



## **E-commerce in the middle-income commercial sector**

### **Comercio electrónico en sector comercial de rentas medias**

Kuri Sisa Quishpilema-Simbayna  
kuri.quishpilema.00@est.ucacue.edu.ec

**Universidad Católica de Cuenca extensión Cañar, Cañar, Cañar, Ecuador**  
<https://orcid.org/0009-0000-5137-9450>

Cristina Guadalupe Ordoñez-Espinoza  
cgordoneze@ucacue.edu.ec

**Universidad Católica de Cuenca extensión Cañar, Cañar, Cañar, Ecuador**  
<https://orcid.org/0000-0001-5781-7781>

#### **ABSTRACT**

The objective of this research is to analyze e-commerce in the middle-income commercial sector of the city of Cañar in Ecuador from the metaphor of a musical symphony. It was descriptive in nature and with a transversal non-experimental design. Regarding the media used for sales transactions, 77% use social networks and 23% prefer other e-commerce platforms. Frequencies of use include 34% for WhatsApp, 32% for TikTok, 31% for Facebook and 3% for Instagram. The strategic utility of virtual assistants as effective technology tools in customer service is highlighted. The ability of these assistants to provide quick and efficient responses not only improves the customer experience, but also represents an effective mechanism for reducing operating costs by automating call identification and answering.

Descriptors: electronic commerce; trade policy; free trade. (Source: UNESCO Thesaurus).

#### **RESUMEN**

La investigación tiene por objetivo analizar el comercio electrónico en sector comercial de rentas medias de la ciudad de Cañar en Ecuador desde la metáfora de una sinfonía musical. De naturaleza descriptiva y con un diseño transversal no experimental. Sobre los medios utilizados para las operaciones de ventas, el 77% utiliza redes sociales y el 23% prefiere otras plataformas de comercio electrónico. Las frecuencias de uso incluyen el 34% para WhatsApp, el 32% para TikTok, el 31% para Facebook y el 3% para Instagram. Se destaca la utilidad estratégica de los asistentes virtuales como herramientas tecnológicas eficaces en la atención al cliente. La capacidad de estos asistentes para proporcionar respuestas rápidas y eficientes no solo mejora la experiencia del cliente, sino que también representa un mecanismo eficaz para reducir costos operativos al automatizar la identificación y atención de llamadas.

Descriptores: comercio electrónico; política comercial; libre comercio. (Fuente: Tesauro UNESCO).

Received: 09/21/2023. Revised: 08/10/2023. Approved: 18/11/2023. Published: 01/01/2024.

#### **Research articles section**



## INTRODUCTION

In the Ecuadorian context, the emergence of e-commerce has been a phenomenon of considerable relevance in recent years, marking a significant transformation in the country's commercial landscape. Ecuador, as a developing economy with its own characteristics, is immersed in a process of adaptation to the global dynamics of e-commerce (Quiñónez-Cabeza, & Quiñónez-Cacedo, 2021).

As e-commerce consolidates as a fundamental element in global trade dynamics, Ecuador has experienced a progressive increase in the adoption of digital technologies in the commercial sphere. This phenomenon has been most notable in sectors related to middle income, where the diversity of markets and the search for economic efficiencies have driven the accelerated implementation of digital solutions (Aguilar-Zambrano & Casanova-Montero, 2022).

The Ecuadorian reality, characterized by its economic and social heterogeneity, presents unique challenges and opportunities in the context of e-commerce integration. Middle-income sectors, ranging from small and medium enterprises to individual entrepreneurs, have sought to take advantage of e-commerce to improve their competitiveness and expand their reach through digital platforms (Mera, 2021).

The present study delves into the analysis of the specific complexities faced by Ecuador at the crossroads between e-commerce and middle-income economies. It will address the particularities of consumption patterns, business strategies and regulatory implications in the Ecuadorian context, offering a comprehensive view that will serve as a basis for policy makers, academics and practitioners in the country seeking to understand and take advantage of the emerging opportunities in this dynamic landscape. This approach seeks to contribute not only to the development of the scientific literature on the subject, but also to informed decision making that will drive the sustainable growth of e-commerce in Ecuador (Pesántez-Calva, Romero-Correa, & González-Illescas, 2020).

