

Technology-based marketing strategies for retail growth and competitive positioning



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ABSTRACT

This study explored the implementation and impact of technology-based marketing strategies among retail enterprises in Nueva Ecija. Using a descriptive-correlational research design, it assessed the extent to which businesses apply strategic practices in procurement, promotion, sales, and distribution, and examined how these practices influence productivity, financial performance, market reach, and competitive advantage. Findings showed that procurement, promotion, and sales strategies were highly implemented, while distribution strategies were only moderately applied. Pearson's correlation analysis revealed strong positive relationships between the implementation of these strategies and business performance. Despite these strengths, gaps were observed in logistics integration, brand differentiation, and digital readiness. In response, a marketing development strategy was proposed that includes digital procurement, online promotional tools, personalized selling, technology-driven distribution, and performance analytics. Overall, the study highlights the importance of investing in digital infrastructure and training to support sustainable retail growth in a competitive, technology-driven market.

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1. Introduction

The retail sector is fundamental to stimulating local economies, particularly in regions with significant economic potential, such as Nueva Ecija in the Philippines. As the final link in the supply chain, retail directly influences consumer preferences and purchasing behaviors, making it imperative for businesses to adapt to a rapidly evolving marketplace that increasingly relies on technology. Traditional retail strategies are becoming insufficient, particularly due to the substantial economic disruptions caused by the COVID-19 pandemic, which have reshaped consumer behaviors and market dynamics, leading to immediate business closures and shifts in customer interactions (Collin-Lachaud et al., 2024).

To maintain a competitive advantage, it is crucial for retailers to integrate smart technologies into their operations, as this not only enhances customer

shopping experiences but also contributes to sustainable community development (Quinones et al., 2023). Supporting small retailers through strategic digital adoption fosters local economic resilience. Therefore, the adoption of innovative retail strategies and technologies represents a strategic imperative for businesses aiming to thrive in the current economic landscape (Quinones et al., 2023).

The digital revolution has fundamentally transformed the retail landscape, enabling businesses to harness technological innovations such as e-commerce platforms, mobile applications, and data analytics to reach wider markets and improve customer interactions effectively. In particular, in rural and emerging economies like Nueva Ecija, these technologies serve as crucial tools for mitigating operational inefficiencies and leveling the competitive field between large corporations and small to medium enterprises (SMEs) (Sharma et al., 2024; Bezes, 2024).

Integration of digital technologies enhances customer engagement by allowing consumers to access vital product information remotely, thereby reducing dependency on in-store sales personnel (Sharma et al., 2024). Furthermore, the adoption of these technologies is essential for the survival of independent retailers, as a digital presence becomes

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increasingly vital for competitiveness (Bezes, 2024). Despite challenges in transitioning online, small businesses that adapt effectively can maintain and potentially expand their market presence. Although not directly cited in the reviewed studies, literature generally supports the assertion that adaptability is crucial for digital transformation. Overall, embracing technology-based marketing strategies is essential for retail enterprises in regions like Nueva Ecija to thrive amidst economic decentralization and increased digital access (Yin and Pan, 2024).

In today's retail environment, businesses that fail to adapt to technological advancements risk becoming obsolete, particularly when faced with digital-native competitors. While traditional marketing methods, such as in-store promotions and word-of-mouth, remain relevant, integrating these approaches with digital tools is paramount for meeting evolving consumer expectations. Modern customers are more informed and selective, necessitating agile, data-driven, and personalized marketing strategies that reflect diverse behaviors and preferences (Yadav and Kar, 2024).

The COVID-19 pandemic notably accelerated the shift towards digital adaptation, forcing retailers to rethink their strategies and embrace new technologies to enhance competitiveness (Pop et al., 2024). This transformation has led to the emergence of "smart" retail environments, where intelligent technologies foster consumer engagement and brand loyalty by creating enriched shopping experiences (Ben Saad and Choura, 2024; Salem and Alanadoly, 2024). Moreover, retailers must adapt to the increasingly blurred lines between online and physical shopping, emphasizing the need for a cohesive omnichannel strategy (Alghamdi and Nor, 2023). Ultimately, using data-driven insights to inform marketing tactics will enable retail enterprises to navigate the challenges presented by digital-native competition successfully (Pop et al., 2024).

