

Smart Strategies in the Digital Age: Conventional Retail Facing the Revolution E-Commerce



Chris Partogi¹, Mochamad Heru Riza Chakim², Mulyati³

^{1,2,3} Department of Retail Management, Faculty of Economics and Business, Raharja University

ABSTRACT: The aim of this research is to see how e-commerce trends impact traditional retail marketing strategies. The study emphasize the use of new technologies such as augmented reality (AR), artificial intelligence (AI), and omnichannel approaches as a way to maintain traditional retail competitiveness. This was done using the PRISMA framework and SWOT analysis. Data was collected from eleven relevant articles over the past three years (2022-2024) using searches in ScienceDirect and Google Scholar. Results show that the use of technology in omnichannel strategies can improve customer experience and operational efficiency. However, the main obstacles remain infrastructure limitations, high investment costs and data security threats. To address this issue, it is recommended to use mitigation strategies that prioritize technology partnerships and focus on specific market segments. This research provides practical guidelines for retail partitioners to adjust to the dynamics of the e-commerce market. In addition, this research offers a perspective for academics in studying retail transformation in the digital era.

KEYWORDS: e-commerce, omnichannel, marketing strategy, conventional retail, SWOT analysis

I. INTRODUCTION

Rapid advances in information and communication technology have changed the business sector in the world in recent years. The digital economy is characterized by transforming the economy, jobs and even society as a whole by introducing new technologies and digital processes that have contributed crucially to economic development. The digital economy involves transactions resulting from countless online connections between data, machines, companies, and people (Soava, Mehendintu, & Sterpu, 2022). One of the most striking changes includes the rapid growth of e-commerce which has presented several major challenges for conventional retail. As stated by Merzlyakova et al., (2021) that the world e-commerce market in 2019 has grown rapidly by \$3.4 trillion in 2019, and will be expected to continue to increase every year.

Agyeman et al., (2022) in his studies evaluate performance and adoption *e-commerce* of the world's leading companies such as Amazon, JD.com, Alibaba, and Sunning.com, the four companies indicated that *e-commerce* will continue to experience significant growth of 22% in 2023 until 2040 continues to increase, and can provide advice to governments and organizations in expanding technology *e-commerce* in areas such as automatic delivery, *telemedicine*, education, and *streaming* direct. In addition, information technology regarding progress in *AI*, *AR/VR*, and big data analysis allows *e-commerce* to provide an increasingly personalized and efficient shopping experience, thereby challenging the dominance of traditional physical stores (S. Li, Liu, Su, Luo, & Yang, 2023; Nauriy et al., 2024).

This rapid growth has encouraged conventional retailers to reevaluate their marketing plans in order to maintain competitiveness in a market world that is increasingly moving towards the digital era. Studies conducted by Dumanska et al., (2021) explained that attendance at shopping centers decreased by 20%-45% and purchases were regular *online* experienced an increase of up to 41%, which has crucially influenced changes in trade internationally. Charm et al., (2020) explained that consumers in various countries have moved to shop *offline* to shop *online* for approximately 60%. Another example is in business *e-commerce* the TikTok media platform is experiencing significant changes, especially in Southeast Asia and China 4.4 billion US dollars or the equivalent of IDR 76.6 trillion in 2022 (Meliala, 2024).

The changes have prompted conventional retail to immediately push *omnichannel* which integrates the shopping experience *online* and *offline*. This encourages retailers not to focus too much on physical stores, but to continue to develop a strong digital presence to meet increasingly changing consumer expectations. So, growth *e-commerce* what has happened has created new

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habits regarding consumer spending habits and can shape the future of the retail industry (Ratchford, Soysal, Zentner, & Gauri, 2022). Rapid growth e-commerce, does not eliminate the important role of conventional retail in the shopping ecosystem. Lindiawatie et al., (2024) explain purchases regularly *online* has several risks, making some people still choose to shop online *offline* or come directly to the shop. By shopping directly in the store, the purchase of certain products can be seen directly by consumers and products that require touch can be felt directly by consumers rather than when shopping *online*.

