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THE IMPACT OF E-MARKETING STRATEGIES ON THE PROFITABILITY OF CLASSIFIED HOTELS ACCORDING TO A QUALITATIVE EVALUATION MODEL

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Purpose. The aim of the research is to determine the impact of digital marketing on the profitability of classified hotels in Algeria, a topic of significant interest due to the growing importance of digital presence for businesses in the current market. The authors aim to analyse digital marketing strategies and their role in attracting customers and improving hotel performance in terms of profitability.
Results. The research reveals a statistically significant positive effect of digital marketing on profitability, representing a qualitative leap in understanding how digital technology influences business operations in the hospitality sector. Additionally, the study highlights factors that enhance the effectiveness of digital marketing, such as expanding the range of services offered, utilising automation, and improving website conversion rates. Moreover, successful digital marketing strategies identified include utilising diverse distribution channels, designing user-friendly websites, engaging with the community, offering tailored promotional offers, and providing superior customer service.
Scientific novelty. It is noteworthy that the research focuses on classified hotels in Algeria, a specific and important category within the hospitality industry that has not received adequate attention in previous research. Furthermore, the proposed model for measuring competitiveness is a significant contribution as it enables hotels to gain a better understanding of their market position and adjust their strategies accordingly, thereby enhancing their chances of success and sustainability in both local and international markets.
Practical value. The findings of the research hold considerable value for Algerian hotels, as they can use them to improve their online presence, increase guest attraction, and consequently achieve higher profitability. Additionally, the proposed competitiveness measurement model serves as a valuable tool for hotels to understand their market position and identify opportunities and challenges, thus enabling them to develop the most appropriate strategies for market dominance.
Key words: e-marketing strategies, profitability, classified hotels, competitiveness model.

Introduction. The hotel industry in Algeria has witnessed significant growth in recent years, driven by an increase in domestic and international tourism rates. With the growing competition, there is also an increasing reliance on effective marketing strategies to attract guests and enhance profitability.

With the increasing importance of digital marketing strategies, it is observed that they play a crucial role in achieving these objectives, providing effective tools for communicating with potential guests, enhancing brand awareness, and stimulating bookings (Olson et al., 2021). Global circumstances, such as the spread of the COVID-19 pandemic, have underscored the importance of directing efforts towards electronic marketing methods in the hotel sector.

Therefore, this study aims to examine the relationship between electronic marketing strategies and the profitability of classified hotels in Algeria. We have built a model tailored to measure the study's variables, which has previously been tested and is focused on three main dimensions, following an in-depth study of hotel profitability. The model can be applied to all types of hotel establishments as follows.

1. Additional services. These include services offered by the hotel in addition to accommodation, such as spa services, laundry, and transportation. These services are an integral part of the guest experience and play a significant role in attracting customers and enriching their experience (Shahid, 2022).

2. Automation. The use of electronic technologies to facilitate operations and improve efficiency, such as online booking systems and self-service kiosks. Automation speeds up processes and improves the accuracy of procedures, thus enhancing the guest experience and satisfaction (Paulose, 2022).

3. Conversion rate. The percentage of visitors who book rooms on the hotel's website. This rate is an important indicator of the effectiveness of electronic marketing strategies and their ability to convert viewers into actual customers (Bag, 2022).

Despite the importance of electronic marketing strategies in enhancing the profitability of hotels in Algeria, there remains a significant challenge.

Identifying the efficiency and effectiveness of electronic marketing strategies in increasing the actual profitability of hotels. Current successes in digital marketing heavily rely on specific technological standards, such as the conversion rate and engagement rate. However, it goes beyond that to the extent of the impact of these strategies on the actual profits of hotels. This research will address this challenge through a deep analysis of survey data collected from 226 classified hotels in Algeria, in addition to analysing financial data, customer evaluations, and hotel websites.