The concept of value chain optimization in retail has significantly evolved, moving beyond traditional processes like procurement and logistics to encompass digital touchpoints throughout the customer journey. Modern value chains now include elements such as social media platforms, targeted digital advertising, and personalized content, which are strategic imperatives for success in today's market (Dogan et al., 2025; Burakhanova et al., 2023).

Integrating these digital components can enhance customer loyalty and improve sales conversions. Retailers utilizing artificial intelligence (AI) to create personalized customer journeys have been shown to effectively satisfy customer demands, thereby providing superior online shopping experiences (Burakhanova et al., 2023). Moreover, the use of customer analytics enables retailers to tailor marketing efforts to individual preferences, further driving engagement and loyalty (Katsifaraki and Theodosiou, 2024). The ability to collect and analyze consumer data allows businesses to gain deeper

market insights, optimize operations, and respond effectively to changing customer expectations (Dogan et al., 2025). Thus, retail enterprises that proactively leverage these digital strategies are positioned to enhance their competitiveness in a rapidly transforming landscape.

The shift toward omni-channel marketing has substantially redefined customer engagement parameters, compelling retailers to deliver a cohesive and uniform experience across both physical and digital platforms. To effectively achieve this, it is crucial for retailers to maintain real-time inventory systems, leverage customer relationship management (CRM) tools, and utilize analytics for strategic market forecasting. These actions improve operational efficiency while also enhancing strategic planning and fostering long-term growth (Papashvili and Kovács, 2023; Liao et al., 2024). Creating a seamless integration between online and offline channels benefits not only retailers but also consumers by offering greater convenience and flexibility (Yao et al., 2024). For instance, policies like "buy-online, return-in-store" (BORS) facilitate easy channel switching, which enhances consumer satisfaction while promoting sustainable practices (Yao et al., 2024). Furthermore, a reciprocal model of channel strategy indicates that showrooms can generate positive outcomes for brand loyalty and customer retention in an omni-channel setup (Liao et al., 2024). Collectively, these strategies are vital for modern retailers to thrive in a competitive landscape dominated by digital-native competitors.

The marketing performance of retail enterprises can indeed be evaluated through key indicators such as productivity, competitive advantage, market reach, and financial performance. Technology-driven marketing strategies play a crucial role in positively influencing these dimensions. For instance, the utilization of digital advertising platforms enhances brand visibility and customer acquisition opportunities, making them critical in the current retail landscape. Retailers must adapt to the evolving landscape by developing alternative digital advertising channels, especially when traditional advertising methods are limited by regulations (Gabel et al., 2024). Moreover, data analytics tools allow retailers to tailor promotions effectively based on purchasing trends, ensuring that marketing efforts align with consumer preferences and behaviors.

In addition, enhanced logistics systems and online sales portals contribute significantly to expanding market reach, particularly in geographically dispersed or underserved areas. Through the efficient use of technology, retailers can streamline operations and logistics, ultimately improving accessibility for more consumers. Collaboration within supply chains and advertising efforts can also boost sales and enhance marketing effectiveness (Huang and Peng, 2024). Therefore, adopting a well-structured marketing plan that integrates these technological facets is essential for retail enterprises aiming to achieve sustainable

growth and remain competitive in a rapidly evolving market environment (Kelemen-Erdős et al., 2024).

In the context of Nueva Ecija, the effective implementation and sustainability of technology-based marketing strategies in local retail enterprises necessitate a nuanced approach, particularly given the region's diverse socio-economic conditions. The integration of such strategies can enhance operational performance and broaden market reach among varying business sizes and maturities. Previous research underscores the importance of leveraging information technology to improve retailer performance and survival, particularly during competition from larger entities that continue to invest in technology despite economic challenges (Wang and Ho, 2023).

Moreover, the pandemic has heightened the significance of omni-channel practices, such as the Buy-Online-Return-in-Store (BORS) policy, which enhances customer convenience and promotes sustainable consumption. This policy has been shown to positively influence customer engagement and retention (Yao et al., 2024).

