

Beyond Profit? How E-Commerce Adoption Strengthens Marketing and Strategic Benefits in Romanian Accommodation SMEs

Olimpia Ban¹, Alexandru Constăngioară², Paul Ruge³ and Dorin-Cristian Coita⁴

¹⁾²⁾³⁾⁴⁾ University of Oradea, Oradea, Romania

E-mail: olimpiaban2008@gmail.com; E-mail: alexandru.co@gmail.com;

E-mail: rugepaul3@gmail.com; E-mail: dorincoita@gmail.com

Please cite this paper as:

Ban, O., Constăngioară, A., Ruge, P. and Coita, D.-C., 2025. Beyond Profit? How E-Commerce Adoption Strengthens Marketing and Strategic Benefits in Romanian Accommodation SMEs. In: C. Vasiliu, D.C. Dabija, A. Tziner, D. Pleșea, V. Dinu eds. 2025. 11th BASIQ International Conference on New Trends in Sustainable Business and Consumption. Oradea, Romania, 26-28 June 2025. Bucharest: Editura ASE, pp. 226-234

DOI: 10.24818/BASIQ/2025/11/038

Abstract

The purpose of this study is to analyze the impact of e-commerce adoption on the performance of SMEs in the Romanian accommodation sector, focusing on both financial and non-financial outcomes. Using a quantitative approach, data were collected through a self-administered online questionnaire completed by 47 managers of accommodation facilities. The analysis was conducted using Structural Equation Modeling (SEM) in SmartPLS 4, based on the updated DeLone and McLean IS Success Model. The findings reveal that while e-commerce does not significantly influence financial performance, it has a strong positive effect on marketing performance, net benefits, and competitive advantage. This suggests that digitalization in Romanian hospitality SMEs serves primarily as a strategic enabler rather than a direct profit generator. The study is among the first to investigate this topic in Romania, filling a gap in the literature and offering a contextualized view of e-commerce adoption in an emerging market. Practically, the results imply that managers should focus on e-commerce as a tool for enhancing customer experience, brand differentiation, and long-term competitiveness, rather than expecting immediate financial returns.

Keywords

E-commerce, tourism, performance, SMEs, managers' perspective, Romania.

DOI: 10.24818/BASIQ/2025/11/038

Introduction

Several researchers have analyzed the impact of e-commerce (from the perspective of its adoption and use within the company) on business performance. They had different views regarding the dimensions that form e-commerce. There are also different views on the concept of use and adoption of e-commerce at a general level and within companies in the tourism and hospitality industry and different perspectives regarding the business performance aspect. Kong et al. (2020) consider that the term e-commerce refers to the selling and buying of goods and services over the internet, with the transfer of money and data to complete the transactions and Rosário and Raimundo (2021) mention that e-commerce involves the use of digital technologies in business to facilitate online sales and transactions.

Lebas and Euske (2002) conceptualize performance as a multidimensional construct comprising both financial and non-financial indicators that reflect the extent to which an organization attains its objectives and desired outcomes. They argue that performance can be effectively represented through a causal framework illustrating how present actions influence future results.

In a complementary perspective, Charles and Ochieng (2023) define firm performance as the execution of organizational activities with a degree of efficiency and effectiveness that surpasses generally accepted benchmarks or norms. In this study, the steps followed in order to develop the paper were followed: Review of the scientific literature, Research methodology, Results and discussion.

1. Review of the scientific literature

In their 2009 study, Intan Salwani et al. (2009) explored the influence of e-commerce usage on business performance by proposing a conceptual framework encompassing three key dimensions:

- the technological context (defined through technological competence);
- the organizational context (firm size, managerial beliefs, and investment in web technologies);
- and the environmental context (intensity of competitive pressure and regulatory support).

This framework, termed E-VALUE, represents a multidimensional theoretical model that integrates elements from both the Technology-Organization-Environment (TOE) model and the Resource-Based View (RBV) theory.

Similarly, Mutia Sobihah, Ahmad Munir and Mohamad Saladin (2014) investigated the role of e-commerce adoption in enhancing organizational performance among Malaysian hotels, employing a synthesized theoretical framework derived from several prior studies. Their findings confirmed significant relationships between the e-commerce business network, e-commerce competence, and organizational performance.