Being important to comment on how in the intricate fabric of e-commerce, the commercial sector stands as a scenario of constant transformations and digital harmonies, especially prominent in middle-income economies. This article delves into the electronic score that is redefining commercial practices in this economic stratum, unraveling the melodic complexities of the evolution of e-commerce and its intersection with middle-income companies (Zambrano-Velasco, Castellanos-Espinoza, & Miranda-Guatumillo, 2021).

From the metaphor of a musical symphony, we can see how e-commerce has experienced a gradual but marked increase in its influence on the middle-income commercial sector. This movement is characterized by a symphony of technological innovations, where companies, aware of their growth potential, are looking to digitalization as a way to fine-tune their business strategies and expand their reach in increasingly competitive markets.

Consumption patterns, as counterpoints in a composition, have undergone a remarkable metamorphosis. Consumers, driven by convenience and accessibility, have adopted new harmonies in their purchasing choices, thus challenging traditional retail structures. This movement explores the changing dynamics in consumer habits, highlighting how the melody of e-commerce has modulated consumer preferences in the middle-income retail sector.

Based on this scrutiny, the research aims to analyze e-commerce in the middle-income commercial sector of the city of Cañar in Ecuador from the metaphor of a musical symphony.



## METHOD

This study was conducted from a quantitative perspective. This approach was implemented with the purpose of collecting and examining data susceptible to quantification, with the objective of establishing specific relationships or describing a reality associated with a phenomenon or problem under investigation. During this research, a detailed analysis of the numerical data obtained after the application of a previously validated instrument was carried out (Sánchez Flores, 2019).

Descriptive in nature and with a non-experimental cross-sectional design, this approach is dedicated to providing a brief and concise description of the variables that make up a phenomenon under investigation. In other words, it focuses on detailing the units of observation, highlighting distinctive data in comparison with other contexts. The objective is to obtain precise information on the problem addressed, without delving into the causes that influence its manifestation.

The study population consisted of the 32 legal representatives of the commercial establishments within the business environment of the city of Cañar in Ecuador, which in their totality constituted the population under investigation. They participated voluntarily in the data collection by answering a survey, without experiencing pressure from the research team.

Regarding the techniques used for data collection, the implementation of a survey was chosen. The data collection instrument consisted of a structured questionnaire comprising 32 closed-ended questions, validated by expert judgment and calculation of Richardson's Kuder coefficient of 0.89, which was considered valid for its application.

The responses collected were tabulated using Microsoft Excel, presenting the results in percentage terms by means of descriptive statistics; no human or animal experiments were carried out in the research.

## RESULTS

From the survey of 32 representatives of commercial establishments in the city of Cañar, it was identified that the majority of respondents are women, representing 63%, while 37% are men. Likewise, it was observed that 53% of those surveyed are salespeople.

It was also determined that 31% of the commercial establishments in the city of Cañar have been in the market for between 4 and 6 years, while 6% are businesses with less than 1 year of existence in the market environment.

Regarding the adoption of e-commerce in business, 69% of respondents use it, highlighting its role in improving the efficiency and speed of operations, expanding the company's reach, and reaching a wider audience, regardless of their geographic location. In contrast, 31% of businesses stated that they do not participate in e-commerce. Fifty percent of participants indicated having invested between 2 and 5 years in e-commerce strategies to position their brands, while 5% did so in a period of 1 to 6 months.

Regarding the factors driving companies to adopt e-commerce, the survey revealed that 36% of respondents cited motivation, another 36% cited competition, and 9% highlighted the exploration of new markets. The majority of participants stated that the impact of e-commerce in recent months has been positive.

In terms of inventory management, 45% of respondents use spreadsheets, while 14% use cloud data storage. Participants highlighted the importance of technology to navigate a competitive market and improve the online shopping experience through strategies such as live chat. En cuanto a la comunicación, el 80% de los encuestados indicaron que las redes sociales son los canales más utilizados, y el 37% publica al menos 2 posts o historias por semana para aumentar



la audiencia y seguidores. Todos los participantes expresaron satisfacción con los resultados de estas estrategias de comercio electrónico.

In terms of measuring business effectiveness, 36% of marketers analyze the number of followers on social networks, 32% review the rate of responses and conversations, while 9% do not measure effectiveness.

In terms of customer satisfaction, 36% review complaints received in a specific period, and 9% use surveys focused on customer experience, responding to requests within a maximum of 3 hours.