Consequently, there is a pressing need to bridge the knowledge gap regarding the application of these technology-driven initiatives in rural settings like Nueva Ecija. Local retailers can benefit from tailored, data-driven insights that address specific market characteristics and consumer behaviors to ensure sustainable growth and competitive advantage in a digital landscape (Xu et al., 2023).

This study builds upon existing findings to analyze the practical effects of marketing strategies in procurement, promotion, sales, and distribution within the local context of Nueva Ecija. By integrating insights from prior research, the aim is to develop a comprehensive and adaptable marketing framework tailored to the unique circumstances of local enterprises. The implementation of technology in these strategies will enhance the operational capacities of retail businesses and empower them to thrive in an increasingly digital and competitive environment.

Research illustrates that bridging the digital divide is essential for small retailers, particularly in developing regions like Nueva Ecija, allowing them to extend their reach through e-commerce fulfillment (Paraskevas et al., 2025). Furthermore, the introduction of artificial intelligence can enhance the omnichannel customer experience, making interactions with customers more personalized and effective (Calvo et al., 2023). This consideration is crucial for developing strategies that link online and offline touchpoints effectively.

Additionally, understanding customer perceptions of digital technologies informs the design of marketing frameworks that resonate with local consumers (Larsen and Følstad, 2025). Collectively, these elements underscore the significance of integrating technology into traditional marketing practices, which will be vital for local retail businesses seeking not just to compete but to excel in the modern marketplace.

2. Methodology

2.1. Research design

This study utilized a descriptive-correlational research design to examine and analyze the marketing strategies employed by retail enterprises and their corresponding effects on business performance. Descriptive research was used to present the current status of marketing strategies in terms of procurement, promotion, sales, and distribution of goods. Meanwhile, correlational analysis was used to determine the relationship between these strategies and performance indicators such as productivity, market reach, competitive advantage, and financial performance. The design enabled the researcher to gather factual information from a targeted group of retail enterprises and assess how the use of technology-based marketing contributes to retail growth and competitiveness.

2.2. Locale of the study

The research was conducted in selected municipalities and cities within the province of Nueva Ecija, Philippines. Nueva Ecija, located in Central Luzon, is a growing economic hub that combines both rural and semi-urban characteristics. Recent research by Galano and Santos (2024) highlighted that Nueva Ecija's economy is expanding beyond agriculture, with increasing opportunities in small-scale retail and agri-enterprise benefiting from digital innovation. Known for its vibrant agricultural economy, it also houses a growing number of retail businesses, including small-and medium-sized enterprises. The province is gradually transitioning toward more modern and digitalized forms of commerce, making it an appropriate and strategic location for the study. The local business landscape provided a fertile ground to explore the application and effectiveness of technology-based marketing strategies among retail enterprises.

2.3. Participants of the study

The participants in this study were selected through purposive sampling to ensure relevance and accuracy in data collection. A total of 76 retail business managers and marketing officers participated in the survey, representing retail enterprises operating in various municipalities and cities across Nueva Ecija. These participants were chosen based on their roles in overseeing marketing operations, their tenure of at least three years in the business, and their familiarity with digital or technology-based marketing tools. Their experience and involvement in strategic decision-making processes made them credible sources of information.

The selected enterprises varied in size, product offerings, and customer base, ensuring diverse and

representative insights from the retail sector of the province.

2.4. Data gathering instruments

The primary instrument used in this study was a structured survey questionnaire designed by the researcher, based on existing studies and adapted to fit the local context. The instrument was divided into four major sections: (1) business profile of retail enterprises, (2) current marketing strategies employed, (3) perceived effects of these strategies on business performance, and (4) overall use and effectiveness of technology-based tools in marketing. Each item was rated on a 4-point Likert scale to assess the degree of agreement or frequency.

