

Strategies of Traditional Traders in Facing the Development of E-Commerce at Plaza Ratahan Market

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Abstract

Traditional markets have long served as the backbone of Indonesia's grassroots economy, yet the rapid expansion of e-commerce now poses a serious structural challenge to their continued existence. This study examines the impact of e-commerce development on traditional traders, the adaptation strategies they employ, and the obstacles they encounter in adjusting to trade digitalization at Plaza Ratahan Market, Southeast Minahasa Regency. A qualitative descriptive approach was used, framed as a single case study of the market. Primary data were collected through semi-structured interviews with twelve purposively selected informants, comprising traders, market management, and customers, supplemented by non-participant observation and documentation, while secondary data were drawn from market management records and relevant statistical reports. Data were analyzed using the interactive model of Miles, Huberman, and Saldaña, involving data condensation, data display, and conclusion drawing/verification. The findings show that e-commerce development has intensified business competition, altered consumer purchasing behavior, reduced the number of customers, decreased traders' income, and weakened social interaction between traders and customers. In response, traders have adopted several adaptation strategies, including improving service quality, maintaining product quality, using social media for promotion, sustaining personal relationships with customers, and adjusting prices competitively. However, this adaptation process remains constrained by low digital literacy, limited capital, restricted access to technology, and low trust in online transactions. The study concludes that traditional traders at Plaza Ratahan Market continue to actively adapt to e-commerce, relying on accumulated social capital and rational, context-sensitive decision-making, even as structural barriers to full digital transformation persist.

Keywords: adaptation strategy; traditional traders; e-commerce; social capital; digital literacy; Plaza Ratahan Market



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INTRODUCTION

Traditional markets in Indonesia have historically functioned as a central pillar of the people's economy, serving not merely as sites of commodity exchange but as spaces of social interaction embedded in local community life. Within this social ecosystem, the market reflects local economic self-reliance, in which bargaining practices, inter-actor trust, and emotional ties have underpinned market stability for decades, consistent with the view that networks of trust and reciprocity constitute a distinct form of social capital available to individuals and groups embedded in a given social structure (Coleman, 1988). In the digital era, however, the existence of traditional markets faces serious structural challenges as consumption patterns shift toward online shopping platforms, or e-commerce. Massive digital transformation has reshaped the landscape of global trade, including in Indonesia. Empirical evidence from the 2020–2025 period points to a radical transformation in the consumption paradigm of Indonesian society, driven by the rapid penetration of digital technology. Digital platforms now dominate the trade sector, shifting shopping behavior from conventional face-to-face interaction toward efficient virtual transactions, a shift increasingly explained through the psychological, social, and technological mechanisms including personalization and trust-building that shape online purchasing decisions (Hwang, 2024). This phenomenon has created tangible economic pressure for traditional traders, particularly in non-food sectors such as clothing and electronics, which have experienced a drastic decline in visitor volume and revenue, a pattern also documented among traditional clothing traders adapting to digital-era competition in other Indonesian markets (H. M. Nasution et al., 2024). The impact of this disruption extends beyond financial dimensions, also touching the psychological dimension of traders who experience uncertainty about their future as their traditional market share erodes.

The presence of e-commerce introduces a new economic logic grounded in algorithms, logistical efficiency, and extreme price transparency an approach that contrasts sharply with the traditional market's logic of personal proximity and social negotiation. Traditional traders now find themselves caught in a kind of digital trap, forced to compete with global platforms possessing virtually unlimited capital and technological resources. An inability to adapt quickly often results in the economic marginalization of small traders who have long served as drivers of grassroots economic activity. This structural mismatch is consistent with broader findings on the barriers Micro, Small, and Medium Enterprises (MSMEs) face in adopting digital technology, including persistent gaps in knowledge, skills, and financial resources for technological investment, identified as the most significant barrier to technology adoption among MSMEs in developing economies (Loo et al., 2023; Diaz-Arancibia et al., 2024).

