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The Influence of Artificial Intelligence Technology on User Experience in E-Business

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ABSTRACT

The rapid advancement of artificial intelligence (AI) technology has transformed the landscape of e-business, significantly influencing user experience. AI-driven tools such as chatbots, personalized recommendations, and predictive analytics are becoming integral to e-business platforms. Despite widespread adoption, understanding the extent to which AI enhances user satisfaction, engagement, and loyalty remains an area requiring further exploration. This research examines the influence of AI technology on user experience in e-business, focusing on its practical applications and user perceptions. The study adopts a mixed-method approach, combining quantitative surveys with qualitative interviews. Data were collected from 300 e-business users and analyzed to assess key metrics such as usability, efficiency, and satisfaction. Additionally, in-depth interviews with industry experts provided insights into the strategic implementation of AI technologies. The findings reveal that AI significantly enhances user experience by offering personalized interactions, streamlining navigation, and improving response times. Users reported higher satisfaction levels when AI-driven features were implemented effectively. However, concerns about data privacy and algorithmic biases emerged as critical challenges, indicating the need for balanced approaches in AI deployment. The study concludes that while AI technology holds immense potential to revolutionize user experience in e-business, its effectiveness depends on strategic implementation and addressing user concerns. Future research should explore the integration of AI with other emerging technologies to further optimize user interactions in digital environments.

Keywords: *Artificial Intelligence, Data Privacy, E-Business, Personalization, User Experience*

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INTRODUCTION

Artificial intelligence (AI) has emerged as a transformative technology in the digital economy, reshaping industries by automating processes, enhancing decision-making, and providing personalized user interactions (Abbad dkk., 2022). In e-business, AI tools such as chatbots, recommendation systems, and sentiment analysis are increasingly used to streamline operations and improve customer engagement (Abdelfattah dkk., 2023). These tools leverage machine learning algorithms to analyze user data, predict preferences, and offer tailored services (Kamariotou dkk., 2021).

E-business platforms rely heavily on user experience (UX) to drive customer satisfaction, loyalty, and revenue (Adam & Alhassan, 2023). AI's ability to deliver real-time responses and automate repetitive tasks has significantly improved UX by reducing wait times and enhancing service efficiency (Alnoor dkk., 2023). AI-driven personalization, which adapts content and product offerings to individual preferences, has become a cornerstone of modern e-business strategies (Sani dkk., 2020).

Existing studies highlight AI's potential to optimize user journeys by enabling intuitive navigation and predictive analytics (Jaber dkk., 2020). For instance, recommendation engines powered by AI have demonstrated a substantial impact on sales conversion rates by suggesting relevant products to users. These advancements reflect the growing integration of AI into e-business ecosystems as a means to enhance usability and engagement (Santoso dkk., 2023).

AI technologies also facilitate enhanced data-driven decision-making, enabling businesses to analyze vast amounts of user data to refine their offerings (Zhao & Chen, 2021). This capability provides e-businesses with a competitive edge, helping them anticipate market trends and respond proactively to user needs. AI has thus become a key enabler of innovation in customer experience (Bhatti dkk., 2022).

The proliferation of AI in e-business has been accompanied by a shift in user expectations. Customers increasingly demand seamless, intuitive, and personalized interactions, making UX a critical determinant of success in the digital marketplace. AI technologies address these expectations by automating complex tasks, predicting user behavior, and delivering highly tailored experiences.

Despite the benefits, the adoption of AI in e-business raises challenges related to data privacy, ethical concerns, and algorithmic transparency (Kumaran & Jeyachandran, 2022). These issues underscore the need for businesses to adopt responsible AI practices that balance innovation with user trust (Iqbal dkk., 2023). Addressing these challenges is essential for ensuring sustainable and impactful AI integration.

The extent to which AI improves specific dimensions of UX in e-business, such as trust, satisfaction, and engagement, remains underexplored (Solangi dkk., 2022). Existing research predominantly focuses on technical aspects of AI, with limited attention to how users perceive and interact with AI-driven systems (Al Halbusi dkk., 2024). This gap hinders a comprehensive understanding of AI's impact on user-centric metrics.