Move to *e-commerce* have a significant impact on employment opportunities in the retail sector. Research conducted by Shankar et al., (2021) projecting significant changes in the required skills and occupational structure in the retail sector. Changes in skills are expected to continue to increase by 50% until 2025 (L. Li, 2022). Subsequently, changes in the conventional retail sector have had an impact on the vitality of urban centres and the use of urban space, requiring responsive strategic planning (Talen & Park, 2021). Therefore, a deep understanding of such dynamics is important to design strategically and effectively.

To remain relevant, Therefore, a deep understanding of such dynamics is important to design strategically and effectively (Ramadhan et al., 2024). Therefore, understanding the impact of *e-trendscommerce* conventional retail marketing strategies are very important for the sustainability and success of retail businesses in today's digital era. So that the information provided can increase insight and inspiration for future practitioners and academics. Then the incorporation of PRISMA methods and SWOT analysis provides a systematic and comprehensive framework for writing. The PRISMA method provides a valid and relevant data source, and SWOT analysis provides strategic insight as a foundation for providing practical recommendations for conventional retail adaptation to trends *e-commerce*.

II. METHODOLOGY

A. Search Strategy

This research uses the ScienceDirect and Google Scholar databases as material for searching for the necessary data, and searches start from using the ScienceDirect database and then Google Scholar which is cleared as one of the indexing systems for citations. These two sources are the most frequently visited by researchers in various worlds. Search strategies include a combination of keyword variations ("*e-commerce influence*" OR "*retail marketing strategy*" OR "*e-commerce trend*" OR "*conventional retail marketing*" OR "*retail transformation*"). The searches carried out follow the guidelines *Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)* which emphasizes the importance of review reports that evaluate randomized trials and are used as a basis for reporting systematic reviews in various other types of research (Permatasari, Hutabarat, & Purnamasari, 2023).

B. Inclusion Criteria

The inclusion criteria used in this research include: (1) Articles used in English, (2) Articles published in the last 3 years, namely 2022-2024, (3) Articles that are explicitly offensive *e-commerce* in conventional retail in the goods sector.

C. Procedure

The initial data obtained amounted to The 11,126 publications from the identification made through the search of the ScienceDirect database totaled 4,266 articles and Google Scholar 6,900 articles. After following the exceptions in the predetermined criteria, 11 articles remain (Bonfanti, Vigolo, Vannucci, & Brunetti, 2023; Kulkarni & Khan, 2023; Merritt & Zhao, 2022; Ranjan, 2024; Sathya, 2024; Salah & Ayyash, 2024; Suh & Moradi, 2023; Vhatkar et al., 2024; Wang, 2023; Yang, Liu, Cao, Sun, & Kong, 2024; Yin, Chiu, Hsieh, & Kuo, 2022). Most of the articles are not used because they are not offensive *e-commerce* in conventional retail. All articles are extracted from sources and analyzed through Mendeley software to help remove duplicate articles. This explanation can be seen in figure 1.

