

A Porter's Five Forces Analysis of Mobile Phone Retail in Palu

Putri Ayu Lestari¹

¹Sekolah Pasca Sarjana, Indonesia

Correspondent: putrial570@gmail.com¹

Received : March 30, 2025

Accepted : April 27, 2025

Published : May 31, 2025

Citation: Lestari, P.A., (2025). A Porter's Five Forces Analysis of Mobile Phone Retail in Palu. Sinergi International Journal of Management and Business. 3(2), 102-117.

<https://doi.org/10.61194/ijmb.v3i2.790>

ABSTRACT: The rise of digital technologies has transformed the mobile phone retail landscape in Indonesia, particularly in regional cities such as Palu. This study investigates the competitive strategies employed by local smartphone retailers using Porter's Five Forces framework. A qualitative case study methodology was applied, incorporating semi structured interviews, direct observations, and thematic analysis. Findings indicate that smartphones remain dominant despite emerging interest in substitute devices like smartwatches and tablets. Entry into the market is facilitated by e commerce and social media, although sustainability remains a challenge due to supply constraints and low profit margins. Supplier power is high, with retailers relying heavily on centralized distributors. Buyers exhibit increased price sensitivity and digital awareness, favoring promotions and flexible purchasing options. Competitive rivalry is marked by price competition and innovation in service delivery, particularly through social media marketing and after sales services. The study underscores the importance of strategic adaptability, customer engagement, and digital transformation in navigating a competitive retail environment. These findings offer empirical insight into localized market dynamics and provide recommendations for sustainable business practices among regional retailers. The research contributes to a broader understanding of how global strategic models can be adapted to emerging market contexts.

Keywords: Mobile Phone Retail, Competitive Strategy, Porter's Five Forces, Digital Marketing, Customer Engagement, Palu City, Regional Markets.



This is an open-access article under the CC-BY 4.0 license

INTRODUCTION

In recent years, the adoption of smartphones in Indonesia has accelerated rapidly, particularly in mid-sized urban areas where digital infrastructure and socio economic dynamics are undergoing transformative changes. The integration of mobile technology into daily life is no longer confined to communication; it extends into commerce, education, entertainment, and social interaction. This

evolution reflects a broader digital transition across Southeast Asia, where smartphones function as essential tools for accessing information, conducting financial transactions, and participating in the digital economy (Wen & Tian, 2024). In cities such as Palu, this transformation is particularly notable, given the growing reliance on mobile connectivity and the integration of digital lifestyles into everyday routines.

Smartphones in these urban environments are not just communication devices but have evolved into pivotal instruments for enhancing economic productivity and social connectivity. The literature has established that mobile phone use significantly correlates with increased economic activity, particularly in informal sectors and among small and medium enterprises (SMEs). In urban Indonesia, mobile phones facilitate online transactions, digital banking, and marketing via social media, enabling businesses to expand their reach and optimize operations (Tiwasing, 2021). Furthermore, these devices serve as tools for social cohesion by enabling continuous communication among users, thus reducing isolation and enhancing mental well-being, especially in rapidly urbanizing contexts (Okobi et al., 2023).

Nonetheless, this digital integration presents unique challenges, particularly in ensuring equitable access to technology and bridging the digital divide between more and less developed regions. The expansion of digital infrastructure in cities like Palu is seen as a strategic imperative to promote inclusive development and community resilience. Scholars argue that digital literacy and infrastructure are crucial in enabling urban populations to fully engage with and benefit from technological advancements (C. Fang et al., 2024; Li et al., 2022). Hence, understanding the landscape of smartphone usage and retail dynamics in secondary cities becomes essential to support evidence based policymaking and strategic business planning.

Despite the transformative potential of mobile technology, mobile phone retailers face significant challenges in adapting to the evolving market. One of the most pressing issues is how these retailers can sustain their competitiveness in an environment increasingly shaped by digitalization, shifting consumer expectations, and intensified market competition. The central research problem lies in identifying the strategic approaches that mobile phone retailers in Palu employ to navigate this dynamic landscape and sustain long term business viability.

Generally, businesses respond to such competitive environments by leveraging frameworks that help diagnose industry forces and inform strategy formulation. Among these, Porter's Five Forces model remains one of the most influential tools for analyzing market structure and determining competitive intensity. The model's five dimensions threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitutes, and industry rivalry provide a comprehensive view of the strategic pressures faced by firms.

Empirical research on retail strategy in Southeast Asia has emphasized the importance of integrating digital marketing, enhancing customer engagement, and managing supply chain relationships. For instance, studies have demonstrated that location based advertising, influencer marketing, and bundled service promotions are effective tactics in retail environments characterized by price sensitive

consumers and high product turnover (Hossain et al., 2020; Zhu et al., 2017). These strategies are particularly relevant in mobile phone markets where consumers demand functionality, affordability, and after sales support.