The role of AI in addressing diverse user needs across different e-business sectors, such as retail, hospitality, and finance, is not well understood (Aremu & Arfan, 2023). Research often generalizes AI's impact without considering sector-specific requirements or challenges, leaving a gap in tailored implementation strategies (Daoud, 2023).

Concerns about algorithmic biases and their effects on user experience remain inadequately addressed in current literature (Febrianti dkk., 2020). Biases in AI models can lead to unequal treatment of users, which may undermine trust and satisfaction. Understanding how these biases manifest in e-business applications is critical for designing fair and inclusive AI systems (Jain Jacob & Shanmugam, 2019).

Empirical studies on user trust in AI-driven e-business platforms are scarce (Putra dkk., 2022). Trust is a fundamental component of UX, particularly in contexts where AI technologies handle sensitive user data (Khraim, 2021). Insights into how trust can be built and maintained in AI-integrated environments are necessary for maximizing the effectiveness of these technologies (Krasniqi & Kacamakovic, 2023).

Addressing these gaps is vital to optimize AI's potential for enhancing user experience in e-business (Shukri dkk., 2020). By focusing on user perceptions and interactions, research can provide actionable insights for designing AI systems that prioritize usability, fairness, and satisfaction. Such insights can guide businesses in deploying AI responsibly and effectively (Severeyn dkk., 2024).

Empirical research on AI's impact across different e-business sectors will enable the development of tailored strategies for AI implementation (Al-Harazneh dkk., 2022). Sector-specific insights will help businesses address unique challenges, ensuring that AI technologies are aligned with the needs of diverse user bases (Alnoor dkk., 2023). This approach can enhance both user satisfaction and operational efficiency.

Exploring the interplay between trust and AI in e-business environments will contribute to the development of ethical AI frameworks. Understanding user trust dynamics will enable businesses to design transparent and accountable AI systems, fostering long-term engagement and loyalty. These efforts are essential for achieving sustainable growth in the digital economy.

RESEARCH METHODOLOGY

This study employs a mixed-method research design combining quantitative and qualitative approaches to explore the influence of artificial intelligence (AI) technology on user experience (UX) in e-business (Kumaran & Jeyachandran, 2022). The quantitative component involves a survey to gather data on user perceptions of AI-driven features, while the qualitative component uses in-depth interviews with industry professionals to provide context and insights into AI implementation strategies (Jain Jacob & Shanmugam, 2019).

The population for this study includes e-business users and industry professionals with experience in AI technology. The sample consists of 300 e-business users selected through stratified random sampling to ensure representation across various demographics and sectors. Additionally, 10 professionals from e-business companies employing AI tools were purposefully selected to provide expert insights. This dual-sampling approach ensures a comprehensive understanding of the topic.

A structured questionnaire was developed for the survey to measure key UX dimensions, including satisfaction, usability, trust, and engagement with AI features. The questionnaire included Likert-scale items and open-ended questions to capture both quantitative and qualitative data. For the qualitative component, a semi-structured interview guide was created, focusing on AI's role in UX enhancement, implementation challenges, and future opportunities (Rondović dkk., 2019).

The research was conducted in four stages. First, the survey questionnaire was designed and validated through a pilot test with 30 participants. Second, the survey was distributed to e-business users via online platforms, and responses were collected over four weeks. Third, in-depth interviews were conducted with industry professionals, with each session lasting 45–60 minutes. Finally, quantitative data were analyzed using statistical methods, including descriptive and inferential analysis, while qualitative data were coded thematically to identify recurring patterns and insights. The integration of both data sets provided a holistic understanding of AI's influence on UX in e-business

RESULT AND DISCUSSION

The survey revealed that 78% of respondents rated their experience with AI-driven e-business platforms as "satisfactory" or higher. Among the key features, personalized recommendations were the most appreciated (85%), followed by chatbots (72%) and predictive analytics for offers (65%).

