

International Meetings and Journals Research Association ISSN 2792-1288 / E-ISSN 2798-0227 © All Rights Reserved, 2025 Science, Education and Innovations in the Context of Modern Problems Editor-in-Chief: Chair of the Editorial Board - Dr. Hala Harzelli Monthly Regular Open Access October 2025 Issue 32, Vol. 8 imcra-az.org	Science, Education and Innovations in the Context of Modern Problems Issue 12, Vol. 8, 2025 Title of research article  Examining the impact of social media marketing on customer relationship management: A structural equation modeling approach using partial least squares in classified hotel establishments in Algeria
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Issue web link	https://imcra-az.org/archive/387-science-education-and-innovations-in-the-context-of-modern-problems-issue-12-vol-8-2025.html
Keywords	Customer Relationship Management, Social Networks, Social Network Marketing, Social Customer Relationship Management, Classified Hotel Establishments in Algeria.
Abstract This study aimed to determine the impact of social media marketing on customer relationship management in hotel establishments. To achieve this goal, a questionnaire was designed and distributed to 321 customers who follow the social media pages of classified hotel establishments in Algeria, using the facilitated sampling method. The applied aspect of the study relied on SPSS.26 for descriptive analysis and SmartPLS4 for structural equation modeling using partial least squares. The most important results of this study were that all dimensions of social media marketing influence customer relationship management in the hotel establishments under study, with the exception of the interaction and personalization dimensions. It also became clear that word-of-mouth was the most influential dimension on customer relationship management across all its dimensions. Finally, the study presented a set of proposals regarding the adoption of social media marketing by classified hotel establishments in Algeria as a mechanism for customer relationship management.	
Citation. Harzelli, H., & Djihad, K. (2025). Examining the impact of social media marketing on customer relationship management: A structural equation modeling approach using partial least squares in classified hotel establishments in Algeria. <i>Science, Education and Innovations in the Context of Modern Problems</i>, 8(12), 453-472. https://doi.org/10.56334/sei/8.12.38	
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Received: 01.05.2025	Accepted: 08.09.2025 Published: 06.10.2025 (available online)

Introduction:

Modern marketing trends and developments have reflected the rapid and unprecedented growth in information and communication technology (ICT) in the current decade, particularly in relation to web technologies. These technologies have significantly contributed to breaking down barriers and bridging the gap between societies and countries. Furthermore, they have created increasingly dynamic and adaptable virtual communities called social networks. Social networks are among the most widespread web technologies on the internet, given their

collaborative nature and their high potential for enriching communication between individuals. This has made them important tools for organizations to conduct online marketing activities and diversify their mechanisms to reach target markets. Hence, the concept of marketing via social networks has crystallized, and its role in the growth and survival of organizations and maximizing their profitability by exploiting the potential opportunities to meet the needs of their consumers of their products on these networks, satisfying them, and influencing their responses to purchases and beyond. Perhaps the presence of individuals in these social networks, especially due to the presence of some of their advantages, is a product of the second generation of the internet, particularly the interactive feature, which is considered one of the most effective means through which a marketer can positively influence customers. And better than traditional methods due to individual interaction and continuous communication.

With the plethora of options available to customers, organizations must keep pace with the latest developments and utilize modern technology by managing their customer relationships via social media. This will enable them to track and manage their marketing operations, which require a rapid, personalized response to each customer, to understand and comprehend their needs, deliver value, achieve customer satisfaction, and retain and maintain customer loyalty.

Hotel establishments were not isolated from this, but rather sought to benefit from social media networks and their applications as an effective means of marketing and promoting their services. They realized that the equation for success within their highly competitive sector is no longer based solely on distinguished service, appropriate pricing, or innovative promotion, but rather is primarily based on the extent of a successful partnership between the establishment and its customers. This led them to exploit social media networks to attract customers and build an interactive relationship with them through each party's trust in the other and their ability to provide value to the relationship. They are also committed to maintaining this relationship, anticipating customer needs and working to meet them according to their desires and based on their conditions, and striving to provide more value in their services and making them available to them at the appropriate time and place, and informing them of them clearly and continuously through constant and ongoing communication between them and addressing any problems before they occur. In other words, adopting a new generation of customer relationship management based on social media networks as an effective marketing tool.

Theoretical Framework and Hypothesis Development:

Driven by the demands of enhanced marketing efficiency, increased market diversity, and the application of technology, the strategic focus of marketing has shifted from product and segment focus to customer and relationship focus. (Sheth, Sisodia, & Sharma, 2000) The new relationship-based marketing paradigm requires marketers and academics to think beyond the traditional marketing mix elements and consider including interactive elements in their strategy. (Heggde & Shainesh, 2018). Social media marketing (SMM) has been widely used to refer to enhancing stakeholder value by integrating social media into marketing communications. (Phuoc & al, 2015; Felix, Rauschnabel, & Hinsch, 2016; Yadav & Rahman, 2017) It has become an indispensable part of businesses' operations, helping them improve and build relationships with their customers. Additionally, social media provides organizations with the opportunity to conduct business and build relationships with potential customers, service providers, and strategic partners. (Niekerk, 2014, p. 40).

(Sano, 2015) Social media marketing is a type of digital marketing that works to attract visitors to an organization's website or customer service. This type of marketing focuses on creating content that attracts the attention of followers and encourages them to participate on social media networks in order to reach customers automatically without the constant need to update or publish content manually. (Sano, 2015, p. 142) (Bond, 2010) It is "the exploitation of social media networks by organizations for marketing purposes by identifying and analyzing conversations, participation, and initiating social interactions within communities and using them". (Shibani, 2022, p. 221) He defined it as an organization's use of various social media networks (Facebook, Twitter, Google, etc.) to engage in marketing activities such as entertainment, innovation, interaction, recommendation, and product promotion with the aim of enhancing customer commitment and their adherence to the continuity of the relationship with the organization.

According to the large number of previous studies that have addressed the concepts of social media marketing and its impact, few of them have focused on measuring and defining its dimensions. Despite its importance in the

field of marketing and brand management since the middle of the last century, researchers and marketing managers continue to pay great attention to it in our current era, considering it an important focus and a major driver of consumer behavior. As mentioned previously, the few previous studies that focused on measuring and defining social media marketing mostly focused on one or two dimensions. However, some studies have addressed multiple and diverse dimensions of social media marketing in their studies, depending on the sectors in which these studies were applied, the cultural and social environment, and the timing of these studies). Kim و Ko '2012 ' Nyoman و al '2022 ' Razzaq, 2022; Ben Talbi, 2021; Yadav و Rahman '2017 ' Alsoud و al(2023 ' , Accordingly, the most important dimensions common to these studies, which are consistent with and in line with our current study, will be addressed: electronic spoken word, interaction, modernity, credibility, and customization.