In this context, this study aims to address the following key objectives:

- *Evaluate the impact of various electronic marketing strategies on hotel profitability*. This study will assess how different electronic marketing strategies impact the profitability of hotels. By analysing various approaches, we aim to determine which strategies are most effective in the Algerian market;

- *Identify the main dimensions contributing to hotel profitability in Algeria*. By conducting a comprehensive analysis, we will identify the primary factors contributing to hotel profitability in Algeria. Focusing on these dimensions will provide valuable insights into enhancing the financial performance of hotels;

- *Provide practical recommendations for hotels to improve electronic marketing strategies and enhance profitability*. Through this study, practical recommendations

will be offered to hotels to improve their electronic marketing strategies. By implementing these recommendations, hotels can enhance their profitability and strengthen their position in the market.

We believe that this study will make a valuable contribution to understanding the relationship between electronic marketing and hotel profitability, helping hotel owners make effective strategic decisions to improve their financial performance and enhance their position in the market.

Review of literature. ***1. Profitability in the hotel industry.*** Profitability in the hotel industry is influenced by various factors, including service quality, pricing strategy, operational efficiency, and customer satisfaction (Kukanja & Planinc, 2020). Superior service quality is a crucial factor affecting hotel profitability. Zeithaml (2000) suggests that superior service quality not only attracts guests but also encourages loyalty and positive word-of-mouth, leading to increased occupancy rates and, ultimately, profitability. In the Algerian context, offering exceptional additional services such as spa treatments, laundry, and transportation can significantly enhance service quality and, consequently, hotel profitability (Elgarhy & Mohamed, 2023).

Pricing strategy. Pricing strategies directly impact hotel profitability. According to Kopalle et al. (2023), implementing dynamic pricing strategies based on market demand and competitor pricing can lead to increased revenue and higher profitability. In Algeria, hotels that adopt flexible pricing models aligned with seasonal demand fluctuations and market trends tend to achieve better financial performance.

Operational efficiency. Operational efficiency is another critical factor affecting hotel profitability. Oualid et al. (2024) demonstrated that implementing automation and technological solutions, such as online booking systems and self-service kiosks, can streamline operations, reduce costs, and enhance the overall guest experience, thus leading to improved profitability.

Customer satisfaction. Customer satisfaction plays a vital role in determining hotel profitability. O'Neill & Mattila (2004) found that satisfied guests are more likely to make repeat visits and recommend the hotel to others, thus contributing to increased occupancy rates and revenue. By focusing on providing excellent service and meeting guest expectations, hotels in Algeria can enhance customer satisfaction, leading to improved profitability.

1.1. Several factors influence the profitability of hotels.

Revenue per available room (Rev PAR). Rev PAR is a key indicator that combines room rate and occupancy rate. The higher the Rev PAR, the better the profitability.

Cost management. Cost management includes all operating expenses such as employee salaries, facilities, and consumables. Efficient management of these costs significantly contributes to increased profits (Shabbir, 2020).

Additional revenues. Hotel profits are not limited to room revenue alone but also include revenues from restaurants, cafes, and other services provided by the hotel. Focusing on diversifying income sources increases profitability.

Marketing strategies. Effective marketing strategies play a pivotal role in attracting guests and introducing them to the hotel (Pholphirul, 2022). Particularly, electronic marketing has become essential in our current era to attract a wide range of customers.

Service quality. Sustainable profitability cannot be achieved without providing high-quality service that meets guests' expectations. A good service reputation attracts customers and encourages them to return (Chan, 2023).

1.2. Characteristics of profitability. Profitability is an important strategy that resources can use to determine the overall performance level within the organisation, in addition to indicating its internal strengths (Al-Busaidi, 2021).

Accuracy or validity. Achieved as long as the measurement tools are sound and objective, providing truth, unlike subjective indicators, which are prevalent when measuring human resource performance (Sartori, 2022).

Sensitivity. It involves the ability to distinguish several degrees of performance. If a difference is found between two tools, the indicator can compensate for it (Gasser, 2020).

Comprehensiveness. By assessing all aspects of performance, such as profitability, business performance, productivity performance, and social performance (Barauskaite, 2021).