Building on the TOE model, the influence of e-commerce usage intensity on firm performance was systematically analyzed, with significant insights provided by Chang, Magobe and Kim (2015). They investigated several relationships, including whether external pressure intensity positively affects the scope of e-commerce use, whether perceived benefits of e-commerce adoption enhance its application, whether technological competence facilitates wider usage, and whether barriers impede its adoption. Additionally, they assessed whether expanding the scope of e-commerce usage subsequently increases its value for the firm.

Also building on the TOE model, Anshari and Payangan (2020) examined factors influencing firm performance, considering e-commerce adoption as an intervening variable. Their research, grounded additionally in RBV theory, demonstrated that the use of e-commerce had a significant positive effect on overall firm performance.

In the United States, Hua, Morosan and DeFranco (2015) analyzed the impact of e-commerce expenditures on hotel performance, using strictly financial indicators. Their results showed that the proportion of e-commerce expenses had a significant and positive impact on revenue per available room across all years studied, with the exception of 2007, indicating a consistent and sustained influence over time.

The impact of e-commerce on the performance of tourism firms, particularly travel agencies, was the central focus of the study conducted by Sunayana and Parveen (2019). They conceptualized e-commerce adoption through several dimensions, including e-marketing, e-advertising, e-customer support services, e-ordering and delivery, and e-payment. Hypothesis testing revealed a positive relationship between the use of these e-commerce applications and the organizational performance of the analyzed firms.

Previous research has emphasized the multifaceted nature of e-commerce adoption and its positive impact on organizational performance, particularly within the tourism sector. Mishra and Gupta (2020) developed a structural model encompassing eight key constructs—technological compatibility, relative technological advantage, firm learning capacity, managerial beliefs, organizational scope, competitive pressure, regulatory support, and institutional interventions—demonstrating that e-commerce adoption significantly enhances performance among start-ups.

Similarly, Alshaweesh and Bandi (2021) identified six dimensions of e-commerce—e-advertising, e-marketing, e-customer service, e-ordering and delivery, e-training, and e-payment—and found that e-ordering and e-payment systems notably improved performance in tourism enterprises in Jordan.

Complementing these findings, David and Musabila (2021) employed the updated DeLone and McLean IS Success Model alongside the Iceberg Competency Model to explore the relationship between e-commerce and SME performance in the tourism sector. Their study highlighted that e-advertising, e-ordering, and online payments have a direct positive impact on market share, sales volume, and customer reach.

More broadly, e-commerce has been shown to offer various benefits such as expanded market access, cost reductions, and stronger customer relationships. In the tourism industry, digital tools like online reservation systems, mobile applications, and loyalty programs are now critical for improving customer experience and operational efficiency.

Despite its potential benefits, the adoption of e-commerce among Romanian SMEs continues to face significant challenges. According to Eurostat data, key barriers include a persistent consumer preference for in-store shopping, limited digital literacy across segments of the population, and ongoing concerns about the security of online transactions.

These issues collectively impede the broader integration and effectiveness of e-commerce solutions. Although the proportion of Romanian individuals engaging in online shopping has grown from just 2.2% in 2009 to a considerably higher rate by 2023, the country still lags behind the European Union average by nearly a decade in terms of adoption speed. Similar gaps are evident in the contribution of e-commerce to enterprise revenue, particularly within the accommodation and food service sectors, further underscoring the structural and behavioral obstacles to digital transformation in Romania.

2. Research methodology

In the case of the present study, the choice of the research model (Figure no. 1) occurred after a thorough process of analysis of several models that initially seemed suitable for the proposed objectives. Following this careful approach, it was decided to use the IS Success Model of DeLone and McLean, updated in 2003 and applied on e-commerce in 2004. According to DeLone and McLean (2003), the success of e-commerce systems depends on several interrelated quality dimensions. Information quality refers to the relevance, clarity, completeness, personalization, and security of web content, which are essential for user trust and engagement. System quality encompasses features such as usability, reliability, adaptability, and response time—key attributes that influence the user experience. Service quality reflects the level of customer support offered during online interactions; insufficient support can lead to customer dissatisfaction and revenue loss. Use captures user interaction with the system, ranging from simple navigation to completing transactions. User satisfaction evaluates the overall user experience, from information access to post-purchase services. In this study, the concept of user satisfaction is expanded into marketing performance, incorporating elements such as customer satisfaction, loyalty, and perceived value.