➤ Customer Relationship Management:

➤ Marketing thought shifted toward establishing and strengthening customer relationships in the 1970s. This resulted in the emergence of the concept of Customer Relationship Management (CRM) in the mid-1970s in the United States. The concept of CRM has undergone continuous development over the years, and researchers have offered multiple definitions of it, which can be classified into three orientations:

➤ The first orientation, "CRM as a technology": Proponents of this orientation view customer relationship management as the use of technological tools and software to collect and store customer data, and facilitate access to it when needed by organizational members. In this context, it was defined by Meta Groupe in 2000 as "the automation processes carried out by an organization across various points of contact with the customer (marketing, sales, after-sales service) by adopting multiple, interconnected communication channels". (Peelen & al, 2009, p. 3) 'It is also known as a technology-based system that integrates sales, marketing, and services with the aim of building a partnership between the organization and its customers .(Marie & Godwin, 2010, p. 2).

➤ The second trend is "CRM as a strategy": Some representatives of this trend consider it a management philosophy, while others consider it a strategy or a set of activities and processes that aim to establish long-term relationships with customers without focusing on the technological methods used, so that it is viewed as "the process that allows for identifying, attracting and gaining better customer loyalty, in order to obtain more profits and returns". (René & Grilles, 2005, p. 33) 'In the same context, a definition was provided stating that "customer relationship management is an organizational process aimed at maximizing an organization's sales volume and profitability by building and consolidating relationships with customers selected based on the potential profits generated through them." It was also defined as a purposeful strategy for building, managing, and strengthening customer relationships and working to sustain them by focusing on understanding and identifying the customer's various needs and requirements and working to meet them". (Antonios, 2016, p. 1).

➤ The third trend: The proponents of this trend combined the ideas of the representatives of the two previous trends, and they preferred that customer relationship management relies on technology through the use of information technology systems to carry out various marketing activities. They considered CRM a strategy or approach aimed at building individual, continuous, and profitable relationships between the organization and the customer, through the development of an information technology infrastructure, the goal of which is to remove barriers and increase interaction between the two parties, which in turn allows for monitoring the progress of operations by qualified individuals in real time.(Peelen & al, 2009, p. 3) 'It is thus defined as a marketing approach that integrates individuals, processes and technology in order to strengthen the organization's relationships with customers .(Barton , 2008, p. 3).

In fact, the concept of customer relationship management first emerged as an expression of software that allows for managing relationships and collecting and analyzing customer data. However, over time, the concept of CRM has evolved from a technology tool to a customer-oriented strategy that necessarily uses software and technological tools ".(relationship, 2023, p. 3)Therefore, it can be said that customer relationship management is a strategy implemented by an organization to identify its current and potential customers and manage their lifecycles. The goal is to build interactive relationships with them, retain them, and gain their loyalty through continuous communication and providing them with the best services, relying on available technological tools and software solutions.

The dimensions of customer relationship management used in previous studies have varied, with some studies using different dimensions than those used in other studies .(Bouabdallah, 2021)) Ramadonna 'Nasfi و 'Aziz '.

‘2019Rosman و Stuhura ‘2013 ‘Sabrina ‘2019 ‘Customer Relationship Management and Achieving Competitive Advantage for Service Organizations - A Case Study of Mobilis - PhD Thesis in Marketing Management, 2020) Based on their reliance in their study on this variable, which is repeated in most of the aforementioned studies, namely customer value, customer satisfaction and customer loyalty, especially since it is consistent with the field of study (the hotel sector).

Using Social Media Marketing in Customer Relationship Management in Hotel Establishments

Many companies are increasingly implementing customer relationship management (CRM) projects, which first became popular in the 1990s, as a holistic strategy focused on developing and maintaining appropriate customer relationships with the help of information technology (IT) or customer relationship management systems (Payne & Frow, 2005, p. 170.)

Today, digital technologies have changed the marketing communications paradigm, with marketers now tasked with integrating social media applications (Trainor & al, 2014, p. 1203), offering organizations new ways to acquire skills to interact and communicate with their customers (Florin, Trif, & Tuleu, 2019, p. 104.)

Many organizations are using social media to improve customer support and guide marketing programs (Turban & al, 2018, p. 310). Social media provides services such as communication, sharing, entertainment, searching for brand information, and finding customer reviews about various products. They have transformed the way organizations relate to their markets (Garrido-Moreno & al, 2018, p. 96.)

Before adopting SCRM as a marketing strategy in the hotel industry, it is important to understand the customer relationship management (CRM) process. Anton (1996) stated that the CRM process is carried out according to four stages: customer selection, customer acquisition, customer retention, and customer relationship sustainability. Even in the digital age, most organizations still focus on customer acquisition and ignore the other stages. Consequently, service-based organizations, especially hotels, primarily use mass advertising and sales promotions to reach customers (Dewnarain & al, 2019, p. 9). The shift from customer acquisition to customer retention requires a new mindset, new communication tools, and a different tone of conversation to create better quality relationships based on trust and reciprocity (Fletcher & Crawford, 2014, p. 59). Accordingly, the term “Social Customer Relationship Management” or “CRM 2.0” has emerged to describe this new way of developing and maintaining customer relationships (Pour & Hosseinzadeh, 2020, p. 50). Some researchers view social customer relationship management as a business philosophy and strategy, implemented through technological platforms, business rules, processes, and social networking features. It is expected to engage customers to deliver mutual value (Yahav & al, 2020, p. 400). According to Turban et al (2018), SCRM is defined as “customer relationship management supported by social networks, adopted by organizations to engage customers in conversations, participation, and interactions to foster trust and build long-term relationships” (Turban & al, 2018, p. 35). It is also defined as “customer relationship management programs that integrate with social networks, allowing organizations to leverage information about current and potential customers available on these networks to understand and interact with them, obtain target market information, and provide better services and products, all to gain customer satisfaction and loyalty” (Lazghad & Barsali, 2021, p. 28). Hotel establishments, like other service establishments, aim, in their application of traditional customer relationship management programs or using social networking (SCRM), to know all their customers personally and accurately, beyond the use of the marketing process, so that they can adapt their services according to the trends, desires, and advice of their customers .(Mir & Sharif, 2020, p. 48)The importance of implementing SCRM programs for hotel establishments is highlighted in the following:

□ Increased customer retention: Customer relationship management via social media provides a broader platform for listening to customers' concerns, engaging positively with them, and getting to know them better through their behavior, lifestyles, and the communities to which they belong, etc. This makes it easier for the establishment to understand them, meet their needs, and retain them.