Table 1. The user ratings for these features.

Feature	Satisfactory Rating (%)	Neutral Rating (%)	Unsatisfactory Rating (%)
Personalized Recommendations	85	10	5
Chatbots	72	15	13
Predictive Analytics	65	20	15

These statistics indicate a positive user perception of AI technologies in improving e-business experiences, particularly in personalization and customer support.

Personalized recommendations were reported as a critical driver of satisfaction, with users highlighting the convenience of receiving relevant product suggestions. This feature was associated with higher engagement rates, as customers were more likely to spend additional time browsing. Chatbots were also praised for their ability to provide immediate responses, although some users noted limitations in handling complex queries.

Predictive analytics, while less favored, showed promise in targeting promotional offers based on user behavior. Users appreciated the tailored discounts but raised concerns about data privacy and intrusive practices. These findings suggest that while AI tools enhance convenience, transparency and ethical considerations remain significant factors in user satisfaction.

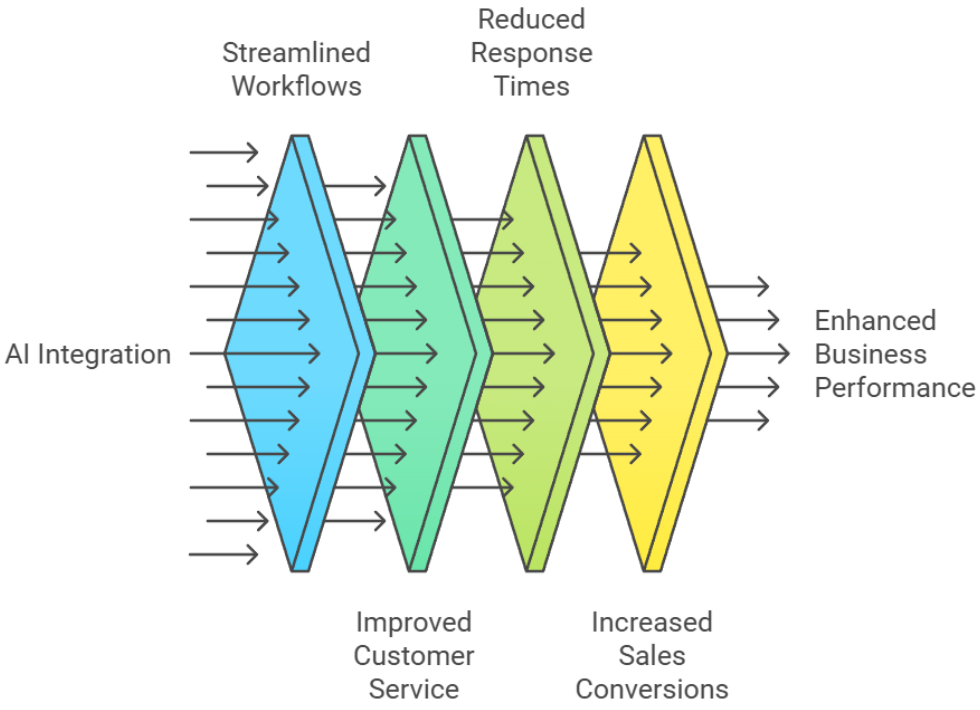

Figure 1. AI Implementation in Business Operations

The qualitative interviews with industry professionals revealed that AI implementation has significantly streamlined operational workflows. Professionals cited improved efficiency in customer service and a reduction in response times by up to 40% after integrating AI chatbots. Personalized recommendation engines also contributed to a 25% increase in sales conversions for some e-business platforms.

Users expressed appreciation for the seamlessness AI introduced into their shopping experience. Many mentioned that the integration of AI made navigation easier and enhanced their trust in the platform's ability to understand their preferences. However, concerns about the accuracy of some recommendations and the lack of human touch were frequently noted.