2. Digital marketing strategies. The tourism sector is witnessing significant growth, opening up broad horizons for hotels to enhance their positions and attract more guests (Akbari, 2021). In this context, electronic marketing emerges as an indispensable strategic tool to achieve the hotels' goals and increase their profits (Chiang, 2020). Electronic marketing is an essential tool for hotels in our digital age, helping to reach a broader audience, enhance brand awareness, and achieve higher conversion rates (Bag et al., 2022). In Table 1, a summary of the explanation of the essential elements of the electronic marketing mix is provided, along with specific strategies that have been developed and adapted to meet the needs of hotels. It is worth noting that the effectiveness of these strategies depends on their proper implementation and adaptation to the nature of each hotel and its target audience (Bouali, 2020). We emphasize the importance of market analysis and keeping up with the latest trends in electronic marketing to ensure the best results, which we relied on in our applied.

In preparing the Table 1, we focused on the importance of each element in achieving the objectives of digital marketing for hotel establishments, considering the following:

- *Integration*. The success of the digital marketing mix relies on effective integration of all elements, with a focus on meeting customer needs and expectations;

- *Customisation*. The customisation process plays a vital role in providing a unique and satisfying customer experience, enhancing brand loyalty;

- *Measurement and analysis*. Regularly measuring and analysing the results of digital marketing strategies is essential to evaluate their effectiveness and make

necessary adjustments;

- *Monitoring and updating*. Digital marketing requires continuous monitoring and regular updating to stay informed about the latest trends and developments in customer behaviours and marketing techniques.

Table 1

Fundamental elements of electronic marketing in the hotel sector

Element	Description	Strategies
1	2	3
Product	The foundation of electronic marketing, encompassing all aspects influencing guest decisions (Ciasullo, 2021)	- Product range: offer a variety of products and services, highlighting unique selling points (USPs). - Product presentation: ensure an accurate and appealing presentation of products through high-quality visuals and informative descriptions. - Design and planning tools: utilize effective tools for presenting and designing the product to enhance user experience
Price	A crucial factor influencing guest decisions. Dynamic pricing strategies can optimize revenue (Abrate et al., 2022)	- Forward auctions: offer products to multiple buyers, with prices potentially decreasing as the auction progresses. - Reverse auctions: invite suppliers to compete for your business, potentially lowering costs. - Personalized pricing: adjust prices based on individual guest data and market demand. - Set your own price: allow guests to propose a price for your product or service (limited application). - Affiliate partners: collaborate with affiliates to reach a wider audience and increase sales
Distribution	Refers to the distribution channels used to reach potential guests by Williams & Kleynhans (2024)	- Remote hosting: provide seamless access to the hotel's offerings from any location through a user-friendly online platform. - Internet advertising: employ targeted online advertising campaigns to reach your ideal guest demographic.
Promotion	A critical element for attracting guests. Utilize various tools to raise awareness and generate interest (Elgarhy & Mohamed, 2023)	- Outbound email marketing: implement targeted email campaigns with personalized offers and promotions. - Viral marketing: encourage user-driven content sharing to organically spread brand awareness. - Recommendation engine: provide personalized recommendations based on individual guest preferences and past behavior. - Content personalisation: tailor website content, offers, and promotions to individual guest preferences
Customisa-tion	Enhances the guest experience by providing personalized offerings (Youssofi et al., 2024)	- Preference notifications: send automated notifications based on guest preferences to enhance their experience (e.g., informing them about upcoming events or special offers relevant to their interests). - Collaborative classification: partner with other businesses to categorize guest preferences and provide even more tailored experiences