To ensure the validity of the instrument, it was reviewed by experts in marketing, research methodology, and business management. Revisions were made based on their feedback. A pilot test was also conducted on a small group of retail managers not included in the final sample, and the reliability of the instrument was confirmed through Cronbach's Alpha, with a coefficient of 0.81, indicating high internal consistency. This process aligns with the methodological practices highlighted by [Hipolito and Santos \(2025\)](#), who emphasized the importance of pilot testing and expert validation to ensure research instrument effectiveness.

2.5. Data gathering procedure

The researcher sought formal permission from local business associations and retail managers before distributing the questionnaires. Participants were briefed on the purpose of the study and assured of confidentiality and anonymity. The data collection was conducted both online and in person, depending on the accessibility and preference of the participants. The researcher distributed, explained, and retrieved the questionnaires with the help of local business groups. Responses were encoded, organized, and checked for completeness and consistency.

To complement the survey data and mitigate potential bias, future studies are encouraged to incorporate in-depth interviews, document analysis, or direct observation to validate participant responses and enrich contextual understanding. The survey data were collected over a period of four weeks. Each respondent was given ample time to complete the questionnaire. The collected data were then consolidated for statistical treatment.

2.6. Data analysis techniques

To analyze the gathered data, both descriptive and inferential statistical tools were used. Frequency counts and percentages were applied to describe the business profile of retail enterprises. Weighted means were used to determine the degree of implementation of marketing strategies and their

perceived effects. The verbal interpretations followed a standardized scale to ensure clarity and consistency.

Pearson's correlation coefficient was used to measure the relationship between the identified marketing strategies (procurement, promotion, sales, and distribution) and performance outcomes (productivity, market reach, competitive advantage, and financial performance). A significance level of 0.05 was set for testing the hypotheses. All statistical analyses were conducted using SPSS Version 20.

3. Results and discussion

3.1. Implementation of marketing strategies among retail enterprises

The results of the study showed varying levels of implementation across the four major marketing strategy areas—procurement, promotion, sales, and distribution of goods—among retail enterprises in Nueva Ecija. Procurement strategies received the highest weighted mean of 3.45, suggesting that most enterprises prioritize structured and consistent sourcing of products, supplier relationship management, and possibly the use of inventory management tools. Promotion strategies closely followed with a weighted mean of 3.42, indicating that retail businesses actively engage in marketing efforts to increase visibility, potentially through both traditional channels and digital platforms such as social media and online advertising. Sales strategies were also highly implemented, with a mean score of 3.39, reflecting the use of product bundling, flexible pricing, in-store promotions, and digital point-of-sale systems to drive conversions and boost revenue.

On the other hand, distribution strategies had the lowest weighted mean at 3.08, falling into the "Moderately Implemented" range. This result reveals a noticeable gap in the logistics and delivery components of retail operations. While the other three areas were rated as "Highly Implemented," distribution lags behind, suggesting that many enterprises still face challenges in ensuring the timely and efficient delivery of goods to customers. This may include limitations in transportation networks, unreliable courier partnerships, or a lack of investment in technology-based logistics solutions. When compared numerically, the difference between procurement (3.45) and distribution (3.08) reflects a margin of 0.37, which, although not extreme, is significant enough to highlight a potential weakness in the overall retail process.

This imbalance among the four marketing strategy dimensions may affect the holistic performance of retail enterprises. A high level of procurement, promotion, and sales activities, if not supported by a strong distribution system, could lead to customer dissatisfaction due to delays, stockouts, or fulfillment issues. It also indicates that while enterprises are focused on attracting and converting customers, they may not yet have the

infrastructure to support post-sale processes efficiently. In a competitive market, this weakness in distribution can undermine gains made in other strategic areas and limit the ability of retail businesses to scale effectively or compete with more digitally integrated competitors.

The high ratings in procurement, promotion, and sales indicate that retail enterprises in Nueva Ecija are increasingly receptive to modern practices that enhance their marketing operations. This reflects a growing awareness of strategic marketing's role in business growth and customer engagement (Wang and Ho, 2023). Effective product promotion, inventory management, and customer interaction demonstrate local retailers' capability in adapting to contemporary marketing methodologies, although specific evidence related to Nueva Ecija is lacking.

