

# E-Commerce Adoption in Developing Markets: SME Perspectives

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**Keywords:** E-Commerce, Readiness, Awareness, Barriers, Small and Medium-Sized Businesses (SMEs).

**Abstract:** E-commerce may enhance communications among manufacturers, retailers, customers, and even policymakers. However for a number of causes, the usage of e-commerce by small and medium-sized businesses (SMEs) in the process of countries is still constrained. This research seeks to establish the variables that affect how SMEs in Ho Chi Minh City employ the E-commerce model. Next, numerous policy implications are offered for Ho Chi Minh City Businesses to encourage e-commerce. The research included data from 302 Ho Chi Minh City Firms. In order to analyze data, statistical methods such as correlation test, the Cronbach's Alpha reliability scale, as well as the linear regression model along with exploratory factors (EFA) was utilised. Results indicate adoption of e-commerce is boosted by the enterprise's preparedness, understanding of the advantages of online shopping, and promoting regulations.

## 1 INTRODUCTION

The integration of electronics, telecommunications, and the internet into manufacturing and commerce represents a monumental paradigm shift in global economic dynamics. E-commerce has emerged as a focal point in various academic disciplines, including economics, management, technology, marketing, and finance (Rajagopal et al., 2022). Its significance extends to both developed and developing nations, providing numerous opportunities for economic advancement. However, challenges persist that can inhibit the full exploitation of e-commerce benefits, particularly in developing nations. These challenges include underdeveloped monetary and financial infrastructure and legal frameworks characterized by outdated laws and inadequate regulations (Pandey et al., 2021).

Consequently, many developing nations struggle to fully exploit the benefits of e-commerce, which can impede their economic growth potential. Despite these obstacles, e-commerce offers innovative avenues for enhancing competitiveness and organizational development, fostering consumer engagement, and expanding market reach (Alrumiah et al., 2021). These advantages are particularly relevant in regions like Ho Chi Minh City, where

there is a notable lack of literature on the factors influencing e-commerce adoption.

Small and mid-size enterprises (SMEs), which typically lack extensive resources, stand to gain significantly from engaging with e-commerce. However, the limited research on this topic creates a gap in understanding how these businesses can effectively leverage e-commerce to their advantage (Lv et al., 2020). Addressing this gap is crucial for identifying opportunities and formulating effective policy interventions aimed at enhancing SMEs' engagement with e-commerce.

The essay proposes specific policy changes tailored to bolster SMEs' adoption of e-commerce, recognizing the pivotal role they play in the economic landscape of Ho Chi Minh City and beyond. By examining the unique challenges and opportunities faced by SMEs in this region, the research aims to provide a comprehensive framework for supporting their integration into the e-commerce ecosystem (Tolstoy et al., 2022).

This exploration is essential not only for fostering local economic growth but also for contributing to the broader understanding of e-commerce's impact on small businesses in developing regions. By addressing the infrastructural and regulatory challenges and promoting targeted policy

interventions, the potential for e-commerce to drive economic development and enhance the competitiveness of SMEs in Ho Chi Minh City can be significantly improved. This approach highlights the transformative potential of e-commerce and

underscores the need for ongoing research and policy support to realize its full benefits.

## 2 LITERATURE REVIEW

Table 1: Exploring SME E-commerce Adoption: Global Perspectives and Insights.

| Author                       | Findings  |
|------------------------------|---|
| Wanzu, et al., 2019          | E-commerce usage affects SMEs' growth in Uganda. A structured, self-administered questionnaire was used to survey 172 Ugandan SME owners/managers in Kampala.   |
| Awe, et al., 2021            | A research study wishes to explore the motivations of young Gambian business owners to use e-commerce technology and their perspectives on its advantages.  |
| Rabayah, et al., 2022        | SME e-commerce application model development efforts are mentioned. The study reviews empirical data showing how firms' preparation influences SMEs' IT adoption.   |
| Nather et al., 2020          | The study focuses on e-commerce usage and attitudes among six manufacturing SMEs in Wenzhou, Zhejiang Province, China, a region economically developed for SMEs.  |
| Wongsunopparat, et al., 2021 | Investigated factors affecting live streaming e-commerce client buying behaviour. The study examines one purchase decision and six independent factors, including platform loyalty, engagement, pricing, product individualization, and the live streamer's public image. |

## 3 HYPOTHESIS DEVELOPMENT

- H1: Enterprise readiness improves E-commerce apps.
- H2: E-commerce awareness improves business E-commerce applications.
- H3: E-commerce obstacles hurt corporate applications.
- H4: Supporting policies boost business e-commerce applications.