□ Lead generation: The establishment's relevant social media posts that address the needs of followers, offer solutions to their problems, and help them maximize the benefit of the establishment's services and products are among the most effective ways to generate leads.

□ Converting leads into customers: Social media helps increase conversion rates by establishing the establishment's business in a way that automatically converts leads into customers. It is important to ensure that the customer conversion process is as automated and hassle-free as possible, whether on or off social media.

□ Identifying innovative ideas: Social dialogue often contains a wealth of information to support innovation. Customer descriptions of a problem can lead to a new product or service, and product complaints can lead to improvements in support and design. Customer feedback often contains suggestions for improving the customer experience.

Customer relationship management via social media also allows organizations to interact more effectively with their customers, as it enables the SCRM team to conduct extensive prospecting and obtain diverse ideas and perspectives to retain their customers (Paul & Nilsson, 2011, p. 192). In addition to developing actionable insights that can help reduce risk and improve all aspects of the customer relationship, SCRM also provides organizations with the opportunity to harness the power of customers to market goods and services, enhance customer satisfaction, and contribute to the organization's highly leveraged direct and indirect revenues (Ohashile, 2017, p. 173).

Studies have indicated that as a result of the rapid development and tremendous spread of social networking sites, institutions, including hotel establishments, have begun to compete in using various social networking sites in order to increase the chances of reaching the largest possible number of customers, with the aim of satisfying their needs and gaining their satisfaction and then their loyalty, which requires the necessity for hotel establishments to benefit from marketing applications via social networking sites in managing their relationships with their customers (Tyron, 2022; Liu, 2022; Chin & Ming, 2022).

From the above, the outlines of the research problem become clear, which can be crystallized into the following main question: Does social media marketing affect customer relationship management in the hotel establishments under study?

A number of sub-questions branch out from the main problem:

.1 Does interaction via social media affect the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) for the hotel establishments under study?

.2 Does modernity via social media affect the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) for the hotel establishments under study?

.3 Does personalization via social media affect the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) for the hotel establishments under study?

.4 Does credibility via social media affect the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) for the hotel establishments under study?

.5 Does word of mouth affect customer relationship management dimensions (customer value creation, customer satisfaction, customer loyalty) towards the hotel establishments under study?

Research Methodology:

Sample and Study Population:

This study targeted regular customers of classified hotels in Algeria who follow their pages on social media. Before collecting data, five academics reviewed the questionnaire, and it was modified based on their feedback. The questionnaire was distributed using Google Forms on social media (particularly Facebook and Instagram) and via email between April and August 2025. The researcher adopted a simple sampling method, selecting the targeted participants from pages and groups focused on hospitality content, and collecting their comments about their various experiences with classified hotels. Participants contacted via email were first asked to answer the

question, "Do they deal with a specific hotel in Algeria?" Those who answered yes were required to continue answering the questions. 356 questionnaires were collected, of which 321 were valid for analysis using the SmartPls program. Study Tool:

An electronic questionnaire was developed and modified based on available literature in the hospitality field. The questionnaire was divided into two parts. The first included questions related to the personal data of the respondents, as well as questions related to the hotels with which the respondents interacted in this study. The second part included the study variables, which included the dimensions of the independent variable, social media marketing, derived from research (Nyoman & al, 2021; Haikal & Aekram, 2022). Dimensions of the dependent variable of customer relationship management (Tyron, 'The Mediating Effects of Perceived Value Between the Relationship of Social Media Marketing and Purchase Intention', 2022; Razzaq, 2022). A five-dimensional Likert scale was used to measure the degree of agreement from 1 to 5. **Data Analysis and Results:**

To test the hypotheses, partial least squares structural equation modeling (PLS-SEM) was used using Smartpls software (Ringle, Wende, & Becker, 2015). This method was used because the data were not normally distributed, and the main objective of the study was to predict endogenous variables (Hair J. F., Hult, Ringle, & Sarstedt, 2017). The number of articles published using partial least squares structural equation modeling has increased significantly in recent years in many social science disciplines, including marketing and hospitality management (Hair J. F., Hult, Ringle, & Sarstedt, 2019, p. 3). Examining a PLS model requires two steps: evaluating the measurement model, followed by the structural model (Hair J. F., Hult, Ringle, & Sarstedt, 2017). Prior to conducting the PLS-SEM analysis, a test for common method variance bias was conducted using Herman's one-factor test (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003), and all items were entered into a principal components analysis. The results showed that no single factor was responsible for the majority of the variance, and therefore, this study does not face any problem related to common method variance bias.

Sample Characteristics:

A sample of 321 regular participants from luxury hotels in Algeria was analyzed. Males constituted the largest percentage (72.9%), while females constituted 27.1%. Participants' ages ranged between 26 and 35 years (44%), followed by those between 40 and 50 years (31.2%), those between 30 and 40 years (29.3%), those under 30 years (28.7%), and those over 50 years (11%). Regarding educational level, 93.5% of participants had a university degree, 3.4% had a postgraduate degree, and the lowest percentage (3.1%) had a secondary school diploma or less. Regarding their income, 29.3% of them earn between 60,001 and 90,000 Algerian dinars, 28.7% of them earn between 30,000 and 60,000 Algerian dinars, 27.4% of them earn more than 90,000 Algerian dinars, and 14.6% of them earn less than 30,000 Algerian dinars. As for hotel characteristics, the percentage of four-star hotels reached 40%, and the percentage of five-star hotels reached 14%. Urban hotels accounted for 32%, and tourist resorts for 9%. Local hotels accounted for 76%, local chains for 12%, and international chains for 12%. **Measurement Model:**

The measurement model was examined based on internal consistency (Cronbach's alpha and composite reliability), convergent validity (index reliability and average variance extracted), and discriminant validity (Hair J. F., Hult, Ringle, & Sarstedt, 2017, p. 121).