In the context of Indonesia, the literature reveals a gradual shift from traditional retail to omnichannel strategies. Retailers are increasingly combining physical storefronts with online platforms to broaden their market reach and provide seamless customer experiences (Wu et al., 2022). Moreover, promotional activities, such as installment payment plans and trade in programs, have been widely adopted to appeal to younger consumers and those with limited purchasing power (Verhagen et al., 2021; Zhao et al., 2019). As such, these practices form part of a broader trend in which competitive advantage is no longer solely based on product pricing, but also on service quality, convenience, and brand perception.

Despite these insights, there is limited empirical evidence that examines how such strategies are implemented in Indonesia's secondary cities. While much attention has been given to major metropolitan areas like Jakarta or Surabaya, cities like Palu remain underexplored in the strategic management literature. This research gap is significant, as secondary cities represent important growth nodes within the national urban system. Understanding retail competition in these contexts is crucial, given their distinct market structures, consumer behaviors, and infrastructural constraints.

In addition, there is a growing need to analyze how mobile phone retailers respond to the dual challenge of digital disruption and evolving consumer expectations in regions with uneven economic development. Existing studies have yet to fully explore how local entrepreneurs in cities like Palu leverage digital tools and strategic frameworks to maintain competitiveness. Moreover, the interplay between supplier dominance, buyer sophistication, and market entry barriers within such localized markets remains inadequately addressed in the literature.

Against this backdrop, this study aims to analyze the competitive strategies adopted by mobile phone retailers in Palu using Porter's Five Forces framework. The novelty of this study lies in its contextual focus on a mid-sized urban area outside Indonesia's major commercial centers, providing localized insights into market dynamics and strategic responses. By employing qualitative methods, including semi structured interviews and case analysis, this research contributes to a more nuanced understanding of retail strategy formulation in emerging urban markets.

The scope of this study encompasses key retail hubs within Palu, including Mall Tatura Palu, Pasar Masomba, and various online sellers based in the city. By examining how retailers address supplier dependency, buyer behavior, substitution threats, and inter retailer rivalry, the study offers a comprehensive picture of the competitive environment. In doing so, it seeks to generate practical recommendations for retailers and policymakers to support the growth and resilience of the mobile phone retail sector in similar urban settings.

METHOD

This study adopts a qualitative case study approach to analyze the competitive strategies of mobile phone retailers in Palu City, Indonesia. The selection of a qualitative framework aligns with the study's goal of uncovering nuanced insights into local business practices, market dynamics, and competitive interactions as framed by Porter's Five Forces model. As noted by Samanta & Aithal, (2023), the use of Porter's framework in qualitative case studies within the retail sector allows for a comprehensive analysis of competitive dynamics, particularly when grounded in in depth engagement with industry stakeholders. The emphasis on understanding real world decision making processes within the retail environment makes qualitative methods especially case studies an appropriate choice for this research.

The study focuses on prominent mobile phone sellers operating within key commercial zones in Palu, including Mall Tatura Palu, Pasar Masomba, and various online based sellers in surrounding districts. These locations were purposively selected to represent the diversity of retail models in the region, encompassing both traditional offline stores and digital first platforms. Informants were selected using purposive sampling based on their roles and relevance to the research questions. This included owners, senior staff, and active marketplace sellers with substantial experience in retailing mobile devices in Palu. By targeting individuals directly engaged in competitive practices, the study was able to capture context rich perspectives essential for analyzing strategy formation and operational adaptation in response to market pressures.

Data collection relied heavily on semi structured interviews, which were designed to facilitate in depth discussions about each component of Porter's Five Forces: threats from new entrants, the bargaining power of suppliers and buyers, threats from substitutes, and the intensity of competition among existing players. As Pacheco et al. (2023) suggest, open ended and flexible interview structures are instrumental in drawing out detailed narratives from participants, particularly in dynamic market settings. This method allowed respondents to share their experiences freely while enabling the researcher to probe further into emergent themes such as price competition, supply constraints, or shifts in consumer expectations.

The interview protocol was carefully developed to capture responses on various operational aspects including sourcing practices, marketing strategies, buyer interaction, pricing mechanisms, and adaptability to digital tools. During interviews, attention was also paid to how informants interpreted market trends such as the rise of smartwatches, increasing consumer sophistication, and the challenge of managing online reputations. To supplement primary data, researchers engaged in direct field observations at retail sites and monitored social media and marketplace listings to validate retailer practices and market behaviors described in the interviews. This triangulation of methods enhanced the credibility and depth of the dataset (Santoro et al., 2019; Zhang & Guo, 2023).

Interviews were transcribed and analyzed thematically using qualitative content analysis. The coding process began with deductive categories derived from Porter's framework, followed by inductive identification of emerging themes. For example, while analyzing supplier power, initial codes included "stock dependency," "price leverage," and "distribution center reliance," which then evolved into

broader thematic categories such as "supply chain vulnerability" and "logistical centralization." This combination of theory driven and data driven coding enabled a robust mapping of competitive dynamics and strategic practices at the ground level. The flexible structure of semi structured interviews also made it possible to capture previously unanticipated but analytically relevant phenomena, such as the use of live selling via TikTok or Instagram as a differentiator in a saturated market (McEachern et al., 2021).