Prior research on traditional traders in the era of online marketing shows that the development of digital technology has transformed community trading patterns and pushed traditional traders to adopt various strategies in order to remain competitive amid intensifying competition. Traditional traders are required to adjust to technological development through improved service quality, use of social media, and strengthened social relationships with customers as a means of sustaining their businesses, a combination of strategies similarly documented among traders navigating the transformation of the Usus Tax Market into a modern marketplace (Purba et al., 2024). These findings indicate that e-commerce development functions not merely as a threat but as a challenge that demands adaptive capacity from traditional traders a dynamic also evident at Plaza Ratahan Market, Southeast Minahasa Regency, where the accelerating growth of e-commerce has altered consumer shopping behavior and compelled traders to confront various challenges in sustaining their businesses.

Competition between e-commerce and traditional traders arises because each offers distinct advantages. E-commerce excels in ease of access, time efficiency, a wider range of products, and promotional programs such as discounts, cashback, and free shipping, advantages closely tied to the trust-building mechanisms including transparent security measures and privacy assurances that shape consumers' willingness to transact online (Singh et al., 2024; Soleimani, 2022). Traditional traders, on the other hand, retain the advantage of direct interaction with customers, the opportunity for consumers to inspect goods in person, and long-established social relationships and trust, an advantage consistent with evidence that small firms leverage networks of trust and reciprocity to sustain business

performance where formal competitive resources are limited (Cooke & Wills, 1999). These traditional-market advantages, however, are often insufficient to counter the promotional appeal and transactional convenience offered by e-commerce, contributing to declining customer numbers and business revenue among traditional traders as consumers increasingly favor the practicality, time efficiency, and price competitiveness of online shopping a dynamic in which even factors such as return-policy clarity and perceived risk have been shown to shape consumer satisfaction with online shopping and, by extension, consumer preference for online over offline channels (Hipólito et al., 2025). This shift in consumer behavior places considerable pressure on traders to pursue adaptation strategies capable of sustaining competitiveness amid ongoing digital technological change.

Although Plaza Ratahan Market underwent physical modernization beginning in 2017 rebuilt as a grand "Plaza"-themed building symbolizing regional progress this architectural transformation now confronts the far less visible challenge of digital modernization. Despite various interventions by the Southeast Minahasa Regency Government through the Regional-Owned Market Enterprise (Perusahaan Daerah Pasar), such as low-cost market operations, the competitive pricing and logistical convenience offered by e-commerce remain an existential threat to traders. A striking contradiction thus emerges: a modernized physical space struggling to compete with a virtual economy that transcends the geographic boundaries of the Ratahan area. This phenomenon is further complicated by the geographic and social characteristics of Southeast Minahasa Regency, where access to technology and digital literacy among traders remains highly uneven some traders have begun experimenting with social media for marketing, while many others continue to rely on conventional methods due to limited technical knowledge, a pattern broadly consistent with digital-divide findings among MSMEs in developing regions, where digital literacy and infrastructure access remain decisive constraints on technology adoption (Rujitoningtyas et al., 2025; Trisninawati & Sartika, 2024).

The persistence and adaptation mechanisms developed by traders are widely regarded as determinant factors for their economic survival, making this an especially relevant context for exploring how trader agency responds to structural market change driven by technology. Prior studies elsewhere in Indonesia similarly show that traditional traders are not entirely passive in the face of such change: traders adapting to digitalization competition in Medan's Hongkong Market have been found to combine price adjustment, social media promotion, and digital payment systems to sustain revenue (H. M. Nasution et al., 2024), while a comparable case study of clothing traders at Petisah Market found that friendly, personalized service remained an important competitive advantage even as some traders began marketing through Shopee and Instagram alongside conventional methods (A. S. P. Nasution et al., 2024). Related case studies from other Indonesian traditional markets facing digital-era competition likewise document adaptation strategies combining service-quality improvement, price adjustment, and selective social media use, underscoring that dual adaptation between offline and online practices is increasingly recognized as key to traditional traders' survival in the digital era (Purba et al., 2024). Most of this research, however, concentrates on urban markets with comparatively better technological access, leaving a research gap regarding traditional traders in smaller, non-metropolitan markets such as Plaza Ratahan, which is characterized by distinct social, economic, and digital-literacy conditions.

