness can be judged using a variety of parameters. Unlike manufacturing, service operations focus on providing intangible outputs, such as transportation, food services, and insurance, rather than producing physical things. In line with the study by Namin (2017), delivering high-quality service is a core challenge that every organization must tackle, as sustainable success relies on attracting and retaining satisfied customers. A firm's ability to provide exceptional value through its services is a key driver of its competitiveness. Consequently, perceived product quality has emerged as one of the most important factors in gaining a market edge. Customer satisfaction significantly influences a company's overall performance and operational success. In this study, customer satisfaction is measured using the SERVPERF model, which assesses service quality based on customers' perceptions of performance and the importance they assign to it. This model, adapted from the SERVQUAL framework, evaluates service quality by identifying the gap between customer expectations and their actual experiences, where a positive gap reflects satisfaction, and a negative gap indicates dissatisfaction. In the fast-food industry, customer satisfaction is often gauged through indicators such as food quality, service quality, and the price-value ratio, highlighting its crucial role in sustaining competitiveness and fostering customer loyalty.

4. Conclusions

Based on the findings, the following conclusions were drawn. The employees in fast-food businesses in San Jose, Occidental Mindoro, find those tools helpful because they work efficiently. The customers of fast-food

businesses in San Jose, Occidental Mindoro, are more satisfied with how the employees treat them and the food quality. Using technology-based services helps a lot behind the scenes. It enables the employees of fast-food businesses in San Jose, Occidental Mindoro, to be better organized and more productive. Adopting technology among employees in fast-food companies in San Jose, Occidental Mindoro, makes the service more efficient. It is important to remember that customer satisfaction still depends heavily on how the employees treat them and the food quality.

Recommendations - Based on the conclusions of this study, the following recommendations were presented. The fast-food businesses in San Jose, Occidental Mindoro, may continue to invest in technology services such as mobile ordering applications and digital payment systems, as these technologies help operational efficiency. The fast-food businesses in San Jose, Occidental Mindoro, may balance the technology integration with human interaction service to uphold customer satisfaction. The fast-food businesses in San Jose, Occidental Mindoro, may regularly evaluate operational strategies to ensure that adapting technology-based services aligns with the business goals. The fast-food businesses in San Jose, Occidental Mindoro, may consider personalized customer service. This approach may retain high customer satisfaction. Future researchers may refer to this study to explore customer and employee perspectives on technology adaptations.

5. References

- Aftab, J. & Sarwar, H. (2016). Importance of Service Quality in Customer Satisfaction (A Study on Fast Food Restaurants). *Entrepreneurship and Innovation Management Journal* ISSN: 2310-0079. 4. 161-171. https://www.researchgate.net/publication/313192868_Importance_of_Service_Quality_in_Customer_Satisfaction_A_Study_on_Fast_Food_Restaurants#fullTextFileContent
- Dimiyati, M., & Subagio, N. A. (2016). Impact of service quality, price, and brand on loyalty with the mediation of customer satisfaction on Pos Ekspres in East Java. *Mediterranean Journal of Social Sciences*, 7(4), 74-86. DOI: 10.5901/mjss.2016.v7n4p74
- Huseynov, F. (2023). Chatbots in digital marketing: Enhanced customer experience and reduced customer service costs. In *Contemporary approaches of digital marketing and the role of machine intelligence* (pp. 46-72). IGI Global. DOI: 10.4018/978-1-6684-7735-9.ch003
- Jain, S. K., & Gupta, G. (2004). Measuring service quality: SERVQUAL vs. SERVPERF scales. *Vikalpa*, 29(2), 25-38. <https://doi.org/10.1177/0256090920040203>
- Ishak, F. C., Lah, N. C., Samengon, H., Mohamad, S. F., & Bakar, A. A. (2021). The implementation of self-ordering kiosks (SOKs): Investigating the challenges in fast food restaurants. *International Journal of Academic Research in Business and Social Sciences*, 11. 10.6007/IJARBSS/v11-i10/11491.
- Isharyani, M. E., Sopha, B. M., Wibisono, M. A., & Tjahjono, B. (2023). Retail Technology Adaptation in Traditional Retailers: A Technology-to-Performance Chain Perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100204–100204. <https://doi.org/10.1016/j.joitmc.2023.100204>
- Karmacharya, B. (2022). Impact of Service Quality Dimensions on Customer Satisfaction in Nepalese Financial Institutions Based on SERVPERF Model. *Journal of Nepalese Business Studies*, 15(1), 11-26. DOI: <https://doi.org/10.3126/jnbs.v15i1.50375>
- Kristiawan, Y., Hartoyo, H., & Suharjo, B. (2021). Customer Satisfaction: Service Quality or Product Quality (Case Study at Fast Food Restaurant in Jabodetabek). *Binus Business Review*, 12(2), 165–176. <https://doi.org/10.21512/bbr.v12i2.6672>
- Liu, Y., Wan, Y., Shen, X., Ye, Z., & Wen, J. (2021). Product Customer Satisfaction Measurement Based on Multiple Online Consumer Review Features. *Information*, 12(6), 234. <https://doi.org/10.3390/info12060234>
- Malaysia, I. U. S. (2022). Manpower and Service Quality of Fast-Food Restaurant: KFC Restaurant. *Journal of The Community Development in Asia (JCDA)*, 5(1), 54-66. P-ISSN: 2685-8819/E-ISSN: 2654-7279. DOI: 10.32535/jcda.v5i1.1385