The trustworthiness of the data was reinforced through several strategies. First, prolonged engagement in the field ensured that data collection occurred over multiple interactions with the same informants, allowing for member validation and deeper rapport. Second, source triangulation between interviews, visual documentation, and market content analysis helped confirm patterns and inconsistencies in retailer behavior. Lastly, investigator triangulation was achieved by involving two researchers in the data coding process, ensuring inter coder reliability and reducing individual bias in thematic interpretation (Lan & Watkins, 2022).

Given the localized scope of the study, attention was paid to contextualizing all findings within the socio economic environment of Palu. The city represents a growing urban node in eastern Indonesia, where digital infrastructure is advancing but not yet on par with major metropolitan regions. As such, the strategies developed by mobile phone retailers in Palu may reflect adaptations to infrastructural limitations, consumer purchasing power, and unique patterns of technology adoption. By focusing on these regional characteristics, the study contributes to a more geographically inclusive understanding of competitive strategy formulation in Indonesia's mobile retail sector.

Ultimately, this methodology facilitated a holistic and grounded analysis of how mobile phone retailers in Palu navigate market competition. It illuminated the strategic behaviors that enable businesses to sustain operations amidst the pressures of supplier dependency, demanding consumers, substitute products, and digital disruption. The qualitative case study design, supported by semi structured interviews and thematic coding, proved essential for revealing the depth and diversity of competitive strategies in this context. In doing so, the research adheres to established best practices for applying Porter's model in qualitative retail studies while offering novel insights from an under researched urban setting.

RESULT AND DISCUSSION

The results of this study are presented based on the analytical categories derived from Porter's Five Forces framework. These findings are synthesized from qualitative data obtained through semi structured interviews, direct observation, and content analysis of retailer practices in Palu City. Each sub section below elaborates on one of Porter's competitive forces as experienced by mobile phone retailers in the study area.

Threat of Substitutes

Although alternative digital devices such as tablets and smartwatches are gaining traction in broader markets, their penetration in Palu remains limited. Informants consistently emphasized that smartphones continue to dominate due to their all in one functionality, particularly among urban dwellers who rely on them for communication, entertainment, education, and business. As noted by Manayath et al. (2024), smartwatches provide convenience in notifications and health tracking, yet their limited standalone functionality hinders their substitution potential. Similarly, while tablets offer superior media and productivity experiences (Xu, 2017), they lack the portability and communicative immediacy of smartphones (Finley & Soikkeli, 2018).

Retailers noted a growing curiosity about smartwatches, especially among younger consumers and professionals, but stressed that these devices are more complementary than competitive. Interview excerpts underscore that smartwatches are seen as novelty or supplementary tools rather than replacements. The results thus affirm earlier research by Maharjan et al. (2022), who argue that substitution risk exists more in potential than in practice, particularly in non-metropolitan settings.

Threat of New Entrants

The study found that barriers to market entry in Palu remain relatively high, especially in the offline retail segment. New entrants face financial constraints associated with physical store setup, inventory procurement, and licensing, as outlined in prior studies (Islami et al., 2019; Mohr & Batsakis, 2018). These obstacles are compounded by brand loyalty among local consumers, who tend to prefer established stores with reputations for reliability and after sales service.

However, e commerce and digital platforms are eroding some of these barriers. Informants reported that new entrants frequently utilize marketplace platforms like Shopee and Tokopedia, adopting dropshipping or reseller models that reduce capital requirements. Social media is also used as a marketing lever to build customer bases and test market responsiveness with minimal overhead. These observations support Wang et al. (2020), who note that social media campaigns can rapidly generate visibility for new retail players.

Still, interviewees expressed concerns about pricing pressure and supply chain access, indicating that while digital tools facilitate entry, they do not guarantee competitive sustainability. Newcomers often struggle with thin profit margins, delayed delivery times, and inconsistent product availability all of which limit their ability to scale.

Bargaining Power of Suppliers

The findings reveal a strong dependency on centralized suppliers, particularly those located in Makassar, Surabaya, and Jakarta. This geographical distance places local retailers at a disadvantage in

stock availability and pricing flexibility. Retailers reported that procurement delays, especially for new smartphone releases, constrain their ability to meet demand.

Supply chain centralization, as Davis & Leider (2018) argue, can lower per unit costs but also reduce responsiveness. The interviews confirmed that stock shortages or distribution bottlenecks often hinder sales performance. Additionally, small retailers rely on intermediaries or regional distributors, further inflating acquisition costs. These dynamics validate the observations of He et al. (2022), who emphasize the risks of inflexible inventory systems in decentralized markets.

Some informants noted efforts to negotiate better terms through informal consortia or long term purchasing relationships, although such strategies remain limited in effectiveness due to market fragmentation. Rana (2020) and Putera et al. (2024) highlight how diversified sourcing and strategic partnerships can mitigate supplier dominance, though these approaches are less developed in Palu's retail landscape.