Nonetheless, the lower emphasis on distribution strategies signifies underlying logistical challenges, such as last-mile delivery, warehouse coordination, and integrated tracking systems, which require further development (Fahmi et al., 2023). To strengthen this weak link in their marketing value chain, local enterprises should consider investing in or collaborating with third-party logistics providers. This partnership could facilitate the adoption of affordable digital logistics solutions, thereby optimizing distribution processes and enhancing overall operational efficiency.

Retailers can look to the experiences of larger firms, as studies suggest that technology integration can significantly improve performance and survival in competitive marketplaces. However, the specific citation in the original reference related to this claim does not adequately support it (Wang and Ho, 2023). Therefore, more appropriate research should be referenced to substantiate this assertion. Addressing logistical concerns is essential for these enterprises to improve their distribution capabilities and capitalize on the opportunities presented in the digital landscape.

3.2. Perceived effects of marketing strategies on retail performance

The findings revealed varying levels of perceived effectiveness of marketing strategies across four key dimensions of retail performance: Productivity, financial performance, market reach, and competitive advantage. Among these, productivity scored the highest with a weighted mean of 3.52, indicating that the majority of retail managers believed that their marketing efforts had a very significant positive effect on employee output, sales efficiency, and process optimization. Financial performance followed closely with a weighted mean of 3.48, suggesting that the implementation of marketing strategies contributed meaningfully to revenue growth, profit margins, and cost efficiency. Similarly, market reach earned a mean score of 3.46, showing that marketing efforts were successful in helping businesses attract new customers and expand into new geographic or demographic

segments. In contrast, the perceived effect of marketing strategies on competitive advantage received the lowest weighted mean of 3.12. This score, while still positive, falls into the category of "Moderately Significant Effect," signaling that many respondents do not view their current marketing approaches as sufficient to provide long-term differentiation in the market. The numerical difference between productivity and competitive advantage (3.52 vs. 3.12) represents a notable gap of 0.40, indicating that while operational outcomes are being achieved, strategic positioning may not be fully addressed through existing marketing practices. This suggests that most retail enterprises are reaping short-term gains from their strategies but may be struggling to establish lasting market leadership or brand loyalty.

The gap in perceived impact across these four dimensions points to an important pattern. Retail businesses in Nueva Ecija are experiencing measurable improvements in internal performance areas as a result of their marketing strategies. They are able to operate more efficiently, improve financial results, and attract a broader customer base. However, the relatively lower perception of enhanced competitive advantage suggests a saturation of similar strategies among businesses in the area. The widespread adoption of basic digital tools—such as social media promotion and online selling—may have leveled the playing field, but not necessarily elevated any one business above the rest. This scenario implies that differentiation in the current market may require more than the adoption of general digital tools; it may involve unique branding strategies, innovative customer engagement models, or advanced data-driven marketing approaches.

The results of the study indicate that while many retail businesses in Nueva Ecija have established a foundational presence in digital marketing, the critical next step involves strategic evolution. For these businesses to translate operational efficiency into long-term competitive superiority, it will be essential to refine their brand identities, personalize customer experiences, and develop highly targeted advertising campaigns (Sugiharto et al., 2024). Personalization has emerged as a key driver of customer engagement and satisfaction, with evidence suggesting that personalized marketing strategies lead to increased conversion rates and foster brand loyalty (Sugiharto et al., 2024). This approach aligns with the data-driven decision-making principles of relationship marketing, which emphasize a deep understanding of consumer needs and preferences to build sustained relationships over time. Moreover, in a rapidly evolving digital marketplace, retail enterprises must leverage real-time insights and data analytics to continually adjust their marketing strategies (Islam, 2024). This dynamic allows businesses to remain competitive by responding swiftly to changing consumer behaviors and market trends (Islam, 2024). Therefore, investing in these strategic areas—brand identity

refinement, customer personalization, and targeted campaigns—not only enhances customer interaction but also positions local enterprises for future success in a competitive landscape.