Continuation of the Table 1

1	2	3
Privacy	A major concern in electronic marketing. Establish trust with guests by demonstrating a commitment to data privacy (Nasrolahi Vosta & Jalilvand, 2023)	- Privacy policy: create a comprehensive privacy policy that outlines data collection practices, usage, and guest rights. - FAQs and help desk: provide a platform for guests to address privacy concerns and seek clarification on data practices
Customer service	Essential for guest satisfaction. Utilize various tools to address inquiries and concerns effectively (Koc et al., 2023)	- Email response management: implement a system for efficiently managing email inquiries and providing timely responses. - Live chat support: offer real-time chat support for guests to connect with the support team directly. - Order tracking: allow guests to track the status of their bookings or purchases. - Customer review forums: encourage customer discussions about products and services to foster a sense of community and gather valuable feedback
Community	Fosters user engagement and builds brand loyalty (Kini et al., 2024)	- User reviews and wish lists: provide a platform for user reviews and wish lists to build trust and encourage potential guests to book. - Homepage design: design a user-friendly homepage that clearly showcases the hotel's offerings and creates a positive first impression
Website Usability	Encompasses ease of navigation, browsing, and searching	- Browsing and search functionality: ensure the website is easy to navigate and search, allowing guests to find the information they need quickly and efficiently. - Intuitive design and layout: design a website with a user-friendly interface and clear layout to enhance user experience and encourage exploration
Security	Paramount for building trust and protecting guest data (Chen & Jai, 2021)	- Security tools: implement robust security measures to safeguard guest data and financial information. Utilize encryption and secure payment gateways. - Electronic coupons: offer secure electronic coupons to incentivize bookings and provide added value to guests
Sales promotion	Key strategy for attracting guests and driving bookings (Han et al., 2024)	- Discounts and promotions: offer targeted discounts and promotions to incentivize guests to book directly through the hotel's website

Source: developed by the authors.

Materials and methods. We initially selected a random sample of 20 classified hotels in Algeria, considering the diversity of hotel categories and their geographical locations. This sample was chosen to ensure comprehensive representation of the hotel industry in Algeria and to obtain diverse and comprehensive data.

Then, we identified all the dimensions that could possibly affect hotel profitability, represented by the additional services offered such as transportation, spa

services, 24-hour room service, and others, in addition to other factors such as service quality and technology used.

Data for each hotel in the sample was collected over a period of two months, using a variety of sources such as financial reports, customer reviews, and internal performance reports. The data was cleaned and filtered to ensure its accuracy and validity. Using qualitative analysis, we analysed the data to understand the relationships between the identified dimensions and hotel profitability. Factor analysis techniques were applied to analyse the impact of each factor on profitability, where the profitability variable was defined as the dependent variable in the study.

After the analysis, we summarized the results in Table 2, which shows the main statements that express the dimensions affecting hotel profitability. The concluding statements were also included, which were adjusted by hotel industry experts to ensure the accuracy and clarity of the results and to guide the recommendations correctly.

Table 2

Hotel profitability indicators

Dimension	Method of Proof	Evidence	Weight	Statement
Additional services	1. Review the hotel website and the list of services offered. 2. Compare the list of services with the list of services offered by competing hotels. 3. Review guest reviews on hotel booking websites	List of services on the hotel website, comparison of services with competing hotels on booking platforms	High	Your hotel offers a package of additional services compared to competitors (laundry service, 24-hour room service, spa services, transportation services)
		Guest reviews of additional services on booking platforms	High	
		Hotel staff opinions on additional services	Medium	
Automation	1. Review the hotel website for any information related to the use of automation. 2. Search for any news or articles related to the hotel's use of technology and smart systems. 3. Contact the hotel directly to ask about their use of automation	Information about technology and smart systems on the hotel website, testimonials from hotel staff about the use of technology	High	Automation (technology and smart systems) is used in hotel services
		Analyse guest reviews about the use of technology in hotel services	Medium	
Conversion rate (CR)	1. Use web analytics tools like Google Analytics to measure the conversion rate. 2. Compare the conversion rate with the conversion rate of competing hotel websites. 3. Review guest reviews on hotel booking websites	Web analytics tools like Google Analytics, number of visitors who booked through the website	High	The conversion rate (CR) on your hotel's website is high (from visitor to guest)

Source: developed by the authors.