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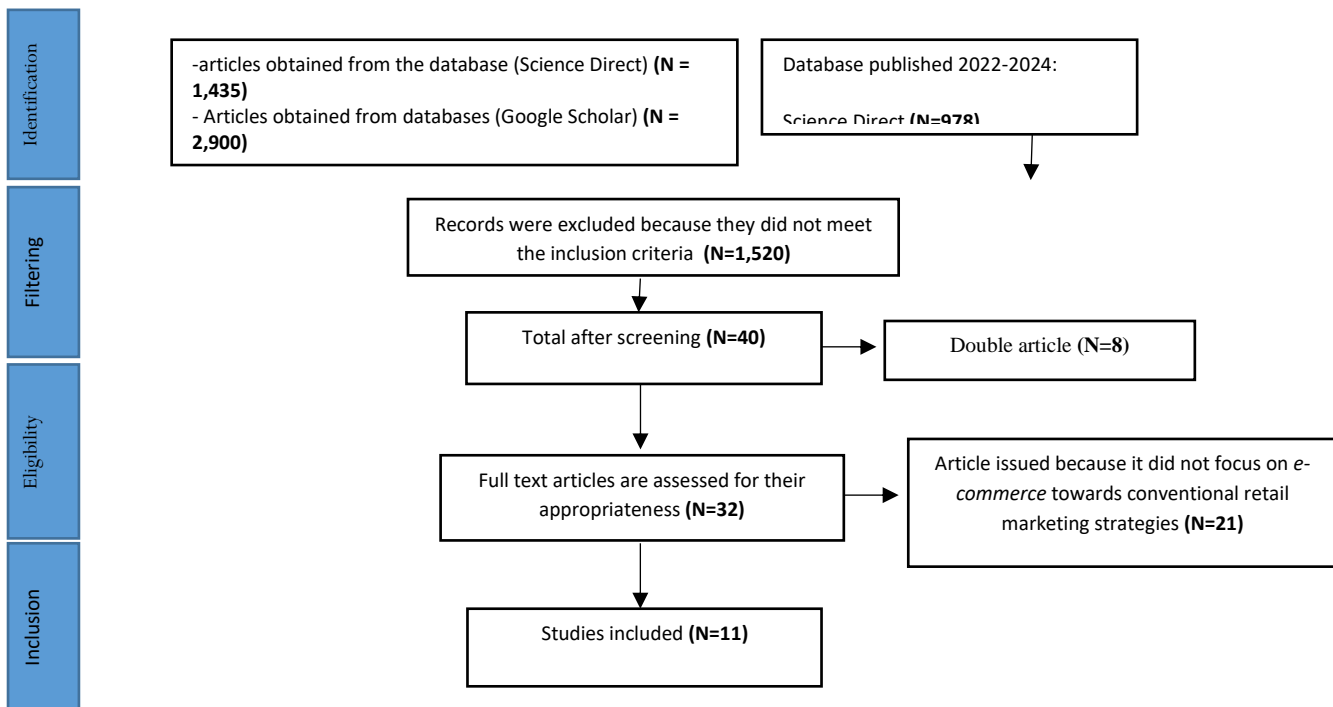


Figure 1. Prisma Research Flowchart

D. Analysis Methods

The analytical method to be used in this study was SWOT, which was then elaborated using a qualitative descriptive approach to construct the SWOT matrix.

III. RESULTS AND DISCUSSION

A. Results

The results of the application of the SWOT analysis that has been carried out are then presented through elaboration with a qualitative descriptive approach to produce a SWOT matrix. The following will explain the overall SWOT analysis from the data sources that have been obtained in the following table:

Table 1. SWOT Analysis

| | |
|------------------------------|---|
| <i>Strengths</i> (Strength) | Digitalization and Technology: <ul style="list-style-type: none"> - Adoption of innovative technologies includes <i>AI</i>, <i>AR/VR</i>, <i>Chatbots</i>. - Integration <i>omnichannel</i> effective. - Data-driven personalization system. - <i>Live streaming platform</i> interactive. Operations and Efficiency: <ul style="list-style-type: none"> - Increase in business productivity. - Operational cost efficiency. - Flexibility in pricing and promotion strategies. - Wider market reach. |
| <i>Weaknesses</i> (Weakness) | Implementation and Infrastructure: <ul style="list-style-type: none"> - Limitations of technological infrastructure. - High investment costs for digitalization. - Difficulty in maintaining consistency between channels. Adaptation and Experience: <ul style="list-style-type: none"> - Limitations of physical experience in <i>e-commerce</i>. - Variations in digital availability between business actors. - Lack of direct consumer perspective. |