This study is theoretically anchored in economic sociology, drawing on Rational Choice Theory, as articulated by J.S. Coleman, to understand how traders evaluate available resources and constraints in shaping their decisions, and on Bourdieu's Theory of Social Capital as methodologically elaborated by Eloire (2018), which emphasizes networks of relationships, trust, and reciprocal norms as crucial assets for individuals and groups navigating social and economic challenges. Social capital understood through dimensions of trust, networks, and reciprocity has been repeatedly shown to enhance small-firm performance and resilience where formal market advantages are limited (Cooke & Wills, 1999; Coleman, 1988). A complementary digital-era perspective is provided by Anthony Giddens's Structuration Theory, which frames traders as agents operating within and reciprocally reshaping the structural system of e-commerce, producing hybrid trading practices that combine conventional and digital elements; this structurational lens has likewise been applied to explain uneven technology adoption in developing-country contexts more broadly (Bhowmick, 2016). Taken together, these perspectives support a concept of Digital Resilience, in which traders draw on limited resources,

digital social capital, and a sense of digital agency to not only withstand digital disruption but adapt and transform through it, consistent with evidence that digital transformation among SMEs is best understood as a capability-building process shaped by entrepreneurial orientation and organizational resilience strategy rather than a single technology purchase (Li et al., 2018; Sudirman et al., 2025; Anatan & Nur, 2023), and that such capability, once developed, can also support broader circular-economy and resource-efficiency objectives within local digital trade ecosystems (Kurniawan et al., 2022). Even so, persistent barriers including low digital literacy, limited capital, weak infrastructure access, and low trust in online transactions continue to constrain full-scale digital transformation among traditional traders more broadly, a constraint mirrored in evidence that IoT-based inventory and monitoring tools, while promising for perishable and small-scale retail operations, remain difficult for resource-constrained micro-enterprises to adopt without external support (Maheshwari et al., 2021).

This research was conducted to fill this gap by analyzing, in greater depth, the impact of e-commerce development, the adaptation strategies of traditional traders, and the obstacles they face in the process of trade digitalization at Plaza Ratahan Market. Understanding these dynamics is essential both for evaluating market-modernization policy which has thus far emphasized physical infrastructure over traders' digital capacity building and for contributing empirically to the still-limited body of qualitative research on trader adaptation strategies in non-metropolitan Indonesian markets.

RESEARCH METHOD

Research Approach and Type

This study employed a qualitative approach with a descriptive case study design to gain an in-depth understanding of the strategies traditional traders use to face e-commerce development at Plaza Ratahan Market, Southeast Minahasa Regency. The qualitative approach was chosen because the research focus lies in the depth rather than the quantity of data, allowing the researcher to explore the phenomenon of digital disruption holistically by understanding the perspectives of traders, market management, and relevant customers. A descriptive case study design was considered appropriate given its capacity to capture the social, economic, and institutional complexity of the phenomenon through the combined perspectives of traders as rational actors, market institution management, and the broader socio-cultural context of Southeast Minahasa.

Research Location and Informants

The research was conducted at Plaza Ratahan Market, the primary economic center in Ratahan. Informants comprised traditional traders active in the clothing and food sectors, management representatives of the Regional-Owned Market Enterprise (PUD Pasar) of Southeast Minahasa, and customers who either continued to patronize the traditional market or had partially shifted toward online shopping. Informants were selected through purposive sampling based on criteria such as length of time in business, type of commodity sold, and level of digital technology adoption. The number of participants was determined based on the principle of data saturation; an initial target of twelve informants was set, with the possibility of additional informants should data saturation not yet be reached, consistent with sample sizes typically used in comparable qualitative studies of Indonesian traditional markets.