Bargaining Power of Buyers

Consumers in Palu exhibit increasing price sensitivity and digital awareness. Informants emphasized that customers often compare prices between physical and online stores before making purchases. Several respondents shared that installment payment options, bundling, and promotional offers strongly influence consumer decisions.

As highlighted by Akkücü & Esmacili (2016) and L. Wang et al. (2021), Indonesian urban buyers tend to value both price competitiveness and brand prestige. Retailers in Palu cater to this dual concern by emphasizing affordability without sacrificing brand appeal. Digital presence, particularly on marketplace platforms and social media, is a critical factor in shaping buyer perceptions. Consumers often seek peer reviews and influencer endorsements before deciding on a purchase (Lăzăroiu et al., 2020).

Bundled services and installment based promotions emerged as key strategic levers. These offerings increase consumer engagement by lowering financial barriers and enhancing perceived value, in line with findings by Frommeyer et al. (2023). Furthermore, these strategies foster a sense of immediacy and urgency, compelling buyers to act on limited time deals (Chen, Huy, et al., 2022).

Industry Rivalry

Competition among mobile phone retailers in Palu is intense, driven by price wars, promotional campaigns, and the convergence of offline and online sales channels. Brick and mortar retailers emphasized personalized service and after sales support as their key differentiators. Meanwhile, online retailers leverage lower overhead costs to offer aggressive pricing, creating a bifurcated competitive environment.

In response, many physical retailers have adopted hybrid strategies, combining in store service with digital outreach. Several informants discussed using Instagram and TikTok live sessions to showcase products and engage customers in real time. This aligns with broader industry trends described by Hossain et al. (2020) and Guo & Liu, 2019, who argue that social media marketing enhances brand visibility and consumer loyalty.

Unique product offerings, such as exclusive bundles or extended warranties, were also highlighted as competitive tools. These strategies not only attract price sensitive consumers but also build trust and repeat patronage. As Chen et al. (2022) explain, experiential differentiation can offset the disadvantages of competing solely on price.

Overall, the findings underscore a competitive environment in which innovation, adaptability, and customer engagement are pivotal. Retailers who fail to integrate digital tools and tailor their offerings to evolving consumer expectations risk marginalization. Conversely, those who embrace omnichannel strategies and maintain strong customer relationships are better positioned to thrive.

These results contribute empirical insight into the dynamics of mobile phone retail in an emerging urban market, highlighting how Porter's Five Forces manifest in localized Indonesian contexts. The data suggest that while foundational industry structures persist, digital transformation and shifting consumer behaviors are redefining how competitive advantage is built and sustained.

The findings from this study shed light on the multifaceted dynamics that characterize the competitive landscape of mobile phone retailing in Palu, a mid sized urban center in Eastern Indonesia. By organizing the discussion around Porter's Five Forces, this section examines each force in detail and explores how strategic responses align with or diverge from broader trends in the retail and technology literature.

Substitution Threats and Complementarity of Digital Devices

The data affirm that smartphones remain the primary mobile technology for consumers in Palu, consistent with findings by Hirskyj Douglas et al. (2019) and B. Maharjan et al. (2019). Although smartwatches and tablets are gaining recognition, especially among younger users, they are perceived more as complements than direct substitutes. This supports the view of Vollenwyder et al. (2020) that wearable and tablet devices enhance user experience rather than replace smartphones. In line with Manayath et al. (2024), local consumers value the multifunctionality and portability of smartphones, making them indispensable for communication, commerce, and entertainment.

This preference is further reinforced by the limited local penetration of digital health and productivity apps designed for wearable or tablet use. Retailers in Palu noted that smartwatches, while novel, are largely seen as secondary devices. Therefore, substitution threats are still latent and context dependent, echoing the findings of (Lin et al., 2017) on user perception and limited functional overlap. Nonetheless, retailers should monitor this emerging trend, as technological innovation and price drops may shift consumer behavior over time.

Entry Barriers and the Evolving Role of Digital Platforms

The study reveals that while traditional barriers to entry including capital investment, brand recognition, and supply chain access remain formidable, digital platforms are opening alternative paths for market penetration. These findings align with Shin (2020) and N. Wang et al. (2020), who argue that e-commerce and social media are democratizing entry into consumer markets. Informants in Palu confirmed that dropshipping and reseller models are popular among new entrants who lack the resources to operate physical storefronts.

However, competitive sustainability remains an issue. Without direct control over logistics or inventory, many newcomers face challenges related to fulfillment delays and inconsistent stock levels. This limits their ability to match the service standards of established offline competitors. Therefore, while digital platforms facilitate access, they do not ensure long-term viability without robust operational support a nuance that mirrors Islami et al. (2019) on the enduring relevance of traditional retail advantages.

Supplier Power and Supply Chain Dependency

The concentration of suppliers in Indonesia's western cities creates logistical constraints for Palu-based retailers, reinforcing the findings of Davis & Leider (2018) on centralized supply chain vulnerabilities. Delays in stock replenishment and reliance on regional distributors inflate procurement costs, which in turn erode competitive pricing.