## 4 RESEARCH METHODOLOGY

A comprehensive investigation into the adoption of e-commerce among small and medium-sized enterprises (SMEs) in Ho Chi Minh City incorporates both qualitative and quantitative methodologies. In the qualitative approach, the research model's variables including Enterprise Readiness (ER), Awareness of E-commerce Benefits (BE), E-commerce Application Hurdles (BA), Support Policies (PO), and E-commerce Application Performance (AP) were refined through a collaborative discussion involving seven e-commerce specialists. This qualitative phase allowed for a nuanced understanding of the key factors influencing e-commerce adoption within the SME sector.

Subsequently, the quantitative method involved the practical sampling of 302 businesses in Ho Chi Minh City. Businesses were selected from compiled

lists and contacted directly via email to participate in the study by completing a questionnaire. The collected data were then subjected to analysis using the SPSS 20 tool, enabling researchers to derive statistical insights into the patterns of e-commerce adoption, the challenges faced by SMEs, and the effectiveness of existing support policies. This combined qualitative-quantitative approach provides a holistic perspective on the dynamics of e-commerce utilization among SMEs in Ho Chi Minh City, facilitating informed policy recommendations and strategic interventions to foster greater uptake in the sector.

## 5 RESULT AND ANALYSIS

The reliability of a scale, as assessed by Cronbach's Alpha coefficient, is crucial in research to ensure consistency and accuracy of measurements. In this study, the Cronbach's Alpha coefficients ranged from 0.830 to 0.929, with the highest value attributed to the influencing element for policy and the lowest to Internet applications. These coefficients indicate high internal consistency, with values above 0.8 considered satisfactory. Moreover, individual components such as enterprise preparation, applications obstacles to e-commerce, and comprehending the benefits of e-commerce demonstrated robust reliability with coefficients of

0.914, 0.904, and 0.888, respectively. The overall correlation exceeding 0.3 further confirms the adequacy of the variables included in the analysis.

Furthermore, the study assures the reliability of the exploratory factor analysis (EFA) with a total of 20 variables, 17 independent and 3 dependent, all meeting the requisite criteria. This comprehensive analysis provides a solid foundation for understanding the factors influencing policy, e-commerce applications, and associated challenges, thus offering valuable insights for decision-makers and researchers in the field.

Table 2: Cronbach’s Alpha analysis results.

| Factor                           | Cronbach’s alpha | Variable |
|----------------------------------|------------------|----------|
| Enterprise readiness             | 0.907            | 5        |
| E-commerce app hurdles           | 0.915            | 6        |
| Support policies                 | 0.931            | 4        |
| Awareness of E-commerce benefits | 0.929            | 5        |
| E-commerce application           | 0.898            | 5        |

All 17 independent factors examined in the exploratory factor analysis (EFA) met the requirements for reliability as evidenced by Cronbach's Alpha analysis. Bartlett's test, with a significant level of 0.000, indicated satisfactory results, validating the factor structure. Furthermore, the Total Variance Explained, exceeding 50% at 79.837%, underscores the adequacy of the factors in explaining the data variability. Factor correlation analysis, as presented in Table 1, revealed the nature of relationships between variables. Notably, the E-commerce application demonstrated positive correlations with ER and BE, while exhibiting a negative correlation with BA, all within acceptable significance levels below 5%. Consequently, these findings support the use of a linear regression approach to establish connections between variables, indicating a promising avenue for further analysis and interpretation of the data.