Data Collection Techniques

This study combined primary and secondary data using a source-triangulation approach. Primary data were collected through three main techniques: (1) semi-structured interviews, which allowed flexible exploration of traders' perspectives while remaining anchored in an interview guide informed by Rational Choice Theory and Social Capital Theory; (2) non-participant observation of trading activity at Plaza Ratahan Market to understand trader-buyer interaction patterns and the use of digital devices in daily trading; and (3) documentation, including photographs of market activity (with informant consent), sales records where accessible, and official market-management documents. Secondary data

were obtained from PUD Pasar reports, statistical publications of the Central Statistics Agency (BPS) for Southeast Minahasa, prior research, and relevant scholarly articles.

Data Analysis

Data were analyzed continuously from the beginning of data collection through the conclusion of the study, following the interactive analysis model of Miles, Huberman, and Saldaña, which comprises three concurrent analytical flows: (1) data condensation, in which raw field data were selected, simplified, and abstracted according to key themes such as social capital, rational choice, and technology use; (2) data display, in which condensed information was organized into descriptive narratives and matrices to clarify emerging patterns of adaptation strategy; and (3) conclusion drawing and verification, in which preliminary interpretations formed throughout data collection were continuously cross-checked against field data to ensure validity. To minimize bias, the study applied source triangulation, member checking, and systematic reflective note-taking throughout the data collection and analysis process.

RESULTS AND DISCUSSION

Brief Profile of Plaza Ratahan Market

Plaza Ratahan Market is the first modern-concept traditional market established in Southeast Minahasa Regency, North Sulawesi Province. The mega-project was initiated during the administration of Regent James Sumendap, with total investment sourced from the Regional Revenue and Expenditure Budget (APBD) reaching approximately IDR 30 billion. The three-story building was officially inaugurated on 23 May 2017 by the Governor of North Sulawesi, coinciding with the 10th anniversary of Southeast Minahasa Regency. Market management transitioned from direct technical control by the Regional Office of Industry, Trade, Cooperatives, and Small and Medium Enterprises (2017–2020) to full management by the Regional-Owned Enterprise, PD Pasar Kabupaten Minahasa Tenggara, from February 2020 onward, with the aim of optimizing regional revenue and independent facility maintenance. To adapt to market dynamics, the Plaza has since diversified its functions, adding a children's play area and repurposing outdoor space as a culinary and night-market zone, in an effort to strengthen its role as a hub of economic, social, and recreational activity for the Southeast Minahasa community. Despite this modernization, occupancy remains uneven across floors: Floor 1 (26 kiosks), dominated by high-demand staple-goods traders, remains relatively busy, while Floors 2 (36 kiosks) and 3 (10 kiosks) face persistent vacancy, prompting the local government's "free kiosk" policy offering three months of rent-free occupancy with minimal administrative requirements to attract more traders to the upper floors.

Impact of E-Commerce Development on Traditional Traders

Interviews with traders at Plaza Ratahan Market revealed that most informants were already aware of e-commerce, having encountered it through smartphones, social media, television, and repeated customer comparisons between market goods and products sold online. Traders understood e-commerce as a trading system enabling transactions without a face-to-face meeting between buyer and seller. As one informant explained, many people now shop through applications because it is easier and can be done from home; another added that whereas people once came directly to the market to see goods, many now search online first, with some completing the purchase there. These accounts show that traders are keenly aware of shifting consumer behavior driven by digital technology, with ease of access, greater product variety, and promotional offers drawing consumers toward online shopping, a pattern consistent with evidence that personalization, trust-building mechanisms, and optimized user experience are central drivers of the ongoing shift toward online purchasing (Hwang, 2024).

The most widely reported impact was intensified business competition: traders described how buyers frequently compare in-store prices with online prices, forcing traders to adjust prices to remain competitive, and how some customers leave without purchasing after checking prices online. This reflects an increase in consumers' informational bargaining power, obtained more easily from multiple sources regarding price, quality, and product variety, in turn requiring traditional traders to become

more competitive in pricing and service quality a competitive pressure also documented among traders in Medan's Hongkong Market, where price comparison with online platforms was likewise identified as a central driver of adaptation (H. M. Nasution et al., 2024).