Regarding the increase in sales transactions after the implementation of e-commerce, 55% of businesses experienced a monthly growth of 21% to 40%, and 5% exceeded 61%. For online payment, 63% use bank transfers and 13% use e-wallets.

As for customer service staff training, 32% indicated that training is rarely conducted. To protect customer information, 41% use internal policies, 5% encrypt data, 64% verify customer identity and 36% implement two-factor authentication.

On the media used for sales transactions, 77% use social networks and 23% prefer other e-commerce platforms. Frequencies of use include 34% for WhatsApp, 32% for TikTok, 31% for Facebook and 3% for Instagram.

Finally, in relation to the challenges of the commercial sector in the city of Cañar to implement e-commerce technological tools, 47% highlight the need to invest in technology, 44% mention the improvement in coordination between suppliers and customers, 50% point out the lack of trust of customers in the use of their data and 38% allude to the complexity of integrating different information systems in the business organization.

## DISCUSSION

In the vibrant metaphor of a musical symphony outlined in this scientific discussion, the results obtained reveal a positive harmony arising from the implementation of e-commerce in companies. Like the masterful orchestration of a symphony, it highlights the imperative need to develop new office automation tools, acting as tuners that optimize marketing tasks and contribute to the digitization of content, thus creating a harmonization that strengthens professional and business relationships.

Following the score of the literature reviewed, digital marketing strategies manifest themselves as notes that not only consolidate online presence, but also open new opportunities to attract potential customers (Cumming, *et al.*, 2023). IT security (Aslam, *et al.* 2020), stands as a key tonal priority, considering the prevention of hacks and cyber-attacks that could affect business reputation, thus ensuring the integrity of the composition.

Emphasizing with firm rhythm, it highlights the importance of promoting product advertising through websites and encouraging electronic purchasing through discounts and additional services, such as free home delivery (Sandoval-Damián, *et al.*, 2021). Digital marketing, like a skillfully executed score, encompasses commercial activities from product planning to distribution in a target market, taking advantage of the availability of information 24 hours a day (Lee, *et al.*, 2023).

Crucial tools in the digital marketing plan, such as business websites and online stores, are highlighted as essential chords by (Rubal & Ornelas, 2021), who highlight the importance of ensuring convenience and attractiveness to customers. Likewise, the relevance of social networks and periodical publication to strengthen the business community is underlined.

In terms of digital advertising, it is recognized that the choice of websites with attractive content is fundamental to attract investment from advertisers. Social networks, such as Facebook,



WhatsApp and Instagram, not only act as advertising platforms, but also play a crucial role in the payment and promotion of products, evidencing the active interaction of customers in the communication and sale of products. The usefulness of virtual assistants, as well-placed notes, stands out in the business melody by providing quick and efficient responses, improving customer experience and reducing operational costs through automatic call identification and attention (Caguana-Baquerizo, *et al.* 2019).

In harmony with the literature reviewed, the importance of motivation in the organizational environment is emphasized with a unique cadence, however, a dissonant note emerges when observing a gap between the availability of digital platforms and their frequent use by companies (Salas-Rubio, *et al.* 2021). In this symphony, the benefits and disadvantages of e-commerce are explored, highlighting a harmonious saving of time and money in global transactions, but also recognizing challenges related to lack of resources and the resistance of some traditional vendors to adopt electronic technologies.

Taken together, the studies reviewed compose a business symphony that emphasizes that successful e-commerce integration provides significant advantages, from reduced organizational costs to a deeper understanding of target market interests. These findings highlight the importance of effective adoption of digital tools, creating a harmony that resonates in today's business environment.

## CONCLUSIONS

The complex picture outlined by the challenges identified in the commercial sector of the city of Cañar for the implementation of e-commerce technology tools reveals an interconnected web of obstacles that require careful and strategic attention by the actors involved. The fact that a significant 47% of respondents highlight the need to invest in technology signals an urgent call to action to upgrade and strengthen existing technological infrastructures to ensure a solid foundation for the effective incorporation of e-commerce.

Improved coordination between suppliers and customers, identified by 44% of participants as a central challenge, underscores the critical importance of establishing efficient and transparent communication channels throughout the business process. This consideration is presented as a key variable that not only impacts the efficiency of transactions, but also influences the overall perception of customer service quality and the building of sustainable business relationships.