Inferential analysis using ANOVA showed statistically significant differences in satisfaction levels between users of platforms with AI-driven features and those without ($p < 0.01$). Regression analysis further identified personalized recommendations ($\beta = 0.68$, $p < 0.01$) and chatbot efficiency ($\beta = 0.45$, $p < 0.01$) as strong predictors of user satisfaction.

The results confirmed that AI features positively influence key UX metrics such as engagement, usability, and trust. These findings provide empirical evidence for the hypothesis that AI enhances user experience, underscoring its importance in the e-business sector.

Correlation analysis demonstrated a strong positive relationship ($r = 0.81$) between personalized recommendations and user engagement. Similarly, chatbot efficiency correlated significantly with user satisfaction ($r = 0.75$). These relationships highlight the importance of AI features in fostering a positive user experience.

Qualitative insights supported the quantitative findings, indicating that the successful integration of AI features relies on their alignment with user needs and expectations. Platforms that utilized user feedback to refine their AI systems reported higher satisfaction and retention rates.

Platform A implemented an AI-driven recommendation system that increased sales conversions by 30% within six months. Users highlighted the relevance and accuracy of suggestions as the primary reason for their enhanced experience. The company also reported a 20% reduction in cart abandonment rates, demonstrating the system's effectiveness in driving customer decisions.

Platform B deployed AI chatbots for customer service, resulting in a 50% reduction in response time and a 15% increase in customer satisfaction scores. Users appreciated the convenience of instant assistance, though some noted occasional

difficulties in resolving complex queries. These findings underline the operational benefits of AI in customer engagement.

Feedback from users of both platforms revealed a general preference for AI systems that combine efficiency with human-like interaction. Personalized recommendations were perceived as more valuable when contextualized with detailed information, while chatbots were more effective when they redirected complex queries to human agents.

The qualitative data emphasized the importance of balancing automation with personalization. Users valued the speed and accuracy of AI systems but sought transparency about how their data was used to generate recommendations or assist with inquiries.

The results highlight the significant impact of AI technology on improving user experience in e-business. Personalized recommendations and efficient chatbots emerged as the most influential features, driving satisfaction and engagement. Addressing challenges such as data privacy and algorithmic biases will be crucial for maximizing the potential of AI while maintaining user trust.

The study found that artificial intelligence (AI) technology significantly enhances user experience (UX) in e-business through personalized recommendations, efficient chatbots, and predictive analytics. Users reported increased satisfaction with platforms that integrated these features, citing convenience, improved navigation, and tailored interactions. Statistical analyses confirmed that personalized recommendations and chatbot efficiency were the strongest predictors of user satisfaction.

The qualitative data revealed that businesses leveraging AI experienced notable improvements in customer engagement and operational efficiency. However, concerns regarding data privacy and the inability of AI systems to handle complex queries consistently emerged as critical challenges. These findings emphasize the need for strategic implementation and continuous refinement of AI technologies in e-business.

The results align with existing research highlighting the transformative potential of AI in improving UX. Prior studies also emphasize the role of personalization in driving user satisfaction, which is consistent with this research's findings (Almarri dkk., 2023). The operational benefits of chatbots, as noted in this study, mirror conclusions from earlier works on automation in customer service (Bhatti dkk., 2022).

This research differs by emphasizing user perceptions and behavioral outcomes rather than solely focusing on technical functionalities (Esmaeilpour Ghouchani dkk., 2020). Previous studies often overlook the importance of trust and transparency, which emerged as significant factors in this study. The findings also contribute a nuanced understanding of how different AI features influence UX in distinct ways (Lorca dkk., 2019).

Some studies have suggested that AI adoption is universally positive, yet this research identifies specific challenges, such as algorithmic biases and data privacy concerns, that can undermine its effectiveness (Güllep dkk., 2022). This divergence underscores the importance of addressing ethical considerations in AI deployment. The study extends the discourse by exploring how businesses can mitigate these challenges to maximize AI's benefits (Severeyn dkk., 2024).