Traders also reported a decline in the number of customers visiting the market directly, describing the market as noticeably quieter than in previous years, particularly among younger shoppers who prefer mobile shopping. This decline in footfall was closely linked to falling revenue, especially for goods readily available on e-commerce platforms such as clothing, accessories, household items, and electronics several traders noted that stock which once sold quickly now takes considerably longer to move, though they reported still being able to sustain their businesses despite lower sales volumes. Beyond economic effects, the study found a marked decline in social interaction between traders and customers. Where customers once visited the market simply to browse and converse, most now prefer to order or purchase online, and while relationships with regular customers persist, they are described as less close than before due to reduced face-to-face visits. This finding indicates that e-commerce development affects not only economic activity but also the social relationships that have historically defined the character of traditional markets.

Overall, the impact of e-commerce on Plaza Ratahan Market traders spans four interconnected dimensions: intensified competition, changed consumer behavior, reduced customer numbers, decreased trader income, and diminished social interaction. This constellation of impacts illustrates that traditional traders face an increasingly complex set of challenges in sustaining their businesses amid the continued growth of digital trade a pattern consistent with broader Indonesian evidence that e-commerce disproportionately affects non-food traditional-market sectors such as clothing, electronics, and household goods (H. M. Nasution et al., 2024; Purba et al., 2024).

Adaptation Strategies of Traditional Traders

Beyond experiencing the impacts described above, traders at Plaza Ratahan Market have actively pursued several adaptation strategies to sustain their businesses. The most widely reported strategy was improving service quality: traders described making deliberate efforts to be friendlier, faster, and more responsive than before, viewing good service as an advantage that cannot be fully replicated by online transactions. This reflects traders' recognition that emotional connection with customers through friendliness, direct communication, and personalized service remains a central strength of the traditional market in competing with e-commerce, consistent with findings that interpersonal relationships between traders and customers are a key factor sustaining traditional-market businesses, as similarly reported among Petisah Market clothing traders who identified friendly service as an important source of competitive advantage over e-commerce and modern retail (A. S. P. Nasution et al., 2024).

Maintaining product quality and availability was a second key strategy: traders emphasized ensuring that goods sold were of good quality and readily available, on the understanding that customers would return if the goods on offer met their needs and could be found without having to search elsewhere. Product quality thus functions both as a customer-attraction factor and a loyalty-retention strategy. A number of traders had also begun using digital technology, particularly social media platforms such as WhatsApp and Facebook, to promote products sending photographs of new stock to customers via WhatsApp or posting new arrivals on Facebook to attract attention. Although still a relatively simple form of adaptation, this reflects an emerging, low-cost transformation process aligning with evidence that traditional traders elsewhere are beginning to use social media as a promotional channel precisely because it is perceived as easier to use than more complex marketplace platforms, a pattern documented among Petisah Market traders who marketed goods through Shopee via Instagram alongside conventional storefront sales (A. S. P. Nasution et al., 2024), and among traders at the transformed Usus Tax Market who combined social media use with digital payment adoption to remain competitive (Purba et al., 2024). In terms of Structuration Theory, these early steps toward social media use indicate traders' growing effort to build capability in using digital technology to support their businesses even as they remain constrained by the same structural conditions, consistent

with structural accounts of uneven technology adoption in developing-country contexts (Bhowmick, 2016), even where that capability remains limited.

Traders also worked deliberately to sustain the social relationships and trust built with customers over many years, an advantage rarely replicated by online transactions. Many longstanding customers know traders personally and trust them more when purchasing directly, and being able to physically examine and ask about goods was cited as a reason customers continue to visit. This underscores the continuing importance of social capital expressed through trust, personal closeness, and relational history in sustaining the viability of traditional trader businesses, and is consistent with evidence that networks of trust and reciprocity constitute a distinct resource individuals can draw upon in navigating economic challenges (Coleman, 1988; Eloire, 2018), and that such social capital measurably enhances small-firm resilience and performance where formal competitive advantages are limited (Cooke & Wills, 1999).