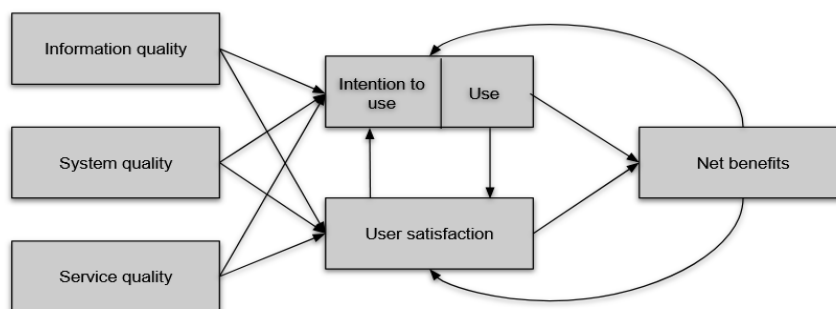


Figure no. 1. Diagram of research model

Source: updated after DeLone and McLean, 2004

Regarding performance from a marketing perspective, which is non-financial, Neely (2002) mentions that in recent times, four concepts (market orientation, customer satisfaction, customer loyalty and brand equity) have attracted extensive attention as representing good marketing inputs. He also highlights that most adopt the perspective that marketing should focus less on completing the individual transaction and more on developing long-term relationships with profitable customers.

In order to counter balance, it is decided to also add the accounting-financial perspective of performance, so that the impact of using e-commerce regarding the performance can be analyzed from both a financial and non-financial perspective. Net benefits refer to the success of e-commerce while a consumer is using the service or products and indicate the important factor for measuring success (DeLone and McLean, 2004).

In order to complete the picture, a decision is made to introduce, as a complement to net benefits, the dimension represented by competitive advantage from the perspective of differentiation.

Barney (1991) mentions that competitive advantage is generally conceptualized as the implementation of a strategy that is not currently implemented by other firms and that facilitates cost reduction, exploitation of market opportunities and/or neutralization of competitive threats.

The purpose of this case study is to analyze the influence of e-commerce use on the performance of SMEs in the Romanian accommodation sector for the year 2024.

Among the objectives pursued are: Determining the impact of information quality on the use of e-commerce; Determining the impact of information quality on the performance of the company - from a marketing perspective; Determining the impact of system quality on the use of e-commerce; Determining the impact of system quality on the performance of the company - from a marketing perspective; Determining the impact of service quality on the use of e-commerce; Determining the impact of service quality on the performance of the company - from a marketing perspective; Determining the impact of e-commerce use on the performance of the company - from a marketing perspective; Determining the impact of e-commerce use on the performance of the company - from an accounting/financial perspective; Determining the impact of e-commerce use on the net benefits of the company; Determining the impact of trade use on the competitive advantage of the company - from a differentiation perspective.

Based on the above mentioned, the diagram of the model to be followed in the current study is as it follows (Figure no. 2).