This research contributes new insights into the interplay between AI technology and user expectations, particularly in diverse e-business sectors (Yousfani & Khowaja, 2019). While existing literature provides a general overview, this study adds depth by analyzing sector-specific applications and user-centric metrics, enriching the academic and practical understanding of AI in e-business (Aremu & Arfan, 2023).

The findings indicate a shift in user expectations towards more intuitive and personalized digital experiences. AI technologies are becoming a standard feature in e-business, signifying a broader trend of technological integration shaping consumer behavior (Upadhyay dkk., 2023). The results reflect a growing reliance on automation to meet evolving demands for efficiency and convenience.

The research highlights the critical role of transparency and accountability in fostering trust in AI-driven platforms (Lippert dkk., 2024). Users increasingly prioritize ethical considerations, such as data privacy and fairness, alongside functionality. These concerns underscore the necessity for businesses to adopt responsible AI practices.

The challenges identified, such as the limitations of chatbots in handling complex queries, point to the need for hybrid systems that combine AI with human oversight. This hybrid approach could address user frustrations while maintaining the efficiency benefits of automation. The findings signal an opportunity for businesses to innovate in designing user-centered AI solutions.

The study suggests that AI technology is not a one-size-fits-all solution. Its impact varies based on implementation strategies, user demographics, and sector-specific requirements. This complexity calls for adaptive approaches to ensure AI's successful integration into diverse e-business environments.

The results have significant implications for e-business strategies, emphasizing the importance of user-centric AI implementation. Businesses must prioritize features like personalization and efficient customer support to enhance satisfaction and engagement. These insights can guide the development of AI solutions that align with user needs and expectations.

Policy implications include the need for regulations that address ethical concerns, such as data privacy and algorithmic transparency. Governments and industry leaders must collaborate to establish guidelines that promote responsible AI use while

fostering innovation. These regulations are critical for building user trust in AI-driven systems.

The findings highlight the potential for AI to drive competitive advantages in e-business. Companies that invest in advanced AI technologies and address user concerns are likely to achieve higher retention rates and market growth. These implications underscore the strategic value of integrating AI into digital business models.

Future research should explore the long-term effects of AI on user behavior and platform performance. This could include longitudinal studies to evaluate sustained engagement and satisfaction over time. These insights will be vital for refining AI technologies and ensuring their relevance in dynamic market environments.

The findings reflect the inherent strengths of AI technologies in automating processes and personalizing user interactions. Personalized recommendations resonate with users because they simplify decision-making and enhance the relevance of e-business platforms. Chatbots' efficiency aligns with user demands for immediate assistance, driving higher satisfaction levels.

Concerns about data privacy and algorithmic biases emerge due to the nature of AI's reliance on user data. These issues highlight the trade-offs between technological innovation and ethical considerations, underscoring the complexity of deploying AI in a trust-sensitive context. Users are increasingly aware of these challenges, which influences their perceptions.

The limitations of AI in handling complex queries stem from the current state of natural language processing and machine learning models. While advancements have been significant, AI systems still require further development to achieve human-like understanding. These technical limitations explain why some users prefer human intervention for complex tasks.

The strong correlation between transparency and trust underscores the psychological impact of AI systems on user perceptions. Trust is not solely derived from functionality but also from how businesses communicate their practices. This interplay between technology and perception is a key factor in the observed results.

Businesses should focus on addressing the identified challenges to maximize AI's potential in enhancing UX. This includes investing in hybrid systems that combine AI and human oversight, ensuring that complex user needs are met effectively. Efforts to increase transparency and ethical compliance should be prioritized to build and maintain user trust.

Future research should delve deeper into the sector-specific impacts of AI on UX, exploring how different industries can tailor AI implementations to suit their

unique demands. Longitudinal studies could provide insights into how user perceptions evolve over time, offering valuable guidance for continuous improvement.