Finally, traders reported adjusting prices to remain competitive with online offerings, sometimes offering discounts to regular customers to prevent them from shifting entirely to online platforms, while acknowledging that they cannot always match online prices given differences in business scale and distribution systems. Taken together, these five strategies improved service, maintained product quality, social media promotion, sustained social relationships, and competitive pricing demonstrate that traditional traders are not passive recipients of digital disruption but active agents combining conventional strengths with incremental innovation, consistent with a Structuration Theory perspective in which traders act simultaneously as agents shaped by, and reshaping, the e-commerce system through hybrid trading practices (Bhowmick, 2016), and consistent with the broader view that SME digital transformation is fundamentally a capability-building process rather than a single technology adoption event (Li et al., 2018).

Obstacles to Adapting to Trade Digitalization

Despite these adaptation efforts, traders at Plaza Ratahan Market continue to face substantial obstacles. The most frequently cited barrier was low digital technology proficiency: many traders, particularly older traders, reported limited knowledge of how to sell through online applications, marketplaces, or other digital platforms, viewing such technology as unfamiliar and difficult to master, while acknowledging that younger traders tend to grasp it more quickly. This finding is consistent with broader evidence identifying knowledge and skills gaps as the most significant barrier to digital technology adoption among micro and small enterprises in developing regions (Díaz-Arancibia et al., 2024; Loo et al., 2023), and with findings that structured, community-based digital literacy education is often needed before MSME actors particularly women traders can translate digital tools into improved marketing outcomes (Trisninawati & Sartika, 2024).

A second major obstacle was limited business capital. Several traders explained that developing an online presence requires additional costs better devices, internet access, online promotion, and improved packaging which are difficult to justify when available capital is already devoted to purchasing merchandise for daily operations. This financial constraint leads many traders to continue relying on conventional trading methods, echoing evidence that resource and financing constraints remain a persistent barrier to MSME technology adoption more broadly (Loo et al., 2023). Limited internet access and inadequate supporting devices constituted a third obstacle: some traders reported unstable internet connectivity and a lack of suitable devices for running online sales applications, reflecting broader digital-infrastructure gaps documented among small enterprises in developing regions (Díaz-Arancibia et al., 2024), and consistent with evidence that rural banking-led digital literacy initiatives in Indonesia have had to address similarly limited access to technology and adequate training before rural MSMEs could adopt digital tools (Rujitoningtyas et al., 2025).

A fourth obstacle concerned low trust in online transaction systems: some traders remained hesitant to sell online due to fears of fraud, transaction errors, or delivery problems, describing in-person market transactions as safer because buyer and seller meet face-to-face. This finding aligns closely with the broader e-commerce literature, which consistently identifies trust as a critical

determinant of both consumer and seller willingness to engage in digital transactions, given the heightened information asymmetry and uncertainty inherent to online exchanges compared with face-to-face trade (Singh et al., 2024; Soleimani, 2022), and with evidence that consumer satisfaction with online transactions is itself shaped by trust and perceived risk, factors that traders' own hesitancy mirrors from the seller's side (Hipólito et al., 2025).

Finally, informants expressed a clear need for external support from government and market management, particularly training and mentoring to help them understand digital technology use in business. Traders expressed hope for structured training programs and assistance to help them keep pace with technological change. These findings indicate that human-resource capacity building through training on social media, marketplace platforms, digital marketing, and online transaction management is essential to strengthening traders' skills and confidence in using technology to support their businesses, and reinforce the view that digital resilience depends not only on individual willingness to change but on the availability of resources, environmental support, and opportunities to acquire relevant knowledge and skills, consistent with evidence that entrepreneurial competencies and organizational resilience strategies mediate SMEs' ability to translate digital tools into sustained performance gains (Sudirman et al., 2025; Anatan & Nur, 2023).