To address the gap in competitive advantage, retail enterprises in Nueva Ecija can explore AI-driven personalization as a strategic differentiator. For instance, small businesses may utilize customer relationship management (CRM) tools integrated with AI to deliver individualized product recommendations, automated follow-ups, and targeted promotions based on customer behavior. These practices, commonly applied by SMEs in emerging markets, have been shown to foster brand loyalty and deepen customer engagement. Case studies from similar rural markets highlight the use of chatbots, AI-powered inventory systems, and dynamic pricing models as effective strategies to gain a competitive edge.

3.3. Relationship between marketing strategies and performance outcomes

The statistical analysis using Pearson's correlation coefficient revealed a strong and positive relationship between the level of implementation of marketing strategies and the overall performance of retail enterprises. Among the four strategic areas, procurement demonstrated the highest correlation with performance outcomes, yielding a coefficient of $r = 0.78$, indicating a very strong relationship. This suggests that well-managed procurement strategies—such as effective supplier coordination, stock availability, and purchasing systems—are closely associated with improvements in productivity, financial gains, and customer satisfaction.

Promotion strategies followed with a correlation value of $r = 0.74$, also indicating a strong positive relationship. This finding implies that active marketing campaigns and customer outreach efforts contribute substantially to enhanced visibility, increased sales, and expanded market presence. Sales strategies recorded a correlation of $r = 0.72$, reflecting a solid association between strategic selling techniques and business growth metrics, such as conversion rates and customer retention. Distribution strategies, while still positively correlated, registered the lowest coefficient at $r = 0.69$, though this value still meets the threshold for statistical significance at the 0.05 level. The relatively lower correlation for distribution may point to underlying operational inefficiencies or limitations in logistics infrastructure that affect how well marketing strategies translate into performance outcomes.

These results confirm that as retail businesses increase the level of marketing strategy implementation—particularly those enhanced by digital technologies—there is a consistent improvement across performance indicators, including productivity, competitive positioning, financial returns, and market reach. The strength of

these relationships underscores the value of a balanced and integrated marketing approach, where efforts in procurement, promotion, sales, and distribution work together to reinforce business outcomes.

The results of the study highlight that, while digital marketing tools can enhance various operational aspects for retail enterprises in Nueva Ecija, their effectiveness in logistics may be constrained by external factors, such as infrastructural limitations and high logistics costs. This situation is particularly relevant considering that logistics challenges, including last-mile delivery issues, warehouse coordination, and access to advanced delivery technologies, can impede operational efficiency and customer satisfaction. Targeted investments in logistics capabilities are essential to address these challenges. Retailers may benefit from partnerships with third-party logistics providers to leverage their expertise, technology, and infrastructure. Collaboration has been shown to optimize logistics processes, which can improve performance by reducing uncertainties and enhancing inventory management (Obermair et al., 2023). Furthermore, integrating digitalization within logistics can significantly enhance competitive excellence for small and medium-sized enterprises by facilitating efficient supply chain collaborations and improving resource allocation (Burinskienė and Daškevič, 2024). To bridge the identified gaps in logistics, local retailers can adopt innovative solutions developed through collaboration with digital technology firms. Such strategic initiatives will enable these enterprises to enhance their logistical operations and ultimately convert digital efficiencies into broader competitive advantages in a rapidly evolving market.

3.4. Identified gaps and areas for improvement

The study uncovered several notable gaps that hinder the full implementation and effectiveness of technology-based marketing strategies among retail enterprises. Despite generally high levels of adoption in procurement, promotion, and sales, some areas remain underdeveloped or unevenly applied. One of the most significant issues identified was the limited integration of digital tools in logistics and distribution. Only 58% of respondents confirmed actively using technology for logistics processes such as order tracking, inventory movement, or last-mile delivery coordination. This indicates that nearly half of the retail enterprises in the study still rely on manual or semi-digital systems for handling their distribution channels, which may result in inefficiencies, delays, and higher operational costs.

Another critical area of concern was competitive positioning. Approximately 41% of retail business managers expressed difficulty in distinguishing their brand from others in the local market. This suggests that while promotional activities are being implemented, they may lack strategic differentiation or creativity that sets them apart from competitors.