Using these processes and additional details, we were able to conduct a comprehensive and reliable study on the factors affecting hotel profitability in Algeria, which contributes to improving hotel management strategies and making sound administrative decisions based on e-marketing strategies. We then conducted this study on 226 classified hotels in Algeria to prove that profitability can be measured using this methodology.

Table 2 provides information about several statements that were presented to study different factors affecting hotel profitability. Each statement relates to a specific aspect that can affect hotel profitability, such as additional services offered, technology usage, and conversion rate on the hotel website. The dimension related to each statement is presented, as well as the method of proof that will be used to verify the validity of this dimension, such as reviewing the hotel website or reviewing guest reviews on hotel booking websites. The available evidence and the weight assigned to each dimension are also clarified.

Overall, the Table 2 provides a comprehensive overview of the different dimensions being analysed in the study of the impact on hotel profitability, and how data is collected and analysed to reach reliable conclusions.

- *Statement and dimension.* Each statement in the table represents a specific aspect that can affect hotel profitability. For example, additional services, automation, and conversion rate (CR) are different aspects that are studied to understand their impact on profitability.

- *Method of proof.* This column shows the methods that will be used to verify the presence or absence of the specific dimension. For example, in the case of additional services, a comparison of the list of services between the hotel and competitors is used, while in the case of automation, the hotel website is reviewed and direct communication is used to inquire about the use of technology.

- *Evidence.* This column shows what evidence is available to confirm the presence of the specific dimension. Evidence can include guest reviews on booking websites, information from the hotel website, or opinions of hotel staff.

- *Weight.* This column reflects the importance of each dimension in analysing its impact on hotel profitability according to experts. For example, if the weight is high, it means that the specific dimension is considered more important in the study and should be focused on particularly. In the table, dimensions with low weights were omitted.

Using these processes, it is possible to understand the different aspects that affect hotel profitability, and how to collect and analyse data to better understand these relationships. This can help in making sound administrative decisions to improve hotel performance and increase profitability. In our study, we adopted it as a dependent variable linked to e-marketing strategies.

Variables and measures of variables. This study uses a dependent variable of profitability, measured through the three dimensions identified in the Table 2. The independent variables are the 11 digital marketing strategies, which are: Distribution;

Pricing; Promotion; People; Security; Website; Community; Personalisation; Privacy; Customer Service.

By analysing the relationship between the independent and dependent variables, this study will identify the most effective digital marketing strategies for improving hotel profitability.

Population and sample. The study population consisted of 565 classified hotels in Algeria, according to the Ministry of Tourism. We distributed an electronic questionnaire to the entire sample, and the response rate was 226 hotels. This was done over a period of 3 months following the adjustment of the dimensions of the profitability variable. The sample was representative, with a 40 % response rate, and was distributed evenly.

Techniques of data analysis. This research mainly considers factors effecting to the profitability of the companies. The data were analysed by using Smart PLS software and mainly descriptive statistics, correlation analysis and regression analysis statistical techniques used for data analysis.

Research model. This model attempts to establish a relationship between the independent variables representing e-marketing strategies and the dependent variables representing profitability dimensions.

Independent variables (E-Marketing strategies):

Production (Pr). We evaluated the utilisation of resources and technology to optimize production capacity and enhance overall operational performance.

Distribution (D). We developed statements to measure the number of channels utilized (OTAs, website, social media) or the effectiveness of each channel in driving traffic.

Pricing (P). This can be represented by average room rate, discount strategies, package deals offered.

Promotion (Promo). We measured by advertising expenditure, social media engagement metrics, public relations efforts.

Sales promotion (SP). We measured by Incremental sales during promotion periods, redemption rates of promotional offers, customer acquisition cost during promotions, customer retention post-promotion.

Security (Sec). We quantified by the presence of security protocols, data breach frequency, guest perception of online security.