Overall, the obstacles identified low digital literacy, limited capital, restricted access to technology, and low trust in online transactions demonstrate that successful adaptation to e-commerce requires collaboration among traders, government, and market management to create an enabling environment for digital transformation, including training, mentoring, improved technology access, and trader-empowerment programs designed to help traditional traders remain competitive amid the rapid growth of digital trade.

CONCLUSION

This study examined the impact of e-commerce development on traditional traders, their adaptation strategies, and the obstacles they face at Plaza Ratahan Market, Southeast Minahasa Regency. The findings show that e-commerce development has generated significant impacts, including intensified business competition, changed consumer behavior, reduced customer numbers, declining trader income, and weakened social interaction between traders and customers evidence that the digitalization of trade has reshaped community trading patterns from conventional systems toward increasingly digital-based ones. In response, traditional traders have pursued several adaptation strategies to sustain their businesses, including improving service quality, maintaining product quality and availability, using social media such as WhatsApp and Facebook for promotion, sustaining social relationships and customer trust, and adjusting prices to remain competitive demonstrating that traders are not merely affected by e-commerce development but are actively working to adjust to an increasingly digital business environment. Nonetheless, the adaptation process continues to face substantial obstacles, most notably low digital literacy, limited business capital, restricted access to internet connectivity and technological devices, and low trust in online transactions, which together prevent some traders from optimally leveraging digital technology to grow their businesses. Overall, this study concludes that e-commerce development represents both a challenge and an opportunity for traditional traders at Plaza Ratahan Market, and that traders' capacity to adapt to technological change is a decisive factor in sustaining the existence and continuity of their businesses amid an increasingly modern, digitally based trading environment. Based on these conclusions, traditional traders are encouraged to continue strengthening their use of digital technology and social media for promotion while preserving the service quality, product quality, and personal relationships that remain their core competitive advantage; local government and market management are encouraged to expand training, mentoring, and digital infrastructure support for traders; the community is encouraged to continue supporting traditional markets as spaces of both economic activity and socially and culturally meaningful interaction; and future research is encouraged to extend this inquiry to a broader range of locations and commodity types, and to examine the longer-term effects of digitalization on the sustainability of traditional trader businesses.

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AUTHOR CONTRIBUTIONS

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CONFLICTS OF INTEREST

The authors declare no conflict of interest

REFERENCES

- Anatan, L., & Nur. (2023). Micro, small, and medium enterprises' readiness for digital transformation in Indonesia. *Economies*, 11(6), 156. <https://doi.org/10.3390/economies11060156>
- Bhowmick, S. (2016). Structural explication of technology adoption in ICT4D: A throwback to Giddens. In B. Dey, K. Sorour, & R. Filieri (Eds.), *ICTs in Developing Countries* (pp. 15–29). Palgrave Macmillan. https://doi.org/10.1057/9781137469502_2
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120. <https://doi.org/10.1086/228943>
- Cooke, P., & Wills, D. (1999). Small firms, social capital and the enhancement of business performance through innovation programmes. *Small Business Economics*, 13(3), 219–234. <https://doi.org/10.1023/A:1008178808631>
- Díaz-Arancibia, J., Hochstetter-Diez, J., Bustamante-Mora, A., Sepúlveda-Cuevas, S., Albayay, I., & Arango-López, J. (2024). Navigating digital transformation and technology adoption: A literature review from small and medium-sized enterprises in developing countries. *Sustainability*, 16(14), 5946. <https://doi.org/10.3390/su16145946>
- Eloire, F. (2018). The Bourdieusian conception of social capital: A methodological reflection and application. *Forum for Social Economics*, 47(3–4), 322–347. <https://doi.org/10.1080/07360932.2015.1028084>
- Hipólito, F., Dias, Á., & Pereira, L. (2025). Influence of consumer trust, return policy, and risk perception on satisfaction with the online shopping experience. *Systems*, 13(3), 158. <https://doi.org/10.3390/systems13030158>
- Hwang, J. (2024). E-commerce and consumer behavior. *GSC Advanced Research and Reviews*, 19(3), 361–371. <https://doi.org/10.30574/gscarr.2024.19.3.0139>
- Kurniawan, T. A., Othman, M. H. D., Hwang, G. H., & Gikas, P. (2022). Unlocking digital technologies for waste recycling in Industry 4.0 era: A transformation towards a digitalization-based circular economy in Indonesia. *Journal of Cleaner Production*, 357, 131911. <https://doi.org/10.1016/j.jclepro.2022.131911>
- Li, L., Su, F., Zhang, W., & Mao, J. Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6), 1129–1157. <https://doi.org/10.1111/isj.12153>
- Loo, M. K., Ramachandran, S., & Raja Yusof, R. N. (2023). Unleashing the potential: Enhancing technology adoption and innovation for micro, small and medium-sized enterprises (MSMEs).