The prominent concern of 50% of respondents about customers' lack of trust in the use of their data reveals a perceptual gap that, if not addressed, could erode the widespread acceptance and adoption of e-commerce. Building a secure digital environment and implementing effective privacy policies emerge as inescapable imperatives to allay apprehensions and build consumer trust.

Finally, the 38% who refer to the complexity of integrating different information systems in the business organization point to a reality that is intrinsic to digital transformation. The effective management of this complexity is presented as a strategic challenge, where staff training and the adoption of flexible approaches become determining factors for success in the convergence of heterogeneous systems.

Overall, addressing these challenges holistically demands a multifaceted response that integrates technological investment, improved coordination, strengthened client trust and skillful management of systemic complexity. These findings underscore the need for robust and adaptive business strategies, as well as the importance of viewing e-commerce not just as a transactional tool, but as a central component of a broader business transformation in the digital age.

Exploration into the realm of digital advertising and customer service reveals the centrality of strategies grounded in the attractiveness of web content to attract advertising investment. Careful



selection of sites with engaging content emerges as an essential starting point for capturing the attention of advertisers in a saturated digital environment.

In addition, the evolution of social networks, such as Facebook, WhatsApp and Instagram, beyond mere advertising platforms, by playing an essential role in the payment process and product promotion. This metamorphosis underscores the active participation of customers in the communicative and sales dynamics, consolidating social networks as crucial forums for fluid interaction between consumers and companies.

It also highlights the strategic usefulness of virtual assistants as effective technological tools for customer service. The ability of these assistants to provide quick and efficient responses not only enhances the customer experience, but also represents an effective mechanism for reducing operating costs by automating call identification and handling.

Taken together, these findings underscore the importance of continued innovation in digital advertising and customer service, pointing toward a synergy between content quality, active social media engagement and operational efficiency through advanced technological tools. These findings not only outline the current evolution of the digital landscape, but also offer valuable insights for future strategic development in these fields.

## AUTHORSHIP CONTRIBUTION

**Kuri Sisa Quishpilema-Simbayna**, played a fundamental role in generating a comprehensive conceptual development and carrying out an exhaustive review of the literature. Her contribution included identifying and defining the research objectives, establishing a theoretical framework that accurately contextualizes the study. In addition, she played an active role in the design of the quantitative methodology, collaborating in the development of the sampling strategy, the creation of the survey questionnaire and the strategic planning of data collection, supervised and executed the statistical analysis of the data collected, as well as the interpretation of the results, including the preparation of representative tables and graphs. **Cristina Guadalupe Ordoñez-Espinoza**, on the other hand, contributed significantly to the problem statement and justification of the study. She participated in the definition of the research objective, emphasizing the relevance of the work in the scientific and practical context. His approach focused on a critical analysis of the results obtained in relation to the existing literature. She also contributed to the development of arguments and discussion of the practical and theoretical implications of the findings, and played a key role in the synthesis and drafting of the final conclusions of the study. Both authors, **Kuri Sisa Quishpilema-Simbayna and Cristina Guadalupe Ordoñez-Espinoza**, collaborated equally and complementarily in the drafting and critical revision of the manuscript as a whole. Their cooperation ensured the coherence and quality of the scientific article presented, demonstrating a shared commitment to academic excellence.

## FINANCING

Non-monetary

## CONFLICT OF INTEREST

There is no conflict of interest with persons or institutions related to the research.

## ACKNOWLEDGMENTS

To the companies participating in the research.