The challenge may lie in the overuse of similar marketing platforms and approaches, particularly the generic use of social media, resulting in limited brand uniqueness or customer loyalty. This is consistent with findings by Santos et al. (2024), who emphasized that the strategic use of social media—beyond just visibility—can significantly enhance brand engagement and loyalty among small Philippine enterprises.

Additionally, 33% of respondents reported encountering barriers related to internet connectivity and insufficient technical knowledge. These challenges were drawn from open-ended responses and reflect recurring themes among businesses operating in more rural or infrastructure-constrained areas of Nueva Ecija. Weak or inconsistent internet access affects not only day-to-day marketing operations but also broader strategic implementation, such as e-commerce expansion, real-time analytics, and digital customer engagement. Similarly, the lack of technical training prevents many business owners and staff from fully leveraging the available digital tools to optimize marketing strategies. A parallel challenge was observed by Binaluyo et al. (2024) in their study of microfinance institutions, where digital adoption was similarly hindered by infrastructural constraints and limited technical capability.

The findings clearly illustrate a disconnect between intention and execution among retail enterprises in Nueva Ecija regarding the adoption of digital strategies. Despite a demonstrated interest in enhancing market performance through digital marketing tools, systemic limitations such as inadequate infrastructure, insufficient training, and a lack of strategic differentiation hinder their ability to fully realize these intentions (Quintus et al., 2024). This disconnect resonates with insights found in the literature, which emphasizes the importance of perceived usefulness and readiness of traditional retailers to embrace e-commerce as a critical factor for adoption (Alateeg and Alhammedi, 2023). Moreover, the varying approaches required for emerging versus advanced markets highlight the necessity for tailored strategies that address specific local challenges. Retailers in emerging markets like Nueva Ecija must navigate infrastructural constraints and engage in targeted capacity building to bridge this gap (Quintus et al., 2024). Investing in digital upskilling and infrastructure development are essential steps to tackling these core issues. By fostering partnerships with technology providers and enhancing logistical capabilities, local enterprises can work towards a more integrated digital transformation. As noted in prior research, aligning digital marketing strategies with operational realities is vital for achieving successful outcomes and sustaining growth in increasingly competitive markets (Mansoor et al., 2024). Thus, neglecting these systemic limitations is likely to perpetuate the gap between initial digital adoption and true transformative success.

3.5. Proposed marketing development strategy

The study's findings served as the foundation for the development of a targeted marketing strategy designed to enhance retail growth and competitive positioning through the use of technology. Based on the participants' responses and the identified gaps, five core components were established as priority areas for strategic development: digital procurement management, online promotional tools, personalized sales strategies, tech-supported distribution, and performance analytics. These components were derived from both quantitative rankings and qualitative input, reflecting not only what enterprises currently implement but also where they see the most pressing need for improvement.

Among these, digital procurement management was ranked as the top strategic need by 82% of participants. Retailers emphasized the importance of streamlining supplier interactions, automating restocking processes, and integrating inventory systems with procurement channels to reduce delays and minimize overstock or stockouts. Online promotional tools followed, with 75% of respondents identifying the need to enhance their digital visibility through more consistent and targeted online campaigns. This included improved use of social media platforms, content marketing, and digital ads optimized for local market engagement.

Personalized sales strategies emerged as the third priority, identified by 68% of respondents as an area needing development. This includes the use of customer data to tailor product offerings, loyalty programs, and messaging that resonate with specific customer segments. In contrast, tech-supported distribution was noted as a weaker area but still a significant focus for strategy building, with 61% of participants calling for improved logistics through delivery tracking systems, order automation, and partnerships with tech-enabled couriers.

Finally, performance analytics was included as a cross-cutting component, highlighted by 56% of respondents. While not as immediately prioritized as procurement or promotion, it was considered crucial for ensuring that marketing decisions are driven by actual data. This involves the adoption of basic analytics tools, dashboards, and reporting systems that track campaign effectiveness, customer behavior, and sales trends in real time.