Reliability and Convergent Validity Criteria:

Convergent validity refers to the assumption that a set of items represents the same factor if the correlation ratio is high, i.e., the degree of saturation of the items on their factor. Evidence of convergent validity is as follows (Hair J. F., Hult, Ringle, & Sarstedt, 2017):

- The loading ratio is greater than 0.5, with the optimal value being between 0.7 and 0.9.
- The average variance extracted (AVE) value is greater than 0.5.
- The composite reliability (CR) value is 0.7 or higher.

Table 1: Convergent Validity

convergent validity	Cronbach's alpha coefficient	CR	AVE	Loadings	Items	CONSTRUCT
investigator	0,778	0,853	0,594	0,739	X12	Interaction
				0,733	X13	
				0,751	X14	
				0,852	X15	
investigator	0,822	0,894	0,739	0,873	X22	Modernity
				0,906	X23	
				0,796	X24	
investigator	0,831	0,888	0,66	0,775	X31	Customization
				0,794	X32	
				0,860	X33	
				0,829	X34	
investigator	0,834	0,889	0,668	0,756	X41	credibility
				0,722	X42	
				0,891	X43	
				0,887	X44	
investigator	0,805	0,873	0,633	0,715	X51	electronic spoken word
				0,835	X52	
				0,847	X53	
				0,777	X54	
investigator	0,770	0,868	0,686	0,815	Y12	Creating value for the customer
				0,887	Y15	
				0,780	Y16	
investigator	0,837	0,902	0,755	0,803	Y21	satisfaction
				0,898	Y22	
				0,901	Y23	

investigator	0,889	0,923	0,751	0,827	Y31	Loyalty
				0,867	Y32	
				0,877	Y33	
				0,892	Y34	

Source: Based on SmartPLS4 outputs

The results of the table above were extracted using the PLS Algorithm feature in the 4SmartPls program, after deleting statements with saturations less than 0.7, as their removal increases the average variance extracted (AVE) and the composite reliability (CR). Since the conditions described above were met, it can be said that the convergent validity condition is met in all the model's components. Therefore, the standard model of the study is characterized by convergent validity.

Discriminant Validity:

Discriminant validity is the extent to which a construct is truly distinct from other constructs according to applied criteria. Therefore, demonstrating discriminant validity means that a construct is unique in capturing phenomena not represented by other constructs in the model. To evaluate this criterion, the following must be calculated:

- Cross loading
- Fornell-Larcker criterion
- Heterogeneous correlation ratio

Table No. (2): Discriminant Validity.

Loyalt y	credibili ty	electronic spoken word	Creating value for the customer	satisfact ion	Mode rnity	Interact ion	Customi zation	
0,102	0,219	0,236	0,378	0,313	0,429	0,739	0,130	X12
0,232	0,323	0,238	0,195	0,133	0,242	0,733	0,278	X13
0,238	0,326	0,370	0,249	0,194	0,350	0,751	0,380	X14
0,280	0,344	0,409	0,414	0,365	0,513	0,852	0,362	X15
0,370	0,468	0,506	0,469	0,377	0,873	0,465	0,479	X22
0,331	0,442	0,501	0,509	0,380	0,906	0,519	0,472	X23
0,330	0,454	0,498	0,379	0,373	0,796	0,356	0,542	X24
0,368	0,413	0,307	0,262	0,289	0,568	0,272	0,775	X31

0,355	0,456	0,320	0,261	0,190	0,459	0,345	0,794	X32
0,376	0,654	0,460	0,251	0,245	0,468	0,330	0,860	X33
0,369	0,570	0,344	0,242	0,218	0,372	0,265	0,829	X34
0,488	0,756	0,451	0,310	0,287	0,454	0,306	0,802	X41
0,348	0,722	0,560	0,360	0,287	0,365	0,339	0,342	X42
0,589	0,891	0,629	0,559	0,531	0,472	0,310	0,445	X43
0,553	0,887	0,624	0,494	0,461	0,438	0,338	0,558	X44
0,432	0,617	0,715	0,497	0,488	0,485	0,312	0,333	X51
0,519	0,562	0,835	0,542	0,506	0,422	0,282	0,366	X52
0,428	0,539	0,847	0,468	0,430	0,467	0,378	0,388	X53
0,369	0,481	0,777	0,440	0,377	0,487	0,365	0,303	X54
0,595	0,547	0,548	0,815	0,630	0,453	0,347	0,310	Y12
0,576	0,438	0,498	0,887	0,703	0,427	0,357	0,217	Y15
0,597	0,350	0,483	0,780	0,716	0,432	0,350	0,241	Y16
0,600	0,355	0,459	0,739	0,803	0,322	0,252	0,169	Y21
0,672	0,456	0,492	0,657	0,898	0,295	0,309	0,293	Y22
0,716	0,480	0,536	0,747	0,901	0,503	0,346	0,287	Y23
0,827	0,598	0,402	0,507	0,555	0,286	0,243	0,417	Y31
0,867	0,538	0,592	0,715	0,696	0,424	0,203	0,332	Y32
0,877	0,455	0,532	0,645	0,760	0,367	0,281	0,370	Y33
0,892	0,540	0,390	0,589	0,644	0,299	0,233	0,450	Y34

Source: Prepared by the researcher based on SmartPLS4 outputs.

Regarding cross-saturations, the external saturation of a statement in its related building should be greater than its cross-saturations with other buildings. Accordingly, the table above shows that each statement has the highest value in its underlying building compared to the other variables. Thus, the first criterion for calculating discriminant validity has been met.

After meeting the first criterion for calculating discriminant validity, the second criterion, the Fornell-Larcker criterion, must be verified. This criterion is listed in the following table:

Table (3): Standard Model Results: Fornell-Larcker criterion

Loyalty	credibility	electronic spoken word	Creating value for the customer	satisfaction	Modernity	Interaction	Customization	
							0,815	Customization
						0,770	0,371	Interaction
					0,860	0,524	0,576	Modernity
				0,869	0,438	0,351	0,291	satisfaction
			0,828	0,822	0,529	0,424	0,312	Creating value for the customer
		0,795	0,617	0,573	0,583	0,416	0,440	electronic spoken word
	0,817	0,696	0,544	0,499	0,528	0,389	0,642	credibility
0,866	0,617	0,555	0,711	0,766	0,399	0,276	0,452	Loyalty

Source: Prepared by the researcher based on SmartPLS4 outputs.