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| | |
|------------------------------------|--|
| <i>Opportunities (Opportunity)</i> | <p>Expansion and Innovation:</p> <ul style="list-style-type: none"> - Market growth <i>e-commerce</i> global. - Sustainable technology development. - Experience integration <i>phygital (physical-digital)</i>. <p>Customer Experience:</p> <ul style="list-style-type: none"> - Personalize data-driven services. - Increased interactivity through <i>live streaming</i>. - Collaboration with <i>influencers</i> social media. |
| <i>Threats(Threat)</i> | <p>Competition and Market:</p> <ul style="list-style-type: none"> - Competition from <i>e-commerce platform</i> big. - Changing consumer preferences to digital. - Decline in physical store traffic. <p>Risks and Challenges:</p> <ul style="list-style-type: none"> - Data security and privacy. - Dependence on technology partners. - Socio-economic impact on traditional retailing. |

After knowing the results of each section *Strengths, Weaknesses, Opportunities, Threats*, will be entered into the table *matrix* SWOT to see the strategy *SO (Strengths-Opportunities), WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats)* which can be implemented. The following is a table of results from *matrix* SWOT:

Table 2. SWOT Matrix

| Internal/External | <i>Strengths (S)</i> | <i>Weaknesses (W)</i> |
|--------------------------|--|---|
| | <ol style="list-style-type: none"> 1. Adoption of innovative technologies 2. Integration <i>omnichannel</i> effective 3. Data personalization system 4. <i>Live streaming platform</i> 5. Operational efficiency | <ol style="list-style-type: none"> 1. Infrastructure limitations 2. High investment costs 3. Difficulty in channel consistency 4. Limitations of physical experience 5. Variations in digital willingness |
| <i>Opportunities (O)</i> | <p>Strategy <i>Strengths-Opportunities</i></p> <ol style="list-style-type: none"> 1. <i>Omnichannel platform</i> integrated 2. Data personalization program 3. Optimize live streaming 4. Cross-channel loyalty program 5. Integration <i>influencer marketing</i> | <p>Strategy <i>Weaknesses-Opportunities</i></p> <ol style="list-style-type: none"> 1. Gradual technology implementation 2. Technology provider partnerships 3. Consistent service standards 4. Research on consumer experience 5. Digital education via <i>influencers</i> |
| <i>Threats (T)</i> | <p>Strategy <i>Strengths-Threats</i></p> <ol style="list-style-type: none"> 1. Integrated differentiation of experience 2. Consumer trend prediction 3. Digital integration in physical stores 4. Powerful data security system 5. Internal technology capabilities | <p>Strategy <i>Weaknesses-Threats</i></p> <ol style="list-style-type: none"> 1. Specific market segment focus 2. Strategy partnership 3. Operational efficiency 4. Hr Training 5. <i>Contingency plan</i> Techno |

B. DISCUSSION

Strategy Analysis Weaknesses-Opportunities

Addressing internal weaknesses through exploiting external opportunities through gradual adoption of technology is the goal of the WO strategy. In this case, companies can implement technology gradually to reduce the risks that may arise from technology adoption too quickly. Several previous studies provided solutions to address internal weaknesses, such as focusing on customer experience, collaboration with third parties, adoption of new technologies, listening to and implementing customer feedback, product and service innovation, integrated marketing, employee skills development, and adaptation to market changes (Barykin et al., 2022; Ngamvichaikit, 2024; Sun & Jung, 2024; Zangana et al., 2024). It aims to ensure that any innovation is implemented effectively and generates additional value for business operations, essential to provide an initial focus on the most important technologies. Thus, assessing the effectiveness of technology implementation, companies must carry out regular evaluations. Further, working with technology providers allows for increased investment costs through knowledge transfer and resource sharing. Apart from that, by establishing partnerships with technology providers, e-commerce platforms or logistics companies, we can strengthen today's omnichannel infrastructure (Barykin et al., 2022). Thus, it allows companies to widen their reach and increase operational efficiency (Zangana et al., 2024). This allows internal capabilities to develop more efficiently and optimally.