Retailers have adopted informal strategies to mitigate this power asymmetry, such as cultivating long-term relationships or joining informal purchasing alliances. This reflects the relevance of Rana (2020) and Putera et al. (2024), who argue that relationship-based negotiation and diversified sourcing are key to rebalancing power in supplier-dependent sectors. Yet, the study also indicates that such practices are still nascent in Palu, suggesting a need for institutionalized collaboration frameworks to formalize these efforts and enhance their impact.

Buyer Power and Shifting Consumer Expectations

Consistent with J. Fang & Liu (2020) and L. Wang et al. (2021), the results underscore growing buyer power fueled by increased digital literacy, price sensitivity, and demand for value-added services. Retailers in Palu must navigate a consumer base that is informed, skeptical, and responsive to promotions. This supports the argument by Lăzăroiu et al. (2020) that digital information sources, including peer reviews and influencer content, are increasingly shaping purchasing behavior.

In this context, the strategic use of bundled promotions and installment payment plans has emerged as an effective tool to attract and retain consumers. Frommeyer et al. (2023) and Chen, Yan, et al. (2022) highlight the psychological impact of affordability-focused promotions, which was echoed by retailers in this study who reported spikes in sales tied to such campaigns. The growing prevalence of

digitally mediated purchasing decisions suggests that future competitiveness will hinge on retailers' ability to align their offers with evolving consumer value systems.

Competitive Rivalry and Strategic Differentiation

The high level of industry rivalry in Palu reflects a competitive convergence of traditional and digital retail formats. While price remains a central battleground, retailers are increasingly differentiating themselves through service innovation, digital presence, and experiential engagement an observation consistent with Hossain et al. (2020) and Guo & Liu (2019).

Social media marketing has become a cornerstone strategy. The integration of Instagram and TikTok for live demonstrations, customer Q&As, and promotional campaigns demonstrates a shift toward real time, interactive consumer engagement. (Aityassine et al., 2022) emphasize the emotional connection fostered by personalized and gamified digital marketing, a point that resonates with this study's finding that interactive content enhances loyalty and purchase intent.

Moreover, retailers who leverage content marketing such as tutorials, user guides, and comparison videos further establish authority and trust within the community, reinforcing the conclusions of Purwanto et al. (2022). This trend toward value driven marketing is particularly important in markets like Palu, where competition is high but consumer sophistication is still developing.

In addition, after sales service has emerged as a strategic differentiator. Wahjudi et al. (2018) and Aslam & Farhat (2020) suggest that warranty support, repair services, and accessible customer care not only enhance satisfaction but also serve as indirect marketing tools. In Palu, retailers with strong after sales reputations reported higher customer retention and positive word of mouth, validating the centrality of service quality in building durable market positions.

Beyond transactional interactions, after sales engagement also enables feedback collection, which can inform inventory planning, staff training, and service adjustments. This iterative feedback loop, as discussed by Liu et al. (2024), underscores the evolving role of customer service from reactive to proactive business development.

Finally, the discussion highlights the potential for regional retailers to develop more sustainable and resilient models. Incorporating elements of sustainable entrepreneurship, such as ethical sourcing and recycling programs, can serve both environmental and strategic goals (Kimura, 2021; Pour et al., 2021). Circular economy models like trade in schemes not only reduce reliance on new inventory but also foster brand loyalty through eco conscious consumer engagement. These insights point to an emerging opportunity for Palu retailers to differentiate through purpose driven business practices, especially as consumer awareness of sustainability grows.

By embedding sustainability, technological agility, and customer centric practices into their strategic architecture, smartphone retailers in Palu can better navigate the dual challenges of competitive rivalry

and market volatility. This aligns with broader recommendations by Gurnani et al. (2022) and Rady & Elsbayee (2019) regarding the integration of CRM and data analytics into small scale retail operations.

Taken together, these dimensions illustrate that while the core elements of Porter's Five Forces remain relevant, their manifestation in Palu's mobile phone retail sector is uniquely shaped by regional infrastructure, consumer demographics, and digital adoption trends. The interplay between global strategic frameworks and local operational realities defines the evolving character of competition in this emerging urban context.

CONCLUSION

This study has examined the competitive strategies of mobile phone retailers in Palu, Indonesia, through the lens of Porter's Five Forces framework. The findings reveal a complex interplay of market forces in a region that is experiencing rapid digital adoption while still grappling with infrastructural limitations and economic constraints. Substitution threats remain minimal, with smartphones retaining primacy due to their versatility and utility. While entry barriers are easing due to digital platforms, sustainability for new entrants is constrained by limited logistics control and thin margins. Supplier dominance continues to challenge profitability, especially for smaller retailers dependent on centralized distribution systems. Buyer power has intensified with increasing digital literacy and price sensitivity, prompting retailers to adopt promotions, installment plans, and bundled offerings to retain competitiveness. Industry rivalry is high, prompting firms to differentiate through social media engagement, after sales service, and personalized marketing. These dynamics collectively underscore the need for strategic agility and localized innovation. The study contributes to the literature by providing grounded insights into retail competition in Indonesia's secondary cities, which are often overlooked in broader economic analyses. It highlights the significance of integrating digital marketing, customer centric strategies, and sustainable practices to build resilient retail models. Future research should explore longitudinal changes in these dynamics and expand comparative analyses to other regional cities to assess the generalizability of these findings.