The Fornell-Larcker criterion compares the square root of the AVE values with other correlations of the latent variable. The square root of the AVE value for each building should be greater than its highest correlation with any other building. Based on the results of the table above, it is clear that the AVE value for each dimension is greater than its highest correlation with any other dimension. For example, the AVE value for personalization is 0.81, which is greater than the AVE values for the other dimensions, which are as follows: Interaction (0.37), Modernity (0.57), Satisfaction (0.29), Customer Value Creation (0.31), Word of Mouth (0.44), Credibility (0.64), and Loyalty (0.45).

In addition, Hair J. F., Hult, Ringle, & Sarstedt (2019) included a new criterion for ensuring discriminant validity, called the Heterotrait-Monotrait Ratio (HTMT). This criterion should not exceed 0.9 to avoid any problems with discriminant validity. This criterion is listed in the following table:

Table (4): Standard Model Results: Heterotrait-Monotrait Ratio (HTMT)

Loyalty	credibility	electronic spoken word	Creating value for the customer	satisfaction	Modernity	Interaction	Customization	
								Customization
							0,463	Interaction
						0,615	0,698	Modernity
					0,519	0,398	0,342	satisfaction
				0,895	0,661	0,515	0,386	Creating value

								for the customer
			0,776	0,688	0,722	0,516	0,534	electronic spoken word
		0,841	0,649	0,569	0,641	0,497	0,789	credibility
	0,700	0,646	0,857	0,886	0,465	0,332	0,526	Loyalty

Source: Prepared by the researchers based on SmartPLS4 outputs.

Table (4) shows that all HTMT values do not exceed 0.9, ranging between 0.463 and 0.895.

Therefore, it can be said that discriminant validity is achieved in the study model by verifying the cross-validity, Fornell-Larcker criterion, and HTMT ratio.

Finally, after verifying the internal consistency reliability criteria, convergent validity, and discriminant validity, it can be said that the measurement model is good and can be used to measure the latent variables in the study model.

Structural Model Evaluation:

Path Coefficients:

□ Model Hypothesis Testing:

The magnitude and significance of the path coefficients between the dimensions of social media marketing (interaction, novelty, personalization, credibility, and word-of-mouth) and the dimensions of customer relationship management (customer value creation, satisfaction, and loyalty) were calculated separately using bootstrapping. We relied on the results of the path estimates, T-values, and the probability P-value to analyze the results. The relationship between the two variables was considered significant if the T-value was greater than 1.96 and the P-value was less than 0.05. The results were as follows:

Table (5): Significance of the study model's path coefficients .

	P values	T statistics (O/STDEV)	Standard deviation (STDEV)	Original sample (O)		hypothesis
Acceptable	0,009	2,630	0,050	0,131	Interaction -> Creating value for the customer	H1
Rejected	0,064	1,851	0,049	0,091	Interaction -> Satisfaction	H2
Rejected	0,753	0,315	0,048	-0,015	Interaction -> Loyalty	H3
Acceptable	0,000	3,985	0,061	0,241	Modernity - >Creating Value for Customer	H4

Acceptable	0,033	2,127	0,064	0,135	Modernity -> Satisfaction	H5
Rejected	0,994	0,007	0,070	0,001	Modernity -> Loyalty	H6
Acceptable	0,001	3,310	0,055	-0,183	Personalization -> Creating Value for Customer	H7
Rejected	0,056	1,911	0,062	-0,119	Customization -> Satisfaction	H8
Rejected	0,089	1,702	0,059	0,100	Personalization -> Loyalty	H9
Acceptable	0,000	3,834	0,067	0,258	Credibility -> Creating value for the customer	H10
Acceptable	0,001	3,294	0,068	0,223	Credibility -> Satisfaction	H11
Acceptable	0,000	5,293	0,073	0,386	Credibility -> Loyalty	H12
Acceptable	0,000	5,278	0,061	0,324	Word of mouth -> Creating value for the customer	H13
Acceptable	0,000	5,451	0,065	0,353	Electronically Spoken Word -> Satisfaction	H14
Acceptable	0,001	3,366	0,074	0,249	Electronically Spoken Word -> Loyalty	H15

Significant at P** level less than 0.01, P* less than 0.05

Source: Prepared by the researcher based on SmartPLS4 outputs.

In light of the results shown in the table above, the results of the study's hypotheses are explained as follows:

.1First sub-hypothesis H1: Social media interaction affects the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) towards the hotel establishments under study.

The results of the structural model analysis demonstrate the significant relationship between the interaction dimension and customer value, with a P-value of 0.009 and a t-value of 2.630.

At a significance level of less than 0.01, the path coefficient was positive, indicating a positive relationship between interaction and customer value creation, with a value of 0.131. This means that a one-unit increase in interaction will lead to a 13.1% increase in customer value creation for the hotel establishments under study.

We conclude from the above that interaction has an impact on customer value for the hotel establishments under study at a significance level of 0.00.

However, the results of the structural model analysis demonstrate the insignificance of the relationship between the interaction dimension and customer satisfaction. The t-value was 0.851, which is lower than the value of 1.96, and the P-value was 0.640, which is greater than 0.05. This means that interaction does not affect customer satisfaction with hotel establishments. The study area, at a significance level of (0.00).

The results of the structural model analysis also showed that the relationship between the interaction dimension and customer loyalty was not significant. The t-value was (0.315), which is lower than the value (1.96), and the P-value was (0.753), which is greater than (0.05). We conclude from the above that there is no effect of interaction on customer loyalty towards hotel establishments at a significance level of (0.00).

.2Second sub-hypothesis H2: Modernity through social media affects the dimensions of customer relationship management (customer value creation, customer satisfaction, and customer loyalty) towards the hotel establishments under study.

The results of the structural model analysis indicate a significant relationship between the modernity dimension and customer value, with the P-value estimated at (0.033). The t-value was (2.127) at a significance level less than (0.05). The path coefficient value was positive, indicating a positive relationship between Modernity and customer value creation, which reached a value of (0.241), meaning that a one-unit increase in modernity will lead to a 24.1% increase in customer perceived value towards the hotel establishments under study.

We conclude from the above that modernity has an impact on customer perceived value towards the hotel establishments under study at a significance level of (0.00).