## REFERENCES

- Aguilar-Zambrano, Daniela, & Casanova-Montero, Alfonso. (2022). Los efectos del COVID-19 en el comercio exterior del Ecuador: Códigos jel: f10, f13, f17, f19 [The effects of COVID-19 on Ecuador's foreign trade: jel codes: f10, f13, f17, f19]. *Revista De La Facultad De Ciencias Económicas*, 4(4), 30–54. <https://doi.org/10.53591/fce.v4i4.1851>
- Aslam, Wajeeha, Hussain, Annas, Farhat, K., & Arif, I. (2020). Underlying Factors Influencing Consumers' Trust and Loyalty in E-commerce. *Business Perspectives and Research*, 8(2), 186-204. <https://doi.org/10.1177/2278533719887451>
- Caguana-Baquerizo, Jessica Ivonne, Zambrano-Moreira, Mónica Elizabeth, & Segarra-Jaime, Humberto Pedro. (2019). El social network como mecanismo alternativo para la inserción de las PYMES en mercados internacionales [Social network as an alternative mechanism for the insertion of SMES in international markets]. *Revista Universidad y Sociedad*, 11(1), 231-242.
- Cumming, Douglas, Johan, Sofía, Khan, Zaheer, & Meyer, Martin. (2023). E-Commerce Policy and International Business. *Management international review: MIR: Journal of international business*, 63(1), 3–25. <https://doi.org/10.1007/s11575-022-00489-8>
- Lee, Jeoung, Yang, Soo, & Ghauri, Pervez. (2023). E-commerce Policy Environment, Digital Platform, and Internationalization of Chinese New Ventures: The Moderating Effects of Covid-19 Pandemic. *Management international review: MIR: Journal of international business*, 63(1), 57–90. <https://doi.org/10.1007/s11575-022-00491-0>
- Mera, Carlos. (2021). Desafíos del comercio electrónico para las PYMES ecuatorianas [Challenges of e-commerce for Ecuadorian SMEs]. *Espíritu Emprendedor TES*, 5(4), 19–39. <https://doi.org/10.33970/eetes.v5.n4.2021.285>
- Pesántez-Calva, Allan, Romero-Correa, Jerry, & González-Illescas, Mayiya. (2020). Comercio electrónico B2B como estrategia competitiva en el comercio internacional: Desafíos para Ecuador [E-commerce in the middle-income commercial sector]. *INNOVA Research Journal*, 5(1), 72–93. <https://doi.org/10.33890/innova.v5.n1.2020.1166>
- Quiñónez-Cabeza, Manuel., & Quiñónez-Cacedo, Luisa. (2021). Política de comercio exterior en Ecuador: Un análisis comparativo [Foreign Trade Policy in Ecuador: A Comparative Analysis]. *Centro Sur*, 4(2), 266–284. <https://doi.org/10.37955/cs.v4i2.81>
- Rubal, S. M., & Ornelas, M. L.. (2021). Marketing digital y posicionamiento web en comunicación científica: a propósito de un caso en el área de Comunicación [Digital marketing and web positioning in scientific communication: a case study in the area of communication]. *Texto Livre*, 14(1), e26251. <https://doi.org/10.35699/1983-3652.2021.26251>
- Salas-Rubio, María Inés, Ábrego-Almazán, Demián, & Mendoza-Gómez, Joel. (2021). Intención, actitud y uso real del e-commerce [Relevance, attitude and the real use of e-commerce]. *Investigación administrativa*, 50(127), 12703. <https://doi.org/10.35426/iav50n127.03>
- Sánchez Flores, Fabio Anselmo. (2019). Fundamentos epistémicos de la investigación cualitativa y cuantitativa: consensos y disensos [Epistemic Fundamentals of Qualitative and Quantitative Research: Consensus and Dissensus]. *Revista Digital de Investigación en Docencia Universitaria*, 13(1), 102-122. <https://dx.doi.org/10.19083/ridu.2019.644>
- Sandoval-Damián, Juan Manuel, Serralde-Coloapa, José Leonardo, & Acosta-Gonzaga, Elizabeth. (2021). Apps de entrega a domicilio en CDMX: estrategia restaurantera de ventas para sobrevivir a la pandemia [Food Delivery Apps in CDMX: Sales Strategy to Survive the Pandemic]. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 12(23), e060. <https://doi.org/10.23913/ride.v12i23.1104>



Zambrano-Velasco, Bernardo, Castellanos-Espinoza, Esther, & Miranda-Guatemillo, Mario. (2021). El E-Commerce en las empresas ecuatorianas: Un análisis de los informes de la Cámara Ecuatoriana de Comercio Electrónico (CECE) en el marco de la pandemia covid-19 [E-Commerce in Ecuadorian companies: An analysis of the reports of the Ecuadorian Chamber of Electronic Commerce (CECE) in the framework of the covid-19 pandemic]. *Revista Publicando*, 8(29), 13-20. <https://doi.org/10.51528/rp.vol8.id2176>

**Copyright: 2024 By the authors. This article is open access and distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license.**

**<https://creativecommons.org/licenses/by-nc-sa/4.0/>**