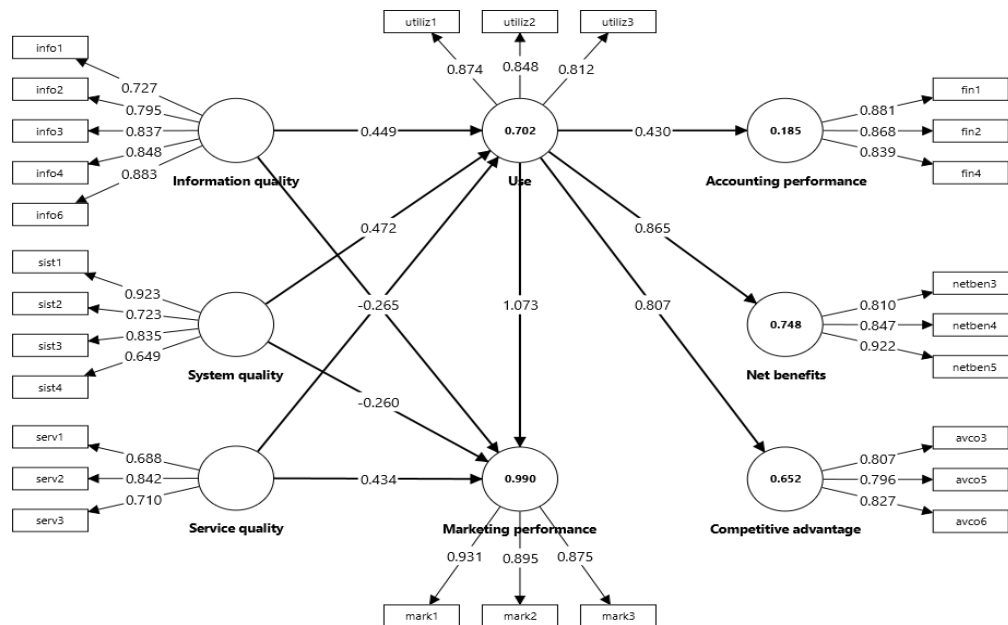


Figure no. 2. Diagram of the model

In short, among the indicators used regarding the quality of the information we have, if it is useful, updated, and sufficient. For the quality of the system, if it has an adequate response time, if it is easy to use or if it protects customer confidentiality. Related variables are the quality of the service, the quality of technical support and if it meets ethical standards. For the performance from a marketing perspective, the degree of customer satisfaction, the customer retention rate, the market share. For the competitive advantage, the distinctive character of the brand, the credibility and prestige of the company, the ability to personalize products and services. Regarding the performance from an accounting perspective, the increase in profit and sales (in the last 3 years), the revenue per available room in the last 3 years and the achievement of financial objectives in the last 3 years. Among the indicators of the net benefit variable we find, improving the decision-making process, saving time, saving costs and simplifying the work of employees.

The hypotheses are the following:

- H1: Information quality has a significant positive impact on e-commerce usage;
- H2: Information quality has a significant positive impact on marketing performance;
- H3: System quality has a significant positive impact on e-commerce usage;

- H4: System quality has a significant positive impact on marketing performance;
- H5: Service quality has a significant positive impact on e-commerce usage;
- H6: Service quality has a significant positive impact on marketing performance;
- H7: The use of e-commerce has a significant positive impact on marketing performance;
- H8: The use of e-commerce has a significant positive impact on accounting performance;
- H9: The use of e-commerce has a significant positive impact on the firm's net benefits;
- H10: The use of e-commerce has a significant positive impact on the firm's competitive advantage.

Similar studies in this field have predominantly employed quantitative research methods, and the present study follows the same approach. As noted by Rana, Gutierrez and Oldroyd (2023), quantitative research involves the collection and statistical analysis of numerical data to address scientific questions, identify patterns, test causal relationships, and generalize findings to broader populations. In this research, data were processed using SPSS 26 and SmartPLS 4. An initial descriptive analysis was conducted in SPSS. Based on these responses, several relevant observations can be made (Table no. 1).

Tabel no. 1. Structure of responding companies

Category	Type	Value / Percentage	Category	Type	Value / Percentage
Responses	Total	49/100%	Locations	Braşov	6/13%
	Valid	47/96%		Constanţa	5/11%
Employees	< 2	27/57%		Bihor	5/11%
	2-9	12/26%		Bucureşti	4/9%
	10-25	6/13%		Suceava	3/6%
	other	2/4%		Mureş	3/6%
Turnover	< €50.000	18/38%		Sibiu	2/4%
	€50.000-€100.000	17/36%		Other	19/40%
	€500.000-€1 mil	5/11%	E-commerce adoption	5-8 years	15/32%
	€100.000-€200.000	4/9%		3-4 years	14/30%
	other	3/6%		1-2 years	8/17%
E-commerce	both proprietary & outsourced	22/46.8%		13-15 years	4/8.5%
	outsourced only	21/44.7%		9-12 years	4/8.5%
	proprietary only	4/8.5%		16-20 years	1/2%
				>20 years	1/2%