The results of the structural model analysis also demonstrate the significance of the relationship between modernity and customer satisfaction, with P value estimated at (0.000). The t value reached (3.985) at a significance level less than (0.01). The path coefficient value was positive, indicating a positive relationship between modernity and customer satisfaction, which reached a value of (0.135). This means that a one-unit increase in modernity will lead to a 13.5% increase in customer satisfaction towards the hotel establishments under study.

We conclude from the above that modernity has an impact on customer satisfaction towards the hotel establishments under study at a significance level. (0.00).

The results of the structural model analysis also showed that the relationship between modernity and customer loyalty was not significant. The t-value was 0.007, which is lower than the t-value (1.96). The P-value was 0.994, which is greater than 0.05. We conclude from the above that modernity has no effect on customer loyalty toward the hotel establishments under study at the significance level of 0.00.

.3Third sub-hypothesis H3: Personalization via social media affects the dimensions of customer relationship management (customer value creation, customer satisfaction, and customer loyalty) toward the hotel establishments under study.

The results of the structural model analysis indicate a relationship between personalization and customer value. The P-value was estimated at 0.001, and the t-value was 3.310. The path coefficient was negative, indicating a negative relationship between personalization and customer value creation, with a value of -0.183. An increase in customization by one unit will lead to a decrease in customer value creation for the hotel establishments under study by (18.3%).

We conclude from the above that customization has an impact on customer value creation for the hotel establishments under study at a significance level of (0.00).

The results of the structural model analysis also reveal the insignificant relationship between the customization dimension and customer satisfaction. The t-value was (1.911), which is lower than the value (1.96), and the P-value was (0.056), which is greater than (0.05). We conclude from the above that there is no impact of

customization on customer satisfaction for the hotel establishments under study. Therefore, we reject the eighth sub-hypothesis at a significance level of (0.00).

The results of the structural model analysis also reveal the insignificant relationship between the customization dimension and customer loyalty. The t-value was (1.702), which is lower than the value (1.96), and the P-value was (0.089), which is greater than (0.05). We conclude from the above that there is no effect of personalization on customer loyalty towards the hotel establishments under study at the significance level of (0.00).

.4Fourth sub-hypothesis H4: Credibility through social media affects the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) towards the hotel establishments under study.

The results of the structural model analysis indicate a significant relationship between the credibility dimension and customer value creation, as the (P) value was estimated at (0.000), and the (t) value reached (3.834) at a significance level less than (0.01). The path coefficient value was positive, which indicates a positive relationship between credibility and customer value creation, with a value of (0.258), meaning that an increase in credibility

We conclude from the above that there is an impact of credibility on creating value for the customer towards the hotel establishments under study, and therefore we accept the tenth sub-hypothesis at the significance level (0.00). The results of the structural model analysis also indicate the significance of the relationship between the credibility dimension and customer satisfaction. The P value was estimated at 0.001, and the t value reached 3.294 at a significance level of less than 0.01. The path coefficient value was positive, indicating a positive relationship between credibility and customer satisfaction, with a value of 0.223. This means that a one-unit increase in credibility will lead to an increase in customer satisfaction with the hotel establishments under study by 22.3%.

We conclude from the above that credibility has an impact on customer satisfaction with the hotel establishments under study at a significance level of 0.00.

The results of the structural model analysis also indicate the significance of the relationship between the credibility dimension and customer loyalty. The P value was estimated at 0.000, and the t value reached 5.293 at a significance level of less than 0.01. The path coefficient value was positive, indicating a relationship. There is a positive correlation between credibility and customer loyalty, with a value of (0.386), meaning that a one-unit increase in credibility will lead to a 38.6% increase in customer satisfaction with the hotel establishments under study.

We conclude from the above that credibility has an impact on customer loyalty with the hotel establishments under study at a significance level of (0.00).

.5Fifth sub-hypothesis H5: Electronic word of mouth via social media affects the dimensions of customer relationship management (customer value creation, customer satisfaction, customer loyalty) with the hotel establishments under study.

The results of the structural model analysis demonstrate the significant relationship between the electronic word of mouth dimension and customer value, with the P value estimated at (0.000), and the t value reached (5.278) at a significance level less than (0.01). The path coefficient value was positive, indicating a positive relationship between electronic word of mouth and value creation, with a value of (0.324), meaning that the increase A single unit of electronic word of mouth will lead to an increase in customer value creation for the hotel establishments under study by 32.4%.

We conclude from the above that there is an impact of electronic word of mouth on customer value creation for the hotel establishments under study at a significance level of 0.00.

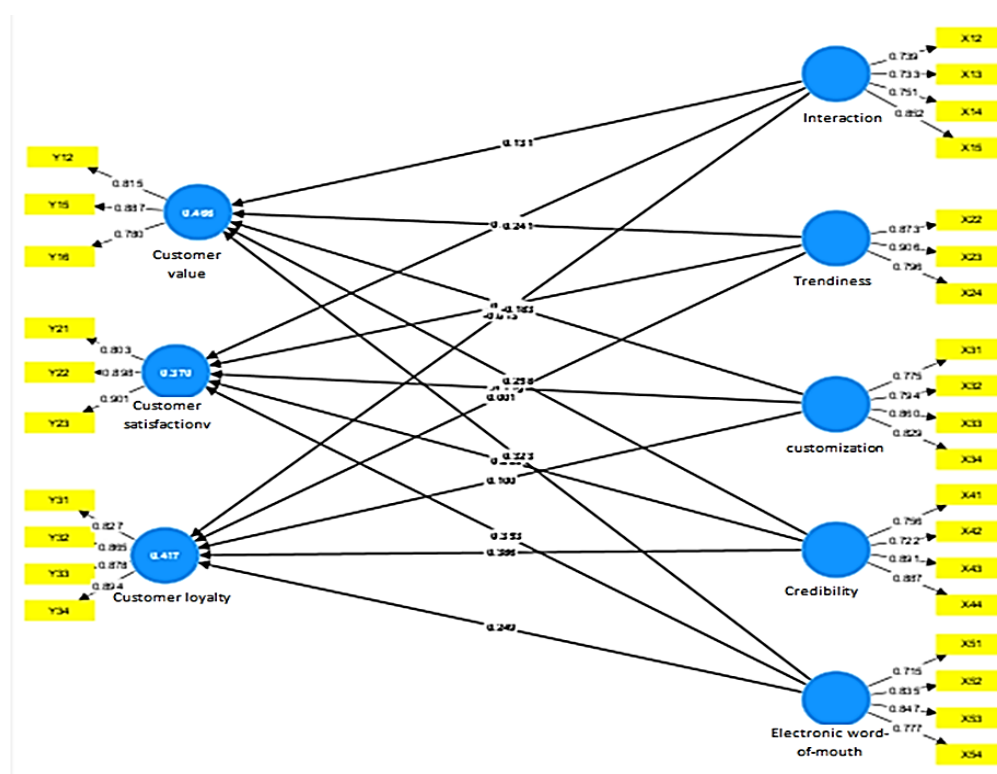
The results of the structural model analysis also demonstrate the significance of the relationship between the electronic word of mouth dimension and customer satisfaction. The P value was estimated at 0.000, and the t value reached 5.451 at a significance level of less than 0.01. The path coefficient value was positive, indicating a positive relationship between electronic word of mouth and customer satisfaction, with a value of 0.353. This means that a single unit increase in electronic word of mouth will lead to an increase in customer satisfaction for the hotel establishments under study by 35.3%.