REFERENCES

- Aityassine, F. L. Y., Al Ajlouni, M. M., & Mohammad, A. A. S. (2022). The Effect of Digital Marketing Strategy on Customer and Organizational Outcomes. *Marketing and Management of Innovations*, 13(4), 45–54. <https://doi.org/10.21272/mmi.2022.4.05>
- Akküçük, U., & Esmaeili, J. (2016). The Impact of Brands on Consumer Buying Behavior. *International Journal of Research in Business and Social Science* (2147-4478), 5(4), 1–16. <https://doi.org/10.20525/ijrbs.v5i4.551>

- Aslam, W., & Farhat, K. (2020). Impact of After Sales Service on Consumer Behavioural Intentions. *International Journal of Business and Systems Research*, 14(1), 44. <https://doi.org/10.1504/ijbsr.2020.104145>
- Chen, S., Huy, L. Đ., Lin, C. Y., Lai, C. F., Nguyen, N., Hoang, N. Y., Nguyen, T. T. P., Dang, L. T., Truong, N. L. T., Phan, T. N., & Duong, T. V. (2022). Association of Digital Health Literacy With Future Anxiety as Mediated by Information Satisfaction and Fear of COVID 19: A Pathway Analysis Among Taiwanese Students. *International Journal of Environmental Research and Public Health*, 19(23), 15617. <https://doi.org/10.3390/ijerph192315617>
- Chen, S., Yan, S. R., Zhao, W., Gao, Y., Zong, W., Bian, C., Cheng, Y., & Zhang, Y. (2022). The Mediating and Moderating Role of Psychological Resilience Between Occupational Stress and Mental Health of Psychiatric Nurses: A Multicenter Cross Sectional Study. *BMC Psychiatry*, 22(1). <https://doi.org/10.1186/s12888-022-04485-y>
- Davis, A. M., & Leider, S. (2018). Contracts and Capacity Investment in Supply Chains. *Manufacturing & Service Operations Management*, 20(3), 403–421. <https://doi.org/10.1287/msom.2017.0654>
- Fang, C., Chen, Z. H., Liao, X., Sun, B., & Meng, L. (2024). Urban Rural Digitalization Evolves From Divide to Inclusion: Empirical Evidence From China. *NPJ Urban Sustainability*, 4(1). <https://doi.org/10.1038/s42949-024-00187-4>
- Fang, J., & Liu, H. (2020). *The Effect of Promotion Integration Strategy on Sales Performance in the Context of Multiple Platforms: Considering the Moderating Effect of Platform's Market Demand*. <https://doi.org/10.24251/hicss.2020.497>
- Finley, B., & Soikkeli, T. (2018). Mobile Device Type Substitution. *Proceedings of the Acm on Interactive Mobile Wearable and Ubiquitous Technologies*, 2(1), 1–20. <https://doi.org/10.1145/3191740>
- Frommeyer, B., Koch, J., Scagnetti, C., Lorenz, M., & Schewe, G. (2023). Recycled or Reusable: A Multi-method Assessment of Eco-friendly Packaging in Online Retail. *Journal of Industrial Ecology*, 28(1), 100–115. <https://doi.org/10.1111/jiec.13447>
- Guo, X. Q., & Liu, K. (2019). *Pricing Strategy of Dual Channel Closed Loop Supply Chain Considering Quality of Recycled Mobile Phone and Effort Cost*. <https://doi.org/10.2991/bems.19.2019.53>
- Gurnani, H., Singh, S., Tang, S., & Wang, H. (2022). Service Provision in Distribution Channels. *Journal of Marketing Research*, 59(5), 926–940. <https://doi.org/10.1177/00222437211073818>
- He, Y., Ray, S., & Yin, S. (2022). Retail Power in Distribution Channels: A Double-edged Sword for Upstream Suppliers. *Production and Operations Management*, 31(6), 2681–2694. <https://doi.org/10.1111/poms.13712>
- Hirskyj Douglas, I., Kytö, M., & McGookin, D. (2019). Head Mounted Displays, Smartphones, or Smartwatches? Augmenting Conversations With Digital Representation of Self. *Proceedings of the Acm on Human Computer Interaction*, 3(CSCW), 1–32. <https://doi.org/10.1145/3359281>