Data is collected exclusively through a self-administered online questionnaire (via Google Forms) addressed to tourism and hospitality companies (SME category only) in Romania. In order to obtain information about commercial companies operating as tourist reception structures with accommodation functions, the website of the Ministry of Economy, Entrepreneurship and Tourism of Romania was consulted. A sample was made from which at the time of carrying out this analysis, only 49 companies responded with 47 valid answers. We decided to continue the research because testing the proposed model is a priority, and we are counting on increasing the number of responses over time through semi-structured interviews. The purpose of evaluating the reflective measurement model is to ensure the reliability and validity of the construct measures and therefore provide support for their appropriate inclusion in the path model. In the case of the reflective measurement model, Hair et al. (2017) recommend examining the results of the following SEM-PLS calculations: Internal Consistency Reliability (Cronbach's Alpha and Composite Reliability), Convergent Validity (Outer Loadings and Average Variance Extracted- AVE) and Discriminant Validity (heterotrait-monotrait ratio- HTMT) (Table no. 2).

Table no. 2. Internal Consistency Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Accounting performance	0.897	0.898	0.897	0.745
Competitive advantage	0.851	0.851	0.851	0.656
Information quality	0.91	0.914	0.911	0.672
Marketing performance	0.927	0.929	0.928	0.811
Net benefits	0.894	0.899	0.895	0.741
Service quality	0.79	0.801	0.793	0.562
System quality	0.867	0.882	0.867	0.623
Use	0.881	0.883	0.882	0.714

Cronbach's Alpha (recommended values between 0.60-0.90) provides an estimate of reliability based on the intercorrelations of the observed indicator variables, in the present situation the values are above 0.80 and just above 0.90. Composite Reliability (recommended values between 0.60-0.90), takes into account the different outer loadings of the indicator variables, the values recorded are from above 0.80 to above 0.90. Outer Loadings (recommended values >0.70), here in majority all values are above 0.70, while some are really close, 0.668 and only one is below 0.650. Average Variance Extracted (AVE, recommended values >0.50), is defined as the grand mean value of the squared loadings of the indicators associated with the construct (i.e., the sum of the squared loadings divided by the number of indicators) in our model all the values are above 0.60. Heterotrait-monotrait ratio (HTMT, recommended values - the confidence interval does not include 1), in short, HTMT is the ratio of the correlations between traits to the correlations within traits. In this case all the values are below 1 and in 25 out of 28 relations between the indicators the values are below 0.850. In the present situation it can be mentioned that the majority of requirements are met, thus the structural model can be evaluated. This evaluation involves examining the predictive capabilities of the model and the relationships between the constructs. Hair et al. (2019) mention that, after these steps and before assessing the structural relationships, collinearity must be examined to make sure it does not bias the regression results. In the current model, all the recorded VIF values are below the limit 5. Hair et al. (2017) recommend the following procedure for evaluating the structural model. Assessing the significance and relevance of the structural model relationships (Structural Model Path Coefficients), Hair et al. (2017) mention that, as a rule of thumb, for sample sizes of up to about 1,000 observations, path coefficients with standardized values above 0.20 are usually significant, and those with values below 0.10 are usually not significant. Based on their sizes, it would appear that the relationships between Service quality \rightarrow Marketing performance; Information quality \rightarrow Use; System quality \rightarrow Use; Use \rightarrow Competitive advantage; Use \rightarrow Net benefits Use \rightarrow Marketing performance are significant (all path coefficient being above 0.40). After running the PLS-SEM algorithm, estimates are obtained for the structural model relationships (i.e., the path coefficients), which represent the hypothesized relationships among the constructs.

3. Results and discussion

The evaluation of the structural model results was based on several key indicators commonly used in Partial Least Squares Structural Equation Modeling (PLS-SEM), in line with established methodological guidelines.

First, path coefficients were analyzed to assess the strength and direction of the relationships between latent constructs, with values close to +1 indicating strong positive associations (see Figure no.2). The statistical significance of these relationships was determined using bootstrapped p-values, where values below 0.05 indicate significance at the 95% confidence level (Table no. 3). When assuming a significance level of 5% (like in this case), the p value must be smaller than 0.05 to conclude that the relationship under consideration is significant. To evaluate the model's explanatory power, the coefficient of determination (R^2) was used, with values of 0.75 or higher considered substantial, 0.50 moderate, and 0.25 weak (Table no. 4). The highest R^2 value was recorded for *Marketing Performance* (0.99), indicating excellent predictive strength.