We conclude from the above that there is an impact of electronic word of mouth on customer satisfaction for the hotel establishments under study at a significance level. (0.00).

The results of the structural model analysis also indicated a significant relationship between the word-of-mouth dimension and customer loyalty, with the P value estimated at 0.001. The t value reached 3.366 at a significance level less than 0.01. The path coefficient value was positive, indicating a positive relationship between word-of-mouth and customer loyalty, with a value of 0.249. This means that a one-unit increase in word-of-mouth will lead to a 24.9% increase in customer loyalty toward the hotel establishments under study.

We conclude from the above that word-of-mouth has an impact on customer loyalty toward the hotel establishments under study. Therefore, we accept the t value at a significance level of 0.00.

Figure No. (01) shows the study model after the bootstrapping process by clarifying the values of the path coefficients and their significance between the latent variables, in addition to the values of the T-test between the statements and their latent variables.



Discussion and interpretation of results:

According to (Malthouse & al, 2013), customer relationship management benefits from the spread of social media because it provides an environment that facilitates customer communication with institutions and facilitates communications that customers previously ignored. This was confirmed by Source specified invalid. Integrating social media with customer relationship management makes answering questions and providing technical support simpler and easier. Important information collected from customers in the form of surveys and other data collection methods receive a higher response rate when combined with social media.

Social media has a significant impact on customer relationship management in several ways. Its purpose is to create communication that enables an organization to inform customers of its products and services and generate interest in its offerings. Despite the differences in organizations' strategies for implementing social media marketing, they all expect positive effects on marketing activities, similar to the dimensions of customer relationship management. Source specified is not valid. In light of the above, the results of the study's hypotheses

regarding the impact of social media marketing on customer relationship management in hotel establishments will be interpreted by interpreting the results of the sub-hypotheses associated with each dimension of social media marketing. These dimensions will be listed according to the extent of their impact and importance in customer relationship management, according to the results of the study model, which we list in the following table:

Table No. (6): Arrangement of the model's dimensions according to priority.

Arrangement	Path coefficient with customer loyalty	Arrangement	Path factor with customer satisfaction	Arrangement	Path coefficient with customer value	Dimension
4	-0.015	5	0.091	5	0.131	Interaction
5	0.001	3	0.135	3	0.241	Modernity
3	0.100	4	-0.119	4	- 0.183	Customization
1	0.386	2	0.223	2	0.258	credibility
2	0.249	1	0.353	1	0.234	electronically transmitted word

Source: Prepared by the researcher based on SmartPLS4 outputs.

Word of mouth was the most important dimension influencing customer value creation, followed by credibility, then novelty, and then interactivity. As for customer satisfaction, the dimensions maintained the same order, but credibility was the most important dimension influencing customer loyalty, followed by word of mouth, then personalization, and then novelty.

Conclusion:

This thesis provides an overview of the theoretical background of social media marketing and customer relationship management in the hotel industry, applying it to hotel establishments. The researcher sought to highlight the strategic importance of hotel establishments adopting the concept of social media marketing in customer relationship management. She also conducted an applied study of the topic on a sample of hotel establishments operating in Algeria. As a result of this study, the most important findings will be presented:

□ With the development of the use of social media, what is known as social customer relationship management (SCM) has emerged, redefining the relationship between the establishment and the customer. It is more than just a communication and information tool; it is a business strategy that leverages the advantages of social media to strengthen the relationship and achieve mutually beneficial value for both the establishment and the customer. □ Social media marketing's contribution to enabling hotel establishments to manage their customer relationships easily and continuously, contributing to customer value creation. Social media ensures ease of use, faster service delivery, time management and efficiency, 24/7 availability, and easy access to information. This directly and indirectly impacts hotel customer satisfaction and loyalty.

□ The benefits of adopting social media marketing and managing customer relationships through it are beneficial for all parties involved. Customers leave the relationship with a high level of satisfaction, a high willingness to purchase, and a loyal customer, in addition to spreading positive word of mouth. For the establishment, this

benefits by improving its image, continuously improving its services, increasing profitability, and achieving competitive advantage.

The scientific study, data analysis, and hypothesis testing, in addition to the researcher's field research using a questionnaire on the marketing content of the social media networks of the hotel establishments under study, resulted in a set of results resulting from the statistical analysis of the interview and questionnaire results and hypothesis testing in Chapter Four, as follows:

□ The data for the study variables and study dimensions do not follow a normal (bell) distribution. This prompted the researcher to rely on the structural equation modeling method using the SmartPLS-4 partial least squares method as an advanced strategy for data analysis in such cases, aiming to test the validity of the network of relationships between the variables.

□ Based on the results of the Spearman's correlation coefficient, a statistically significant correlation at the 0.01 level between social media marketing and customer relationship management (CRM) was found, reaching 0.660. This confirms that social media marketing contributes to customer relationship management in hotel establishments, according to the responses of the sample studied. The more social media marketing practices (interaction, modernity, credibility, word-of-mouth, and personalization) are applied, the more the hotel establishments under study are able to create value for customers and achieve customer satisfaction and loyalty.

□ The study model was tested on the study sample, where the proposed hypotheses were examined, attempting to identify the structural relationships within the model using least squares structural equation modeling. The research objective was achieved by proposing a theoretically supported model, where it was concluded that most of the hypothesized relationships in the model are significant and positive. Therefore, the main hypothesis of the study, which states that social media marketing affects CRM in the hotel establishments under study, can be accepted.