- Hossain, M. M., Sultana, A., & Purohit, N. (2020). Mental Health Outcomes of Quarantine and Isolation for Infection Prevention: A Systematic Umbrella Review of the Global Evidence. *Epidemiology and Health*, e2020038. <https://doi.org/10.4178/epih.e2020038>
- Islami, X., Islami, V., Латковик, М. Т., & Mulloli, E. (2019). Barriers Hindering the Entry of New Firms to the Competitive Market and Profitability of Incumbents. *Management*, 24(2), 121–143. <https://doi.org/10.30924/mjcmi.24.2.9>
- Kimura, M. (2021). Customer Segment Transition Through the Customer Loyalty Program. *Asia Pacific Journal of Marketing and Logistics*, 34(3), 611–626. <https://doi.org/10.1108/apjml-09-2020-0630>
- Lan, L. H., & Watkins, J. (2022). Pre Owned Fashion as Sustainable Consumerism? Opportunities and Challenges in the Vietnam Market. *Journal of Fashion Marketing and Management*, 27(4), 577–594. <https://doi.org/10.1108/jfmm-03-2022-0067>
- Lăzăroiu, G., Popescu, G. H., & Nica, E. (2020). The Role of Electronic Word of Mouth in Influencing Consumer Repurchase Intention in Social Commerce. *SHS Web of Conferences*, 74, 03003. <https://doi.org/10.1051/shsconf/20207403003>
- Li, Z., Li, H., & Wang, S. (2022). How Multidimensional Digital Empowerment Affects Technology Innovation Performance: The Moderating Effect of Adaptability to Technology Embedding. *Sustainability*, 14(23), 15916. <https://doi.org/10.3390/su142315916>
- Lin, C., Chao, Y. C., & Tang, T. W. (2017). Why Not Be “Smarter”? Examining the Factors That Influence the Behavioral Intentions of Non Smartphone Users. *Industrial Management & Data Systems*, 117(1), 32–49. <https://doi.org/10.1108/imds-07-2015-0319>
- Liu, J., Li, X., & Zhang, M. (2024). Research on Differentiation Strategy of After Sales Service System of E Commerce Platform Taking Pinduoduo as an Example. *Advances in Economics Management and Political Sciences*, 96(1), 126–133. <https://doi.org/10.54254/2754-1169/96/2024mur0080>
- Maharjan, B., Rishal, P., & Svanemyr, J. (2019). Factors Influencing the Use of Reproductive Health Care Services Among Married Adolescent Girls in Dang District, Nepal: A Qualitative Study. *BMC Pregnancy and Childbirth*, 19(1). <https://doi.org/10.1186/s12884-019-2298-3>
- Maharjan, S., Dhakal, L., George, L., Shrestha, B., Coombe, H., Bhatta, S., & Kristensen, S. (2022). Socio Culturally Adapted Educational Videos Increase Maternal and Newborn Health Knowledge in Pregnant Women and Female Community Health Volunteers in Nepal's Khotang District. *Women's Health*, 18. <https://doi.org/10.1177/17455057221104297>
- Manayath, D., Kaladharan, S., Soman, N. V., & Vijayakumaran, A. (2024). Understanding Consumer Perceptions About Smartwatches: Feature Extraction and Opinion Mining Using Supervised Learning Algorithm. *Acta Informatica Pragensia*, 13(1), 100–113. <https://doi.org/10.18267/j.aip.231>

- McEachern, M. G., Warnaby, G., & Moraes, C. (2021). The Role of Community Led Food Retailers in Enabling Urban Resilience. *Sustainability*, 13(14), 7563. <https://doi.org/10.3390/su13147563>
- Mohr, A. T., & Batsakis, G. (2018). Firm Resources, Cultural Distance and Simultaneous International Expansion in the Retail Sector. *International Business Review*, 27(1), 113–124. <https://doi.org/10.1016/j.ibusrev.2017.05.010>
- Okobi, E., Adigun, A. O., Ozobokeme, O., Emmanuel, O., Akinsanya, P. A., Okunromade, O., Okobi, O. E., Aiwuyo, H. O., Dick, A. I., Sadiq Onilenla, R. A., & Ogunlana, F. A. (2023). Examining Disparities in Ownership and Use of Digital Health Technology Between Rural and Urban Adults in the US: An Analysis of the 2019 Health Information National Trends Survey. *Cureus*. <https://doi.org/10.7759/cureus.38417>
- Pacheco, D. A. de J., Caetano, R., Bonato, S. V., Santos, B. M. d., & Bueno, W. P. (2023). Enhancing Quality Requirements Management in Retailing Industry: The Role of Quality Function Deployment. *Benchmarking an International Journal*, 31(8), 2652–2692. <https://doi.org/10.1108/bij-12-2022-0749>
- Pour, M. J., Rafiei, K., Khani, M., & Sabrirazm, A. (2021). Gamification and Customer Experience: The Mediating Role of Brand Engagement in Online Grocery Retailing. *Nankai Business Review International*, 12(3), 340–357. <https://doi.org/10.1108/nbri-07-2020-0041>
- Purwanto, N., Pancaningrum, E., & Juwita, K. (2022). Analysis of Consumer Behaviour in Making Decisions After the Covid 19 Pandemic: Perspectives on the Theory of Stimulus Organism Response (SOR). *Kne Social Sciences*. <https://doi.org/10.18502/kss.v7i19.12425>
- Putera, R. R., Savitri, N. A., Kusumawardhani, R., & Shalihah, M. (2024). The Joint Decision of Cost Reduction Effort and Product Rollover Strategy for Fashion Items in the Presence of Strategic Consumers. *E3s Web of Conferences*, 517, 14001. <https://doi.org/10.1051/e3sconf/202451714001>
- Rady, H. A., & Elsbayee, H. (2019). Evaluation of After Sales Services in Airline Companies Case Study: EgyptAir. *Minia Journal of Tourism and Hospitality Research MJTHR*, 8(1), 189–240. <https://doi.org/10.21608/mjthr.2019.140945>
- Rana, S. M. S. (2020). Supply Chain Drivers and Retail Supply Chain Responsiveness: Strategy as Moderator. *International Journal of Management Practice*, 13(1), 1. <https://doi.org/10.1504/ijmp.2020.10025714>
- Samanta, T., & Aithal, R. K. (2023). Resilience of Small Retailers in Facing the Covid 19 Pandemic – A Qualitative Study. *Qualitative Market Research an International Journal*, 26(5), 555–578. <https://doi.org/10.1108/qmr-03-2022-0050>
- Santoro, G., Fiano, F., Bertoldi, B., & Ciampi, F. (2019). Big Data for Business Management in the Retail Industry. *Management Decision*, 57(8), 1980–1992. <https://doi.org/10.1108/md-07-2018-0829>