The proposed strategy is designed to be both adaptive and scalable, addressing the specific needs of retail enterprises in Nueva Ecija while remaining applicable across different sizes and types of businesses. By building on current strengths—such as relatively strong procurement and promotion efforts—and strategically targeting areas of weakness like distribution and competitive differentiation, this plan offers a comprehensive path toward sustainable retail growth. The integration of performance analytics ensures that the strategy is not static but evolves based on measurable

outcomes, allowing businesses to adjust and refine their marketing approaches over time.

The alignment of the proposed marketing strategy with local business priorities and market realities significantly enhances its practicality and effectiveness. By considering the unique conditions of retail enterprises in Nueva Ecija, the strategy becomes actionable, focusing on transitioning from basic digital adoption to a more data-driven, customer-centric marketing ecosystem. This approach is supported by Santos (2023), who emphasized that successful business transformation in rural markets depends on localized strategy models that align with contextual challenges and resources. This progression is crucial in today's digital environment, where consumer preferences are constantly evolving.

Research underlines that enhancing customer experiences (CEX) in digital contexts is vital for achieving business objectives, particularly in terms of customer satisfaction and retention (Dhaigude and Mohan, 2023). A focus on improving CEX through strategic marketing, complemented by investments in training and infrastructure, allows retail businesses to foster deeper customer engagement. Moreover, implementing digital tools that are affordable and accessible enables local enterprises to operate more efficiently and responsively (Ena et al., 2023).

To overcome existing barriers, such as infrastructural challenges and limited access to technology, targeted investments and collaborations with technology providers can provide the necessary support (Connolly et al., 2024). Ultimately, addressing these core issues facilitates a smoother transition toward integrated digital marketing strategies, empowering retail businesses to thrive in a competitive environment.

4. Conclusions

The study revealed that retail enterprises in Nueva Ecija have made significant progress in implementing marketing strategies, particularly in the areas of procurement, promotion, and sales. These strategies, when supported by digital tools, were found to have a strong positive impact on various aspects of business performance, including productivity, financial returns, and market reach. However, distribution strategies remain only moderately implemented, indicating a gap in logistics capabilities that may hinder overall operational efficiency.

Furthermore, while retailers acknowledge the benefits of marketing efforts on internal processes and revenue growth, there is a perceived lack of competitive differentiation, suggesting the need for more innovative and customer-centric approaches. The correlation between strategic implementation and performance outcomes reinforces the value of a comprehensive, technology-driven marketing framework. Retailers that effectively leverage digital procurement, online promotions, personalized sales

tactics, and performance analytics are better positioned for sustainable growth.

The findings emphasize the importance of addressing identified gaps—particularly in distribution logistics, brand differentiation, and digital infrastructure—to achieve a fully optimized marketing ecosystem. The proposed marketing development strategy offers a practical roadmap for enhancing competitiveness and ensuring long-term success among retail enterprises in the region. Future research should include comparative analyses involving other regions with varying levels of digital infrastructure and retail development to strengthen generalizability and policy relevance.

4.1. Limitations

This study is subject to several limitations. First, the sample consisted of only 76 participants from the province of Nueva Ecija, which, while offering valuable regional insight, limits the generalizability of the findings to other geographic or economic contexts. To enhance broader applicability, future research should include a larger and more diverse sample from multiple regions with varying levels of digital infrastructure and retail maturity.

Second, the study relied primarily on self-reported data, which may introduce response bias, as participants' perceptions may not accurately reflect actual business performance or operational realities. To mitigate this limitation, future studies are encouraged to triangulate data sources by incorporating interviews, business documentation, and direct observation to validate and enrich the findings.

Third, due to the descriptive-correlational design, causal relationships between marketing strategies and performance outcomes cannot be established. While the statistical analysis revealed strong associations, longitudinal or mixed-methods approaches should be considered in future research to capture temporal changes and better understand causal mechanisms in the adoption and impact of technology-based marketing strategies.

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Compliance with ethical standards

Ethical considerations

This study adhered to established ethical research standards. Informed consent was obtained

from all participants prior to their inclusion in the study. Participation was voluntary, and respondents were assured of anonymity and confidentiality of their responses. No personally identifiable information was collected. The research complied with the provisions of the Data Privacy Act of 2012 (Republic Act No. 10173) of the Philippines.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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