CONCLUSION

The study revealed that artificial intelligence (AI) technology significantly enhances user experience (UX) in e-business through personalized recommendations, efficient chatbots, and predictive analytics. Unlike previous studies, this research emphasized the direct relationship between AI-driven features and user satisfaction metrics, such as engagement, trust, and convenience. It also identified critical challenges, including data privacy concerns and the limitations of AI in handling complex user queries, which are often overlooked in existing literature.

This research contributes both conceptually and methodologically by integrating quantitative and qualitative approaches to explore the interplay between AI technologies and user experience. The study introduced a user-centric perspective, offering practical insights into how personalization and efficiency drive satisfaction. Additionally, the use of sector-specific analyses provided a more nuanced understanding of AI's applications, enabling businesses to align their strategies with diverse user needs.

The study's scope was limited to short-term impacts of AI on UX, leaving the long-term effects unexplored. The sample size, while adequate, may not fully capture the diversity of user experiences across different cultural and regional contexts. Future research should focus on longitudinal studies to evaluate sustained engagement and satisfaction. Expanding the scope to include ethical considerations, such as fairness and bias in AI algorithms, will provide a more comprehensive understanding of AI's implications in e-business

REFERENCES

Abbad, M., Magboul, I. H. M., & AlQeisi, K. (2022). Determinants and outcomes of e-business adoption among manufacturing SMEs: Insights from a developing country. *Journal of Science and Technology Policy Management*, *13*(2), 456–484. Scopus. https://doi.org/10.1108/JSTPM-03-2021-0049

Abdelfattah, F., Al Halbusi, H., & Al-Brwani, R. M. (2023). Cognitive style and fostering of technological adaptation drive E-entrepreneurial of new mature business. *International Journal of Innovation Studies*, *7*(3), 230–243. Scopus. https://doi.org/10.1016/j.ijis.2023.04.001

Adam, I. O., & Alhassan, M. D. (2023). Global e-readiness as a foundation for e-government and e-business development: The effect of political and regulatory environment. *International Journal of Business Information Systems*, *44*(1), 64–80. Scopus. https://doi.org/10.1504/IJBIS.2023.133523

Al Halbusi, H., Soto-Acosta, P., & Popa, S. (2024). Entrepreneurial passion, role models and self-perceived creativity as antecedents of e-entrepreneurial intention in an emerging Asian economy: The moderating effect of social media.

Asia Pacific Journal of Management, *41*(3), 1253–1284. Scopus. https://doi.org/10.1007/s10490-022-09857-2

Al-Harazneh, Y. M., Alobeytha, F. L., & Alodwan, T. A. A. (2022). Students' Perceptions of E-Learning Systems at the Jordanian Universities Through the Lens of E-Business Booming During the Coronavirus Pandemic. *International Journal of Distance Education Technologies*, *20*(1). Scopus. https://doi.org/10.4018/IJDET.295981

Almarri, K., Boussabaine, H., & Al Nauimi, H. (2023). The influence of risks on the outturn cost of ICT infrastructure network projects. *Construction Innovation*, *23*(1), 85–104. Scopus. https://doi.org/10.1108/CI-05-2020-0079

Alnoor, A., Atiyah, A. G., & Abbas, S. (2023). Toward digitalization strategic perspective in the European food industry: Non-linear nexuses analysis. *Asia-Pacific Journal of Business Administration*. Scopus. https://doi.org/10.1108/APJBA-07-2023-0298

Aremu, A. Y., & Arfan, S. (2023). Factors Influencing the Usage of E-Business to Improve SME Performance. *International Journal of E-Business Research*, *19*(1). Scopus. https://doi.org/10.4018/IJEBR.324065

Bhatti, H. Y., Bint E. Riaz, M., Nauman, S., & Ashfaq, M. (2022). Browsing or buying: A serial mediation analysis of consumer's online purchase intentions in times of COVID-19 pandemic. *Frontiers in Psychology*, *13*. Scopus. https://doi.org/10.3389/fpsyg.2022.1008983