Strategy Analysis Strengths-Threats

Strategy strengths-threats in digital retail encourage companies to use power internally to address risks externally, one of which is by providing a different experience for consumers. What companies can do is by utilizing technological integration to create a unique proportion of value. By creating new products and services that can meet the needs of a frequently changing market (Barykin et al., 2022). Companies can carry out new innovations to reduce the risk of losing market share due to competition or changes in consumer preferences and help companies remain relevant (Gasparin & Slongo, 2023; Sun & Jung, 2024; Zangana et al., 2024). A focus on experience for excellent consumers provides a competitive advantage in attracting and retaining consumers. Meanwhile, attention to data security is very important considering the increasing and increasingly complex cyber threats. As explained by Zangana et al., (2024) to minimize external risks companies can exploit strengthening technology infrastructure, resulting from cyber threats or disruptions in the supply chain. So, companies can implement stricter security systems by focusing on protecting consumer data, including audits and system updates which are carried out periodically in order to maintain consumer integrity and trust in the digital retail platform used. In addition, the use of new technologies adopted by a company can improve data analysis and decision making. This means that companies can better understand market trends and customer behavior so they can respond more effectively (Barykin et al., 2022).

Strategy Analysis Weaknesses-Threats

The weaknesses-threats strategy focuses on a defense approach in reducing weaknesses and preventing threats. By focusing on specific market segments to find and serve more exclusive market segments. This is in line with the statement Zangana et al., (2024) correlates with *stakeholders*, as customers, suppliers and business partners can build stronger relationships useful to help companies overcome any external threats. Additionally, by optimizing resources on specific parts of the market, companies can form stronger correlations in consumers and cultivate specialized skills that suit the needs of those segments. Through training and skills development can help companies be better prepared to face external risks (Ngamvichaikit, 2024). So that the company is ready to face challenges that arise, such as changes in regulations or market fluctuations (Sun & Jung, 2024). Meanwhile, the weaknesses-threats strategy prioritizes operational efficiency so that companies can reduce operational costs by maximizing business processes. Increasing efficiency and reducing dependence on manual labor regarding some business functions can implement automation. Therefore, companies can still run optimally amidst dynamic market challenges thanks to more precise processes resulting from the use of lean management systems. As is Ngamvichaikit, (2024) reports that companies must have mitigation strategies, this aims to improve employee training, investment in new technology, or improve operational processes to increase efficiency and effectiveness.

IV. CONCLUSIONS

This study shows how important it is to change conventional retail marketing strategies to face the rapid growth of e-commerce in the digital era. Artificial intelligence (AI), augmented reality (AR), and omnichannel can be the main forces for increasing competitiveness, according to SWOT conducted. Huge opportunities are also emerging from the global e-commerce market, allowing businesses to improve customer service and shopping experiences.

However, problems such as limited infrastructure and high investment costs must be addressed by gradually implementing technology and cooperating strategically with technology providers. Effective mitigation approaches are needed to reduce threats

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from outside sources, such as increased competition from large e-commerce platforms and data security risks. This approach includes strengthening security systems and concentrating on specific market segments.

Thus, this research provides practical guidance for retail industry players to adapt to e-commerce trends while maintaining their competitive advantage, as omnichannel strategies prove to be relevant steps to integrate online and offline shopping experiences, increase consumer satisfaction, and support the sustainability of conventional retail businesses.

V. IMPLICATIONS

This research has benefits for both parties, practitioners and academics. Practicalists can use the SWOT framework to create effective marketing strategies, and academics can use these findings as a basis for conducting further research on how technology impacts conventional retail.

VI. RESEARCH LIMITATIONS

This study only uses data from articles published in the last three years (2022-2024), so it does not cover a wider history. In addition, the focus of the study is on goods retailing, so the results may not be fully applicable to the services sector.