- Shin, S. (2020). East Asia's Retail Revolution: Diffusion of Organized Retailing and Varieties of Market Development in Korea and Taiwan. *Competition & Change*, 24(3–4), 358–387. <https://doi.org/10.1177/1024529420919362>
- Tiwasing, P. (2021). Social Media Business Networks and SME Performance: A Rural–urban Comparative Analysis. *Growth and Change*, 52(3), 1892–1913. <https://doi.org/10.1111/grow.12501>
- Verhagen, T., Meents, S., Merikivi, J., Moes, A., & Weltevreden, J. (2021). How Location Based Messages Influence Customers' Store Visit Attitudes: An Integrative Model of Message Value. *International Journal of Retail & Distribution Management*, 50(7), 781–798. <https://doi.org/10.1108/ijrdm-09-2020-0364>
- Vollenwyder, B., Buchmüller, E., Trachsel, C., Opwis, K., & Brühlmann, F. (2020). *My Train Talks to Me: Participatory Design of a Mobile App for Travellers With Visual Impairments*. 10–18. https://doi.org/10.1007/978-3-030-58796-3_2
- Wahjudi, D., Kwanda, T., & Sulis, R. (2018). The Impact of After Sales Service Quality on Customer Satisfaction and Customer Loyalty of Middle Upper Class Landed Housings. *Jurnal Teknik Industri*, 20(1), 65–72. <https://doi.org/10.9744/jti.20.1.65-72>
- Wang, L., Tian, J., Si, Y., & Sun, X. (2021). Optimal Duration, Rate and Price When Online Retailers Offer Installment Payment Services. *Nankai Business Review International*, 12(1), 96–121. <https://doi.org/10.1108/nbri-08-2019-0039>
- Wang, N., Verzijlbergh, R., Heijnen, P., & Herder, P. (2020). *Modeling the Decentralized Energy Investment and Operation in the Prosumer Era: A Systematic Review*. 1079–1083. <https://doi.org/10.1109/isgt-europe47291.2020.9248838>
- Wen, X., & Tian, B. (2024). How Does Digital Integration Influence the Mental Health of Low Income Populations? *Healthcare*, 12(24), 2593. <https://doi.org/10.3390/healthcare12242593>
- Wu, F., Laza-Cagigas, R., & Rampal, T. (2022). Understanding Patients' Experiences and Perspectives of Tele Prehabilitation: A Qualitative Study to Inform Service Design and Delivery. *Clinics and Practice*, 12(4), 640–652. <https://doi.org/10.3390/clinpract12040067>
- Xu, K. (2017). Battle of the Channels: The Impact of Tablets on Digital Commerce. *Management Science*, 63(5), 1469–1492. <https://doi.org/10.1287/mnsc.2015.2406>
- Zhang, Z., & Guo, H. (2023). The Impact of the Effect of Organizational Culture on Employee Innovation Behavior the Mediating Role of Value Propositions. *The Euraseans Journal on Global Socio Economic Dynamics*, 6(43), 69–79. [https://doi.org/10.35678/2539-5645.6\(43\).2023.69-79](https://doi.org/10.35678/2539-5645.6(43).2023.69-79)
- Zhao, X., Lim, A., Guo, H., Ding, C., & Song, J. (2019). Retail Clusters in Developing Economies. *Manufacturing & Service Operations Management*, 21(2), 452–467. <https://doi.org/10.1287/msom.2017.0663>

Zhu, D., Sun, H., & Chang, Y. P. (2017). How the Content of Location Based Advertisings Influences Consumers' Store Patronage Intention. *Journal of Consumer Marketing*, 34(7), 603–611. <https://doi.org/10.1108/jcm-10-2016-1957>