Website (Web). We measured by website traffic, user experience metrics (bounce rate, conversion rate), website functionality.

Community (Com). We represented by social media follower growth, guest reviews and ratings, guest loyalty program participation.

Personalisation (Pers). We measured by the level of customisation offered (targeted promotions, guest preferences), the effectiveness of personalisation efforts.

Privacy (Priv). We quantified by data privacy policies, compliance with regulations, guest trust regarding data handling.

Customer service (CS). We measured by guest satisfaction surveys regarding

service, response time to inquiries, complaint resolution rate.

Dependent variables: Profitability dimensions (Prof).

Additional services (AS). Represented by the number and type of additional services offered (spa, laundry, transportation) or revenue generated from these services.

Automation (Auto). Measured by the level of automation implemented in hotel operations (booking systems, self-service kiosks), the cost savings achieved through automation.

Conversion rate (CR). This refers to the percentage of website visitors who convert into paying guests.

Model structure. This can be represented by a multiple regression equation:

$$Profitability = \beta_0 + \beta Pr + \beta_1 D + \beta_2 P + \beta_3 Promo + \beta_4 SP + \beta_5 Sec + \\ + \beta_6 Web + \beta_7 Com + \beta_8 Pers + \beta_9 Priv + \beta_{10} CS + \varepsilon, \quad (1)$$

where profitability is a composite measure of the three profitability dimensions (AS, Auto, CR). This can be a weighted average based on their relative importance to overall profitability;

β_0 is the intercept, representing the base level of profitability when all independent variables are zero (unlikely scenario);

β to β_{10} are the regression coefficients, indicating the strength and direction of the relationship between each independent variable and profitability;

ε is the error term, accounting for the unexplained variance in profitability.

This model provides a framework for analysing the relationship between e-marketing strategies and hotel profitability. By understanding these relationships, hotels can optimize their marketing efforts to drive greater profitability.

External factors beyond e-marketing strategies may also influence profitability (e.g., economic conditions, competition).

Results and discussion.

1. Descriptive statistics analysis. Descriptive statistics are useful to make general conclusions about collect data. As a whole these provide information for the selected sector. By handling these statistics can be got basic idea about the behavior of hotel sector (Table 3).

According to the provided table, the mean value of PROF (Profitability) is 0.000 with a standard deviation of 1.000. This indicates that the average profitability value lies at 0.000, and the data points can deviate from this mean by approximately 1.000 in both positive and negative directions.

The maximum recorded value for PROF is 1.589, while the minimum value is -1.615. This suggests that profitability values range from -1.615 to 1.589 within the dataset.

Considering the average profitability value of 0.000, hotels with profitability values above this average are considered to be in a favourable position. However, it's important to note that some hotels may have negative profitability values, indicating potential financial losses.

Table3

Results of descriptive analysis (N = 226)

Indicators	Mean	Maximum	Minimum	Std. deviation
PROF	0.000	1.589	-1.615	1.000
Distribution	0.000	1.388	-1.682	1.000
Price	0.000	1.254	-2.109	1.000
Product	0.000	1.047	-2.220	1.000
Promotion	0.000	1.128	-2.149	1.000
Sales Promotion	0.000	1.589	-1.616	1.000
Security	0.000	1.469	-1.323	1.000
Website	0.000	1.502	-1.235	1.000
Community	0.000	1.141	-1.904	1.000
Customisation	0.000	1.156	-1.790	1.000
Privacy	0.000	0.838	-1.925	1.000
Customer service	0.000	0.969	-2.411	1.000

Source: PLS–SEM (Smart PLS 4) Output.

2. Comprehensive analysis of reliability and validity coefficients for various hotels. The analysis of reliability and validity coefficients plays a critical role in ensuring the credibility and integrity of research studies, guiding decision-making processes, and offering insights for potential improvements in measurement instruments. Table 4 provides information on various constructs and their corresponding reliability and validity coefficients.