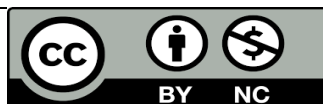
REFERENCES

- 1) Agyeman, F. O., Zhiqiang, M. A., Li, M., Sampene, K., Frimpong, M., & Brenya, R. (2022). Comprehending the Globalization and Performance of E-Commerce Businesses: Evidence From E-Commerce Companies. *Original Research Article Asian Journal of Advances in Research*, 5(1), 409–424. Retrieved from <http://research.sdpublishers.net/id/eprint/3279/>
- 2) Bonfanti, A., Vigolo, V., Vannucci, V., & Brunetti, F. (2023). Creating memorable shopping experiences to meet phygital customers' needs: evidence from sporting goods stores. *International Journal of Retail and Distribution Management*, 51(13), 81–100. <https://doi.org/10.1108/IJRDM-12-2021-0588>
- 3) Charm, T., Coggins, B., Robinson, K., & Wilkie, J. (2020). The great consumer shift: Ten charts that show how US shopping behavior is changing.
- 4) Dumanska, I., Hrytsyna, L., Kharun, O., & Matviets, O. (2021). E-commerce and M-commerce as Global Trends of International Trade Caused by the Covid-19 Pandemic. *WSEAS TRANSACTIONS ON ENVIRONMENT AND DEVELOPMENT*, 17, 386–397. <https://doi.org/10.37394/232015.2021.17.38>
- 5) Kulkarni, M. M., & Khan, Z. (2023). The Evolution and Impact of E-Commerce on Malls in India: a Comparative Analysis. *EPRA International Journal of Economic and Business Review*, (May 2023), 24–29. <https://doi.org/10.36713/epra13456>
- 6) Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-022-10308-y>
- 7) Li, S., Liu, Y., Su, J., Luo, X., & Yang, X. (2023). Can e-commerce platforms build the resilience of brick-and-mortar businesses to the COVID-19 shock? An empirical analysis in the Chinese retail industry. *Electronic Commerce Research*, 23(4), 2827–2857. <https://doi.org/10.1007/s10660-022-09563-7>
- 8) Lindiatie, Dhona Shahreza, & Lisna Wati. (2024). Analisis Perbandingan Penjualan Offline Dan Online Produk Fashion Meccanism Sebagai Cara Menarik Konsumen. *Jurnal Manajemen Dan Ekonomi Bisnis*, 4(1), 334. Retrieved from <https://prin.or.id/index.php/cemerlang/article/view/2574/2355>
- 9) Meliala, R. A. S. (2024). *Dampak Saluran Integrasi terhadap Loyalitas Melalui Pengalaman Berbelanja Generasi Z di Aplikasi Tiktok pada Kota Medan* (Universitas HKBP Nonmensen Medan). Universitas HKBP Nonmensen Medan. Retrieved from [https://repository.uhn.ac.id/bitstream/handle/123456789/10287/ROBI ANDIKA SEMBIRING MELIALA.pdf?sequence=1&isAllowed=y](https://repository.uhn.ac.id/bitstream/handle/123456789/10287/ROBI%20ANDIKA%20SEMBIRING%20MELIALA.pdf?sequence=1&isAllowed=y)
- 10) Merritt, K., & Zhao, S. (2022). The Power of Live Stream Commerce: A Case Study of How Live Stream Commerce Can Be Utilised in the Traditional British Retailing Sector. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 71. <https://doi.org/https://doi.org/10.3390/joitmc8020071>
- 11) Merzlyakova, E., Ershova, I., & Bridskiy, E. (2021). Main Trends in the Development of the Global E-Commerce Market. *SHS Web Conf.*, 110. Retrieved from <https://doi.org/10.1051/shsconf/202111001035>
- 12) Nauriy, C., Santosa, E. B., Hastomo, M. D., Pantjarani, A., Purbiyanto, E., Santosa, T. B., ... Alawiyah, L. (2024). *Literasi Digital dan Peningkatan Daya Saing UMKM Masa Kini (Pertama)*. Surakarta: Politeknik Harapan Bangsa Surakarta.
- 13) Permatasari, I., Hutabarat, P. M., & Purnamasari, E. (2023). Faktor Evaluasi Usabilitas dalam Sistem e-learning dengan Panduan Tinjauan Sistematis PRISMA: Indonesia. *J-ENSITEC (Journal of Engineering and Sustainable Technology)*, 9(02 SE-Articles), 805–810. <https://doi.org/10.31949/jensitec.v9i02.3662>
- 14) Ramadhan, B., Maâ€™ruf, F. N., Darmawan, F., Santoso, K. A., Mitasari, Maulana, A., & Hananto, D. (2024). Inovasi