Additionally, the f^2 effect size was calculated to determine the individual contribution of each exogenous construct to the explained variance of the dependent constructs. Effect sizes above 0.35 are considered large, with *Use \rightarrow Marketing Performance* reaching an exceptionally high value of 36.042 (Table no. 5). Furthermore, predictive relevance (Q^2) was assessed using the blindfolding procedure and the Cross-Validated Predictive Ability Test (CVPAT), confirming that all endogenous constructs exhibited good predictive capacity. Together, these indicators provided a comprehensive validation of the model's robustness, predictive strength, and practical relevance.

Table no. 3. Bootstrap routine – path coefficients and P values

	Original sample (O)	P values
System quality \rightarrow Marketing performance	-0.031	0.745
Information quality \rightarrow Marketing performance	-0.042	0.744
Service quality \rightarrow Use	0.063	0.598
Information quality \rightarrow Use	0.41	0.007
Service quality \rightarrow Marketing performance	0.293	0.004
System quality \rightarrow Use	0.401	0.003
Use \rightarrow Accounting performance	0.383	0.002
Use \rightarrow Competitive advantage	0.7	0

	Original sample (O)	P values
Use -> Marketing performance	0.753	0
Use -> Net benefits	0.771	0

Additionally, the f^2 effect size was calculated to determine the individual contribution of each exogenous construct to the explained variance of the dependent constructs. Effect sizes above 0.35 are considered large, with *Use* → *Marketing Performance* reaching an exceptionally high value of 36.042 (Table no. 5). Furthermore, predictive relevance (Q^2) was assessed using the blindfolding procedure and the Cross-Validated Predictive Ability Test (CVPAT), confirming that all endogenous constructs exhibited good predictive capacity. Together, these indicators provided a comprehensive validation of the model's robustness, predictive strength, and practical relevance.

Table no. 4. R-square and R-square adjusted

	R-square	R-square adjusted
Accounting performance	0.185	0.167
Competitive advantage	0.652	0.644
Marketing performance	0.99	0.99
Net benefits	0.748	0.742
Use	0.702	0.681

Table no. 5. f-square

	f-square
Information quality -> Marketing performance	2.632
Information quality -> Use	0.319
Service quality -> Marketing performance	8.539
Service quality -> Use	0
System quality -> Marketing performance	2.498
System quality -> Use	0.357
Use -> Accounting performance	0.227
Use -> Competitive advantage	1.874
Use -> Marketing performance	36.042
Use -> Net benefits	2.968

The analysis of the structural equation model reveals several key insights into the role of e-commerce adoption within Romanian accommodation SMEs. Among all tested relationships, only three paths are statistically significant and positive at the 5% level: *Use* → *Marketing Performance*, *Use* → *Net Benefits*, and *Use* → *Competitive Advantage*. These results highlight that the primary benefits of e-commerce are not directly financial, but rather strategic, with strong effects observed in areas such as customer engagement, brand differentiation, and perceived organizational value.

This is further supported by the R^2 values, which are substantial for Marketing Performance (0.99) and Net Benefits (0.748), and moderate for Use (0.702) and Competitive Advantage (0.652). Conversely, the R^2 for Accounting Performance (0.185) is weak, suggesting a limited or delayed financial impact of e-commerce initiatives.

Additionally, effect size analysis (f^2) indicates that the use of e-commerce has a particularly large impact on marketing-related outcomes, with the most notable value being $f^2 = 36.042$ for the *Use* → *Marketing Performance* relationship. Predictive relevance (Q^2) results, along with the CVPAT test, confirm that the model possesses high predictive accuracy, especially for constructs associated with non-financial performance. The structural diagram (Figure no. 3) visually confirms these findings, showing the strongest path coefficients between *Use* and the key performance constructs. By contrast, relationships from System Quality, Information Quality, and Service Quality to performance outcomes are weaker or statistically insignificant.