Table 4

Results of correlation analysis

Indicators	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Profitability	0.793	0.795	0.879	0.708
Distribution	0.813	0.829	0.889	0.728
Price	0.811	0.813	0.876	0.638
Product	0.921	0.931	0.942	0.765
Promotion	0.817	0.818	0.891	0.732
Sales promotion	0.869	0.875	0.905	0.657
Security	0.934	0.937	0.950	0.792
Website	0.947	0.947	0.958	0.793
Community	0.877	0.878	0.925	0.803
Customisation	0.895	0.900	0.934	0.826
Privacy	0.944	0.944	0.960	0.857
Customer service	0.882	0.882	0.919	0.739

Source: PLS–SEM (Smart PLS 4) Output.

Profitability. This construct shows high levels of internal consistency with a Cronbach's Alpha of 0.793 and strong composite reliability scores. The average variance extracted (AVE) is 0.708, indicating that the items within this construct explain a substantial amount of variance.

Distribution. The reliability coefficients for this construct are relatively high, with Cronbach's Alpha at 0.813 and composite reliability scores above 0.8. The AVE value of 0.728 suggests that the items in this construct capture a significant portion of

the variance.

Product. This construct demonstrates excellent reliability with a Cronbach's Alpha of 0.921 and high composite reliability and AVE values. The construct appears to be well-defined and consistent.

Promotion. With a Cronbach's Alpha of 0.817 and strong composite reliability scores, this construct shows good internal consistency. The AVE of 0.732 indicates that the items in this construct contribute significantly to explaining variance.

Sales promotion. The reliability coefficients for this construct are high, with Cronbach's Alpha at 0.869 and composite reliability scores above 0.8. The AVE value of 0.657 suggests that there may be room for improvement in capturing variance.

Security. This construct demonstrates exceptional reliability and validity, with high scores across all metrics. The high AVE value of 0.792 indicates that the items effectively represent the construct.

Community. With strong reliability coefficients and a high AVE of 0.803, this construct shows good internal consistency and variance explained by the items.

Customisation. This construct exhibits high reliability and validity coefficients, with a Cronbach's Alpha of 0.895 and strong composite reliability and AVE values. The construct appears to be well-defined and reliable.

Customer service. The reliability coefficients for this construct are high, with Cronbach's Alpha at 0.882 and composite reliability scores above 0.8. The AVE value of 0.739 suggests that the items in this construct capture a significant portion of the variance.

Overall, the analysis indicates that most constructs in the Table 4 show good to excellent reliability and validity properties, with some constructs demonstrating stronger measurement properties than others.

3. Multiple regression analysis. In this study, multiple linear regression analysis used to measure the impact of independent variables (Distribution; Price; Product; Promotion; Sales promotion; Security; Website; Community; Customisation; Privacy; Customer service) on the dependent variable (PROF).

According to Table 5, all p-values for Cramér-von Mises are 0.000, indicating that the probability of the variables following a normal distribution is extremely low. This suggests that the data deviates from the normal distribution.

Kurtosis values. Most values are negative, indicating flatter distributions than the normal distribution. Some values are relatively high, such as 2.993 for "privacy". This suggests that there are more extreme values in some variables.

Skewness values. Most values are negative, indicating that the data is skewed to the left. Some values are relatively high, such as -1.494 for "Site Web". This suggests that the data is not symmetrical in some variables.

R-Square and Adjusted R-Square values. These values indicate that 62.1 % of the variation in the dependent variable can be explained by the independent variables. After adjusting for the number of variables, 60.1 % of the variation can be explained.

These are typically acceptable values, but they should be evaluated in the context of the study.