- Namin, A. (2017). Revisiting customers' perception of service quality in fast food restaurants. *Journal of Retailing and Consumer Services*, 34(34), 70–81. <https://doi.org/10.1016/j.jretconser.2016.09.008>
- Özşahin, M., Çallı, B. A., & Coşkun, E. (2022). ICT Adoption Scale Development for SMEs. *Sustainability*, 14(22), 14897. <https://doi.org/10.3390/su142214897>
- Perez, G. V. A., Tolin, J. P. A., Cunag, C. J. T., Abante, L. A. D. U., Granada, V. M. N., & Borbon (PhD), J. C. (2019). Operational Efficiency of Quick Service Establishments: Basis for Business Operation Enhancement. *Asia Pacific Journal of Academic Research in Business Administration*, 5(1), 70–79. <https://research.lpubatangas.edu.ph/wp-content/uploads/2019/08/APJARBA-2019-009.pdf>
- Rastegar, N., Flaherty, J., Liang, L., Choi, H. (2021). The adoption of self-service kiosks in quick-service restaurants. *European Journal of Tourism Research*, 27:2709. <https://doi.org/10.54055/ejtr.v27i.2139>
- Sagar, S. (2024). The Impact Of Digital Transformation On Retail Management And Consumer Behavior. *Journal of Business and Management*, 26(1), 06-14. DOI: 10.9790/487X-2601010614
- Seethamraju, R., & Diatha, K. S. (2019). Digitalization of small retail stores-challenges in digital payments. *Proceedings of the 52nd Hawaii International Conference on System Sciences | 2019*. https://www.researchgate.net/publication/351946197_Digitalization_of_Small_Retail_Stores_-Challenges_in_Digital_Payments#fullTextFileContent
- Talebi, H., & Khatibi, B. A. (2023). The impact of information technology on service quality, satisfaction, and customer relationship management (Case Study: IT Organization Individuals). *Journal of Management Science and Engineering Research*, 6(10.30564). 10.30564/jmser.v6i2.5823
- Tanwar, R., & Prasad, A. (2017). The Development and Validation of the Organizational Effectiveness Scale Using Confirmatory Factor Analysis. *Global Business Review*, 18(3), 1-18. <https://journals.sagepub.com/doi/10.1177/0972150918811720>
- Ugbebor, F., Adeteye, M., & Ugbebor, J. (2024). Automated Inventory Management Systems with IoT Integration to Optimize Stock Levels and Reduce Carrying Costs for SMEs: A Comprehensive Review. *Journal of Artificial Intelligence General Science (JAIGS)* ISSN: 3006-4023, 6(1), 306-340.DOI: 10.60087/jaigs.v6i1.257
- West, D. M. (2018). *The Future of Work: Robots, AI, and Automation*. Brookings Institute Press. <https://www.scirp.org/reference/referencespapers?referenceid=3796639>