Overall, the results suggest that in the context of Romanian hospitality SMEs, the value of e-commerce lies primarily in its strategic and marketing potential rather than in immediate profitability. The limited financial impact may stem from superficial integration, lack of strategic coherence, or insufficient measurement of online revenues.

Structural challenges—such as consumer mistrust, limited digital marketing capacity, and reliance on traditional business models—may further constrain financial returns. Nonetheless, the evidence underscores the importance of viewing e-commerce as a long-term enabler of market visibility, customer satisfaction, and competitive positioning.

Conclusions

The present study confirms that the adoption of e-commerce among Romanian accommodation SMEs exerts a significant positive impact primarily on marketing performance, net benefits, and competitive advantage.

Unlike findings from studies such as those by Intan Salwani et al. (2009) and Chang, Magobe and Kim (2015) which reported a strong relationship between e-commerce adoption and both financial and operational performance, our results suggest a more selective influence, with financial outcomes being less directly affected. A possible reason for this divergence could be the limited integration of e-commerce solutions with internal operational and financial systems among Romanian SMEs, resulting in marketing advantages without immediately translating into measurable financial improvements. This divergence may also stem from the fact that the study is based on subjective managerial assessments rather than on concrete financial and operational metrics, leading to a focus on perceived advantages rather than immediately measurable financial impacts.

The findings also align partially with the conclusions of Sunayana and Parveen (2019) and David and Musabila (2021), who emphasized the importance of e-commerce applications in improving customer satisfaction, market share, and brand loyalty. Similar to these studies, the current research demonstrates that e-commerce usage acts as a strategic enabler rather than a direct financial driver. Furthermore, consistent with the observations of Anshari and Payangan (2020), the results highlight that the value of e-commerce adoption lies in its contribution to broader organizational benefits and competitive positioning, rather than short-term profitability.

In summary, while prior research largely recognized a comprehensive impact of e-commerce on firm performance, this study nuances the existing literature by demonstrating that in emerging markets such as Romania, the immediate effects are more pronounced on marketing and strategic differentiation rather than on financial outcomes. These insights call for a re-examination of how e-commerce success is conceptualized and measured in different economic and sectoral contexts.

This research provides valuable insights into the nuanced effects of e-commerce adoption within the hospitality SME sector in Romania. Unlike prior assumptions that linked e-commerce usage directly to financial performance, our findings suggest that its most significant impact is felt through marketing performance, net benefits, and competitive advantage. These results highlight the need for theoretical models to more clearly distinguish between financial and non-financial performance outcomes when assessing e-commerce effects. The study reinforces the validity of multidimensional approaches, such as the updated IS Success Model, but also points to the importance of incorporating constructs like competitive differentiation and marketing effectiveness in future theoretical frameworks.

For managers and entrepreneurs in the Romanian hospitality sector, the findings underline that investing in e-commerce solutions primarily enhances marketing performance and strengthens competitive positioning, rather than immediately boosting financial indicators. Practical efforts should therefore prioritize optimizing customer engagement, digital visibility, and service personalization through e-commerce platforms. Companies should view e-commerce not merely as a sales tool but as a strategic enabler for building brand equity, improving customer satisfaction, and achieving long-term differentiation in a highly competitive market environment.

It can be mentioned that one of the limits is that the number of responses and the response rate overall is relatively small. Besides that, some of the indicators, after testing them, were not suited for the present model, so they were removed. In some cases, the number of indicators is as low as 3, not really a big issue but more indicators the better for the overall model.

Acknowledgement(s): The author gratefully acknowledges the support of the University of Oradea.

References

- Alshaweesh, R. and Bandi, S., 2021. Impact of E-commerce on Business Performance on Tourism Industry in Jordan. *International Journal of Innovation, Creativity and Change*, 15(10), pp. 843-878.
- Anshari, A. and Payangan, O.R., 2020. Factors Determinant of E-Commerce and Impacts on Increasing Company Performance. *Global Scientific Journal*, 8(6), pp.2111-2123.
- Barney, J., 1991. Firm resources and sustained competitive advantage. *Journal of management*, 17(1), pp.99-120. <https://doi.org/10.1177/014920639101700108>.