Daoud, L. (2023). Predictors of Auditors' Usage of CAATs: The Role of Top Management Support and Trust. *Information Sciences Letters*, *12*(5), 1841–1850. Scopus. https://doi.org/10.18576/isl/120528

Esmaeilpour Ghouchani, B., Jodaki, S., Joudaki, M., Balali, A., & Rajabion, L. (2020). A model for examining the role of the Internet of Things in the development of e-business. *VINE Journal of Information and Knowledge Management Systems*, *50*(1), 20–33. Scopus. https://doi.org/10.1108/VJIKMS-04-2019-0058

Febrianti, M. A., Yudhistira, G. A., & Kusrini, E. (2020). Adoption of e-Business: A Systematic Literature Review. *Int. Conf. Decis. Aid Sci. Appl., DASA*, 680–685. Scopus. https://doi.org/10.1109/DASA51403.2020.9317168

Güllep, E., Unyapoth, A., & Suesaowaluk, P. (2022). Factors influencing the satisfaction of chat commerce usage experience in Thailand: A Covid necessitated e-business platform. *Int. Conf. Inf. Syst., ICIS: "Digit. Next Gener."* International Conference on Information Systems, ICIS 2022: "Digitization for the Next Generation." Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85192561324&partnerID=40&md5=b2c2fcac3ee0a01fbc401ef979e1ef6f

Iqbal, A., Asrar-Ul Haq, M., Noor, Z., & Ahmed, M. (2023). E-Business Career Opportunities and Implications for Fresh University Graduates in Pakistan. *International Journal of E-Business Research*, *19*(1). Scopus. https://doi.org/10.4018/IJEBR.323808

Jaber, O. A., Johar, M. G. M., & Al-Masaeed, S. (2020). How do legislations, regulations, policies and cases influence the security in E-Commerce? *Systematic Reviews in Pharmacy*, *11*(1), 673–680. Scopus. https://doi.org/10.5530/srp.2020.1.86

Jain Jacob, M., & Shanmugam, M. (2019). A study on the influencing factors of online shopping and purchasing decisions among college students: An empirical study.

International Journal of Advanced Science and Technology, *29*(5), 1320–1325. Scopus.

Kamariotou, M., Kitsios, F., & Madas, M. (2021). E-Business Strategy for Logistics Companies: Achieving Success through Information Systems Planning. *Logistics*, *5*(4). Scopus. https://doi.org/10.3390/logistics5040073

Khraim, H. S. (2021). Factors affecting Jordanian entrepreneurs' intentions to use smartphone applications in business. *Uncertain Supply Chain Management*, *9*(4), 1037–1046. Scopus. https://doi.org/10.5267/j.uscm.2021.x.003

Krasniqi, A., & Kacamakovic, M. K. (2023). CHALLENGES AND PERSPECTIVES OF LAW AND DIGITALIZATION: CASE STUDY OF CONTRACT LAW. *Human Research in Rehabilitation*, *13*(2), 264–270. Scopus. https://doi.org/10.21554/hrr.092308

Kumaran, L. A., & Jeyachandran, H. (2022). Modelling e-business influencing factors for supply chain performance of Indian MSMEs: An ISM approach. *International Journal of Process Management and Benchmarking*, *12*(1), 28–45. Scopus. https://doi.org/10.1504/IJPMB.2022.120444

Lippert, R. K., Mackinnon, D., & Treffers, S. (2024). The new private urban governance: Vestiges, ventures and visibility. *Urban Studies*, *61*(14), 2673–2685. Scopus. https://doi.org/10.1177/00420980241286305

Lorca, P., de Andres, J., & Garcia-Diez, J. (2019). Impact of e-commerce sales on profitability and revenue. The case of the manufacturing industry. *Engineering Economics*, *30*(5), 544–555. Scopus. https://doi.org/10.5755/j01.ee.30.5.21254