Table 3: Correlation analysis result.

|                     | Enterprise readiness | Awareness of E-commerce benefits | E-commerce application barriers | Support policies | E-commerce application |
|---------------------|----------------------|----------------------------------|---------------------------------|------------------|------------------------|
| Pearson correlation | 0.354**              | 0.671**                          | -0.237**                        | 0.200**          | 1                      |
| Sig. (2-tailed)     | 1.001                | 1.001                            | 1.001                           | 1.001            |                        |
| N                   | 304                  | 304                              | 304                             | 304              | 304                    |

The regression analysis indicates that the parameters ER, BE, and PO positively influence AP, while BA has an adverse effect on AP. The R2 value of 0.586 suggests that the model accounts for 58.6% of the variance in e-commerce usage. In other words, ER, BA, BE, and PO collectively explain 58.6% of the variation observed in the use of e-commerce. This underscores the significance of these factors in understanding and predicting patterns of e-commerce adoption and usage.

Table 4: Regression model results.

| Model                           | Unstandardized coefficients |            | Standardized coefficients | t      | Sig.  |
|---------------------------------|-----------------------------|------------|---------------------------|--------|-------|
|                                 | B                           | Std. Error | Beta                      |        |       |
| 1 (Constant)                    | -0.781                      | 0.325      |                           | -2.446 | 0.016 |
| E-commerce application barriers | -0.224                      | 0.047      | -0.204                    | -5.847 | 0     |
| Enterprise readiness            | 0.253                       | 0.038      | 0.279                     | 7.942  | 0     |
| Support policies                | 0.245                       | 0.043      | 0.234                     | 5.607  | 0     |
| E-commerce advantages           | 0.467                       | 0.037      | 0.515                     | 13.187 | 0     |

The standardized regression coefficients reveal the impact of various components on the dependent variable, AP. Beginning with BE, its positive beta value of 0.514 indicates a significant positive influence on AP. For every unit increase in BE, AP rises by 0.389 units, underscoring their positive relationship. Similarly, ER demonstrates a positive impact on AP, with a beta value of 0.278. A one-unit increase in ER corresponds to a 0.278 unit improvement in AP, further highlighting their constructive association. Conversely, BA exhibits a negative impact on AP, with a beta value of 0.203, implying that AP decreases by 0.203 units for every unit increase in BA. Lastly, the relationship between AP and PO is also positive, as indicated by a beta value of 0.236. With each unit increase in PO, AP improves by 0.236 units, reinforcing their favourable correlation. Overall, these findings underscore the varying influences of different components on AP, highlighting both positive and negative associations.

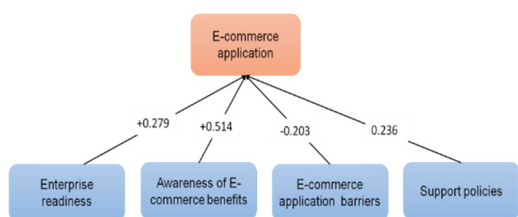


Figure 1: Research model results.

## 6 CONCLUSION

In Ho Chi Minh City, the adoption of e-commerce by small and medium-sized enterprises (SMEs) is crucial for enhancing customer retention and facilitating growth. This study aims to identify the factors influencing the utilization of e-commerce among companies in the region. Employing a qualitative approach, the research involved group discussions among E-commerce specialists to refine criteria and develop a questionnaire. Subsequently, a combination of quantitative techniques such as linear equation modelling, Cronbach's Alpha test, and EFA tests were employed to analyse the gathered data and categorize questions.

Several challenges impede the widespread adoption of e-commerce among SMEs, including reliance on traditional methods of buying and selling, limited human resources, high investment costs, lack of expertise, and inconsistent business strategies. Nonetheless, certain factors support the integration of e-commerce. Financial, technological, infrastructural, and human resources all play crucial roles in preparing a firm for e-commerce implementation.

To overcome barriers and capitalize on opportunities, it is imperative for employers and employees to engage in training sessions focused on e-commerce programmes. These sessions are essential for equipping individuals with the necessary knowledge and skills to navigate the complexities of the e-commerce landscape effectively.

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