- Chang, B.-Y., Magobe, M.J. and Kim, Y.B., 2015. E-commerce applications in the tourism industry: A Tanzania case study. *South African Journal of Business Management*, 46(4), pp.53–64. <https://doi.org/10.4102/sajbm.v46i4.109>.
- Charles, M. and Ochieng, S.B., 2023. Strategic Outsourcing and Firm Performance: A Review of Literature. *International Journal of Social Science and Humanities Research*, 1(1), pp.20–29. <https://doi.org/10.61108/ijsshr.v1i1.5>.
- David, M. and Musabila, A., 2021. E-commerce usage and performance of small and medium tourism enterprises in Tanzania. *East Africa Journal of Social and Applied Sciences*, 3(2), pp. 88-105.
- DeLone, W.H. and McLean, E.R., 2003. The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), pp.9–30. <https://doi.org/10.1080/07421222.2003.11045748>.
- DeLone, W.H. and McLean, E.R., 2004. Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model. *International Journal of Electronic Commerce*, 9(1), pp.31–47. <https://doi.org/10.1080/10864415.2004.11044317>.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M., 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks: Sage Publications Inc.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M., 2019. When to use and how to report the results of PLS-SEM. *European business review*, 31(1), pp.2-24. <https://doi.org/10.1108/EBR-11-2018-0203>.
- Hua, N., Morosan, C. and DeFranco, A., 2015. The other side of technology adoption: Examining the relationships between e-commerce expenses and hotel performance. *International Journal of Hospitality Management*, 45, pp.109-120. <https://doi.org/10.1016/j.ijhm.2014.12.001>.
- Intan Salwani, M., Marthandan, G., Daud Norzaidi, M. and Choy Chong, S., 2009. E-commerce usage and business performance in the Malaysian tourism sector: empirical analysis. *Information management & computer security*, 17(2), pp.166-185. <https://doi.org/10.1108/09685220910964027>.
- Kong, X.T., Zhong, R.Y., Zhao, Z., Shao, S., Li, M., Lin, P., Chen, Y., Wu, W., Shen, L., Yu, Y. and Huang, G.Q., 2020. Cyber physical ecommerce logistics system: An implementation case in Hong Kong. *Computers & Industrial Engineering*, 139, p.106170. <https://doi.org/10.1016/j.cie.2019.106170>.
- Lebas, M. and Euske, K., 2002. A conceptual and operational delineation of performance. In: A. Neely, ed. *Business performance measurement: theory and practice*. Cambridge: Cambridge University Press, pp. 65–79.
- Ministry of Economy, Entrepreneurship and Tourism of Romania, 2024. *Authorized structures in accommodation*, [online] Available at: <<https://se.situr.gov.ro/OpenData/OpenDataList?type=listaCazari>> [Accessed 14 october 2024].
- Mishra, O.N. and Gupta, S., 2020. Antecedents and impact of e-commerce adoption among new venture firms: Evidence from tourism and hospitality industry. *Vision*, 24(4), pp.431-440. <https://doi.org/10.1177/097226292092794>.
- Mutia Sobihah, A.H., Ahmad Munir, M.S. and Mohamad Saladin, M., 2014. The relationship between e-commerce adoption and organization performance. *International Journal of Business and Management*, 9(1), pp.56-63. <https://doi.org/10.5539/ijbm.v9n1p56>.
- Neely, A. ed., 2002. *Business performance measurement: Theory and practice*. Cambridge: Cambridge university press.
- Rana, J., Gutierrez, P.L. and Oldroyd, J.C., 2023. Quantitative methods. In *Global Encyclopedia of Public Administration, Public Policy, and Governance* (pp. 11202-11207). Cham: Springer International Publishing.
- Rosário, A. and Raimundo, R., 2021. Consumer marketing strategy and E-commerce in the last decade: a literature review. *Journal of theoretical and applied electronic commerce research*, 16(7), pp.3003-3024.
- Sunayana, K. and Parveen, R., 2019, June. The impact of e-commerce on organizational performance of the Indian travel agencies. In *Tourism International Scientific Conference Vrnjačka Banja-TISC* (Vol. 4, No. 1, pp. 482-499).