Putra, F. I. F. S., Wardhani, M. F., & Budiantoro, R. A. (2022). DESITA: E-Service Optimization of Student Final Project Management Based on Website Technology. *Int. Semin. Appl. Technol. Inf. Commun.: Technol. 4.0 Smart Ecosyst.: A New Way Doing Digit. Bus., iSemantic*, 396–400. Scopus. https://doi.org/10.1109/iSemantic55962.2022.9920446

Rondović, B., Djuričković, T., & Kašćelan, L. (2019). Drivers of e-business diffusion in tourism: A decision tree approach. *Journal of Theoretical and Applied Electronic Commerce Research*, *14*(1), 30–50. Scopus. https://doi.org/10.4067/S0718-18762019000100104

Sani, A., Nawaninatyas P, N., Khristiana, Y., Udin Zailani, A., & Husain, T. (2020). E-Business Adoption Models in Organizational Contexts on the TAM Extended Model: A Preliminary Assessment. *Int. Conf. Cyber IT Serv. Manag., CITSM*. 2020 8th International Conference on Cyber and IT Service Management, CITSM 2020. Scopus. https://doi.org/10.1109/CITSM50537.2020.9268869

Santoso, W., Sunyoto, H. K., & Usmanij, P. (2023). Managing Intangible Resources on e-Commerce Msme Embracing Digital Era in Surabaya: A Test of Business Adoption as Mediation. Dalam *Entrepreneurship Research: Developing New and Emerg. Patterns in the Post COVID-19 Pandemic Era* (hlm. 83–102). Springer Nature; Scopus. https://doi.org/10.1007/978-981-99-4452-1_5

Severeyn, E., La Cruz, A., Puente, C., Velásquez, J., & Huerta, M. (2024). Unveiling the Barriers to E-Business Adoption in Venezuelan Public Enterprises: A Multiple Correspondence Analysis Approach. Dalam Briceno Rodriguez D.Z. (Ed.), *IEEE Colombian Conf. Commun. Comput., COLCOM - Proc.* Institute of Electrical and Electronics Engineers Inc.; Scopus. https://doi.org/10.1109/COLCOM62950.2024.10720252

Shukri, S. M., Johar, M. G. M., & Tham, J. (2020). How E-business platform channels influence chinese auto-parts wholesale market? *Systematic Reviews in Pharmacy*, *11*(1), 718–725. Scopus. https://doi.org/10.5530/srp.2020.1.92

Solangi, Z. A., Solangi, Y. A., Al-Githami, S. S., Maitlo, A., & Shah, M. H. (2022). Adoption of social commerce: An empirical analysis in the context of Pakistan. *International Journal of Advanced and Applied Sciences*, *9*(7), 54–64. Scopus. https://doi.org/10.21833/ijaas.2022.07.007

Upadhyay, N., Upadhyay, S., Al-Debei, M. M., Baabdullah, A. M., & Dwivedi, Y. K. (2023). The influence of digital entrepreneurship and entrepreneurial orientation on intention of family businesses to adopt artificial intelligence: Examining the mediating role of business innovativeness. *International Journal of Entrepreneurial Behaviour and Research*, *29*(1), 80–115. Scopus. https://doi.org/10.1108/IJEBR-02-2022-0154

Yousfani, K., & Khowaja, F. (2019). The role of digital economies in the development and growth in Asian business models. Dalam *Handb. Of Res. On Manag. Pract. And Disruptive Innov. In Asia* (hlm. 227–248). IGI Global; Scopus. https://doi.org/10.4018/978-1-7998-0357-7.ch013

Zhao, J., & Chen, S. (2021). Research on Credit Evaluation System of E-business Enterprises from The Perspective of Organizational Resilience Theory. Dalam Li E.Y., Zhou H., & Yen B. (Ed.), *Proc. Int. Conf. Electron. Bus. (ICEB)* (Vol. 21, hlm. 342–352). International Consortium for Electronic Business; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125321257&partnerID=40&md5=9458e3bf71e3931680df56c8c0af71ba