Smart Strategies in the Digital Age: Conventional Retail Facing the Revolution E-Commerce

Pemasaran Jasa : Meningkatkan Daya Saing Bisnis di Era Digital. *Philosophiamundi*, 1(2 SE-Articles). Retrieved from <https://philosophiamundi.id/index.php/philosophia/article/view/29>

- 15) Ranjan, S. (2024). The impact of e-commerce on traditional retail model in India. *Interantional Journal of Scientific Research in Engineering and Management*, 08(04), 1–5. <https://doi.org/10.55041/ijrsrem32677>
- 16) Ratchford, B., Soysal, G., Zentner, A., & Gauri, D. K. (2022). Online and offline retailing: What we know and directions for future research. *Journal of Retailing*, 98(1), 152–177. <https://doi.org/https://doi.org/10.1016/j.jretai.2022.02.007>
- 17) Sadhya, P. (2024). Impact of E-Commerce on Traditional Retailers of Electronic and Garments. *Interantional Journal of Scientific Research in Engineering and Management*, 08(04), 1–5. <https://doi.org/10.55041/ijrsrem31019>
- 18) Salah, O. H., & Ayyash, M. M. (2024). E-commerce adoption by SMEs and its effect on marketing performance: An extended of TOE framework with ai integration, innovation culture, and customer tech-savviness. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100183. <https://doi.org/https://doi.org/10.1016/j.joitmc.2023.100183>
- 19) Shankar, V., Kalyanam, K., Setia, P., Golmohammadi, A., Tirunillai, S., Douglass, T., ... Waddoups, R. (2021). How Technology is Changing Retail. *Journal of Retailing*, 97(1), 13–27. <https://doi.org/https://doi.org/10.1016/j.jretai.2020.10.006>
- 20) Soava, G., Mehedintu, A., & Sterpu, M. (2022). Analysis and Forecast of the Use of E-Commerce in Enterprises of the European Union States. *Sustainability*, Vol. 14. <https://doi.org/10.3390/su14148943>
- 21) Suh, T., & Moradi, M. (2023). Transferring in-store experience to online: An omnichannel strategy for DIY customers' enhanced brand resonance and co-creative actions. *Journal of Business Research*, 168(February 2022), 114237. <https://doi.org/10.1016/j.jbusres.2023.114237>
- 22) Talen, E., & Park, J. (2021). Understanding Urban Retail Vacancy. *Urban Affairs Review*, 58(5), 1411–1437. <https://doi.org/10.1177/10780874211025451>
- 23) Vhatkar, M. S., Raut, R. D., Gokhale, R., Kumar, M., Akarte, M., & Ghoshal, S. (2024). Leveraging digital technology in retailing business: Unboxing synergy between omnichannel retail adoption and sustainable retail performance. *Journal of Retailing and Consumer Services*, 81, 104047. <https://doi.org/https://doi.org/10.1016/j.jretconser.2024.104047>
- 24) Wang, T. (2023). Research on the Impact of E-commerce on Offline Retail Industry. *Frontiers in Business, Economics and Management*, 10(1), 169–173. <https://doi.org/10.54097/fbem.v10i1.10237>
- 25) Yang, R., Liu, J., Cao, S., Sun, W., & Kong, F. (2024). Impacts of agri-food e-commerce on traditional wholesale industry: Evidence from China. *Journal of Integrative Agriculture*, 23(4), 1409–1428. <https://doi.org/10.1016/j.jia.2023.10.020>
- 26) Yin, C. C., Chiu, H. C., Hsieh, Y. C., & Kuo, C. Y. (2022). How to retain customers in omnichannel retailing: Considering the roles of brand experience and purchase behavior. *Journal of Retailing and Consumer Services*, 69(February), 103070. <https://doi.org/10.1016/j.jretconser.2022.103070>



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