Table5

Results of regression analysis

Model	Variable	P-value for Cramér-von Mises	Excess kurtosis	t-statistic	Skewness
1	Distribution	0.000	-1.059	0.400	-0.278
	Price	0.000	-0.584	0.504	-0.588
	Product	0.000	-0.207	1.152	-0.881
	Promotion	0.000	-0.576	0.786	-0.635
	Sales Promotion	0.000	-1.088	0.363	-0.162
	Security	0.000	-1.399	0.948	-0.076
	Website	0.000	-1.494	1.404	-0.042
	Community	0.000	-0.654	0.870	-0.629
	Customisation	0.000	-0.826	1.083	-0.625
	Privacy	0.000	-0.424	2.993	-1.007
	Customer service	0.000	0.315	1.530	-1.093
R-Square		0.621			
Adjusted R-Square		0.601			
BIC (Bayesian information criterion)		-155.095			
Std. error		1.000			
Prob.		0.000			

Note. Significant at the 5 % level.

Source: PLS–SEM (Smart PLS 4) Output.

Bayesian information criterion. The value of this criterion (-155.095) is relatively low.

Std. error and Prob. values. The Prob. value is 0.000, indicating that the results are statistically significant at the 5 % level.

The statistical analysis highlights the importance of understanding and analysing data correctly to make sound strategic decisions. The probability and variance values indicate the statistical significance of the results and guide decisions regarding the relationship between e-marketing strategies and hotel profitability.

The results show a positive and statistically significant effect of e-marketing strategies on hotel profitability, suggesting that these strategies can be an effective tool for enhancing the financial performance of hotels. This can include the use of social media, online advertising, website optimisation, and other digital strategies.

This study focuses on three key dimensions of hotel profitability:

Additional services. Hotels that offer a wider range of additional services, like spas, laundry, and transportation, tend to be more profitable. This suggests that guests value convenience and a comprehensive hospitality experience.

Automation. Implementing automation technologies (booking systems, self-service kiosks) can streamline operations, reduce costs, and potentially improve profitability.

Conversion rate. Optimising websites for a smooth user experience and clear calls to action can significantly increase the conversion rate, turning website visitors into paying guests.

While the study doesn't explicitly rank the effectiveness of each strategy, it provides a comprehensive list of eleven e-marketing areas to consider. The following are the key areas that hotels should focus on:

Distribution. Utilising a variety of distribution channels, including Online Travel Agencies (OTAs), the hotel's own website, and social media platforms, can broaden the reach and attract a wider clientele.

Website design and functionality. A user-friendly website with clear navigation, attractive visuals, and mobile responsiveness is crucial for a positive first impression and ultimately conversions.

Community management. Actively engaging with guests on social media platforms fosters loyalty and encourages positive online reviews, which can significantly influence booking decisions.

Personalisation. Tailoring promotions and offerings to individual guest preferences can create a more relevant and appealing experience, potentially leading to increased bookings.

Customer service. Prioritising excellent customer service throughout the guest journey, from pre-booking to post-stay interactions, fosters positive word-of-mouth and return visits.

Conclusions. This study offers valuable insights into the connection between e-marketing strategies and profitability for classified hotels in Algeria. The study highlights a statistically significant positive effect of e-marketing strategies on hotel profitability. This reinforces the notion that digital marketing plays a crucial role in attracting guests and boosting revenue for Algerian hotels. Hoteliers should prioritise implementing effective online marketing campaigns across various channels like social media, online advertising, and website optimisation.

The study focuses on three key dimensions of hotel profitability: (i) additional services; (ii) automation; (iii) conversion rate. The following are the key areas that hotels should focus on: (i) distribution; (ii) website design and functionality; (iii) community management; (iv) personalisation; (v) customer service.

The study acknowledges some limitations. The data might not be perfectly normally distributed, and external factors impacting profitability (e.g., economic conditions) are not explored. Future research could address these limitations by using larger sample sizes and incorporating external factors into the analysis. Additionally, investigating the effectiveness of specific e-marketing strategies within different hotel categories or locations could provide more granular insights for hoteliers.

This Algerian hotel e-marketing research offers compelling evidence that digital marketing plays a significant role in boosting hotel profitability. By focusing on the identified profitability dimensions and implementing effective strategies across various e-marketing channels, Algerian hotels can enhance their online presence,

attract more guests, and ultimately achieve greater financial success.

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