- Maheshwari, P., Kamble, S., Pundir, A., Belhadi, A., Ndubisi, N. O., & Tiwari, S. (2021). Internet of things for perishable inventory management systems: An application and managerial insights for micro, small and medium enterprises. *Annals of Operations Research*. <https://doi.org/10.1007/s10479-021-04277-9>
- Nasution, A. S. P., Amelia, C., Kaban, F. P., Andani, N. P., & Fazira, S. M. (2024). Analysis of adaptation of traditional market traders in the digital evolution (Case study of Petisah Market clothing shop). *PERSPEKTIF: Journal of Social and Library Science*, 2(3), 111–116. <https://doi.org/10.70489/perspektif.v2i3.377>
- Nasution, H. M., Lubis, I. A., Pranata, M. H., Siregar, N., & Lubis, S. N. T. (2024). Adaptation strategy of traditional market traders in response to digitalization competition. *PERSPEKTIF: Journal of Social and Library Science*, 2(3), 125–132. <https://doi.org/10.70489/perspektif.v2i3.379>
- Purba, D. S., Tanjung, H. Y., Saragih, M. A., & Permatasari, P. D. (2024). Survival strategies of traditional market traders in the digital era: A case study on the transformation to modern market. *PERSPEKTIF: Journal of Social and Library Science*, 2(3), 165–170. <https://doi.org/10.70489/perspektif.v2i3.404>
- Rujitoningtyas, C. N., Nugraha, E. R., Laksana, H. D., Apriyanto, Y., & Dewi, N. G. (2025). Enhancing digital literacy for business development in Micro, Small, and Medium Enterprises (MSMEs) through banking initiatives at the rural level in Indonesia. *Jurnal Akuntansi dan Bisnis*, 10(2), 122–132. <https://doi.org/10.47686/jab.v10i02.735>
- Singh, N., Misra, R., Quan, W., Radic, A., Lee, S. M., & Han, H. (2024). An analysis of consumer's trusting beliefs towards the use of e-commerce platforms. *Humanities and Social Sciences Communications*, 11(1), 899. <https://doi.org/10.1057/s41599-024-03395-6>
- Soleimani, M. (2022). Buyers' trust and mistrust in e-commerce platforms: A synthesizing literature review. *Information Systems and e-Business Management*, 20(1), 57–78. <https://doi.org/10.1007/s10257-021-00545-0>
- Sudirman, I. D., Astuty, E., & Aryanto, R. (2025). Enhancing digital technology adoption in SMEs through sustainable resilience strategy: Examining the role of entrepreneurial orientation and competencies. *Journal of Small Business Strategy*, 35(1), 97–114. <https://doi.org/10.53703/001c.124907>
- Trisninawati, & Sartika, D. (2024). Digital literacy model to improve the marketing skills of micro, small, and medium enterprises women with a community-based educational approach. *Jurnal Penelitian Pendidikan Indonesia*, 10(2). <https://doi.org/10.29210/020244149>