□ The coefficient of determination results showed that the combined dimensions of social media marketing explain 46% of customer value creation in the hotel establishments with which the respondents interact. These same dimensions also explain 41% of loyalty and 37% of satisfaction among respondents with their hotel establishments.

□ It was found that the dimensions of social media marketing (e-word of mouth, credibility) have a weak impact on customer relationship management across all its dimensions, while the dimensions of interactivity, modernity, and personalization do not affect customer relationship management, particularly in the dimensions of customer satisfaction and loyalty.

These results confirm the results of the study (Randal & Kurt, 2013), which showed the existence of a correlation and influence between social media marketing and customer relationship management in hotel establishments, despite the difference in the level and direction of influence. In addition, it concluded that word of mouth is the most important and strongest dimension of social media marketing that affects the dimensions of customer relationship management. This is consistent with the study (Chen & Lin, 2019) and (Liu, 2022). The results of the current study also agreed with the studies (Bilgin, 2018) and (Liu & al, 2022) in that there is no influence of the dimension of interaction and personalization via social media on the dimensions of customer relationship management, and if there is an influence, it is an insignificant influence.

Based on the results of the theoretical and applied study, a set of suggestions can be made to help successfully implement social media marketing and customer relationship management activities. These suggestions are as follows:

-Hotel establishments should educate their employees about the importance of the customer, the relational orientation, and its relationship to increasing profitability. They should also incorporate concepts such as customer relationship management and social media marketing into their marketing strategies, gradually incorporating them into their respective levels until reaching the highest level of customer partnership. This can only be achieved through employee engagement and involvement in the process.

-Training and development courses are among the best approaches that enable establishments to begin adopting customer relationship management and social media marketing, improving the performance and efficiency of their employees, who will, in turn, be able to perform with excellence.

-Encouraging customers to express their opinions about aspects of the service provided via social media, focusing on the relational aspects by activating the role of social media as marketing channels. This aims to obtain the greatest possible amount of feedback, which will serve as input for the continuous improvement process.

-Hotel establishments' widespread use of social media networks to enhance their role as marketing tools through a constant presence on these networks, ensuring communication and building interactive relationships that motivate customers to provide feedback and co-create value.

-Providing a data bank that enables the establishment to store customer data obtained through social media networks, and then analyze it using marketing information systems and subsystems. This will add a sense of individuality and personalization to the process of communicating with customers and directing marketing offers based on qualitative information about customer preferences and desires.

-Having a set of statistical tools and programs is necessary to measure the extent of customer interaction and engagement with updates to page posts on social media networks, which allows determining the customer's stage (satisfaction/dissatisfaction) and their loyalty levels, through word of mouth on social media networks.

Ethical Considerations

The study was conducted in full accordance with the ethical principles of academic research and institutional guidelines of Mohammed Khider University of Biskra (Algeria). All participants involved in the survey were informed about the research objectives, confidentiality of their responses, and voluntary participation. No personal identifiers were collected, and respondents were allowed to withdraw at any time without consequence. Ethical approval for this research was granted by the Departmental Scientific Committee of the Faculty of Economics, Commerce, and Management Sciences at Mohammed Khider University of Biskra.

Acknowledgments

The authors express their sincere gratitude to the hotel managers, marketing officers, and staff of the classified hotels in Algeria who participated in the survey and interviews. Their cooperation and valuable insights were indispensable for the success of this research. Special thanks are also extended to the Department of Management and the Laboratory of Marketing and Service Quality at Mohammed Khider University of Biskra for their continuous academic support and constructive feedback during all stages of this study.

Methodology

This study adopted a quantitative research design to examine the impact of social media marketing (SMM) activities on customer relationship management (CRM) performance in classified hotel establishments in Algeria. Data were collected using a structured questionnaire distributed to marketing and customer service managers across three major hotel categories (three-star, four-star, and five-star). The survey items were adapted from established measurement scales on social media marketing, CRM effectiveness, and customer engagement.

A total of 310 valid responses were obtained and analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique via SmartPLS 4.0. The model included constructs such as social media interaction, content sharing, trust, customer satisfaction, and CRM performance. Reliability and validity were evaluated using Cronbach's alpha, composite reliability (CR), average variance extracted (AVE), and Fornell-Larcker criteria. The bootstrapping method with 5,000 resamples was employed to test the significance of the structural paths.

This approach enabled the assessment of both measurement and structural models, providing empirical evidence of the mediating role of customer satisfaction between SMM activities and CRM performance in Algeria's hospitality sector.

Funding

This research received no specific grant from any public, commercial, or not-for-profit funding agency. The authors conducted the study as part of their academic duties within Mohammed Khider University of Biskra.

Conflict of Interest

The authors declare no conflicts of interest related to the publication of this article. All data and interpretations are presented objectively and independently, without any commercial or institutional bias.

References

1. Alsoud, M., et al. (2023). Social media marketing activities and tourists' purchase intention. *International Journal of Data and Network Science*, 7, 677–686.
2. Anderson, K., & Kerr, C. (2001). *Customer relationship management*. McGraw-Hill Education.
3. An empirical study of the effect of social media marketing activities upon customer satisfaction, positive word-of-mouth, and commitment to indemnity insurance service. (2015). In *Proceedings of the International Marketing Trends Conference*.
4. A business model and framework for electronic customer relationship management. (2002). In *Proceedings of the 8th AMCIS Conference*.
5. A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). (2017). Sage Publications.
6. A primer on partial least squares structural equation modeling (PLS-SEM). (2019). Sage Publications.
7. A strategic framework for customer relationship management. (2005). *Journal of Marketing*, 4.
8. An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon. (2004). *Industrial Marketing Management*.
9. Bouabdallah, H. (2021). The impact of customer relationship management on service excellence in private medical clinics: A field study. *Algerian Journal of Economics and Finance*, 8(15).
10. Characteristics of social-media marketing strategy and customer-based brand equity outcomes: A conceptual model. (2015). *International Journal of Internet Marketing and Advertising*, 9(4), 321–337.
11. Common method biases in behavioral research: A critical review of the literature and recommended remedies. (2003). *Journal of Applied Psychology*, 88(5), 879–903.
12. CRM in real time. (2008). New York: Library of Congress.
13. CRM systems: Necessary, but not sufficient. REAP the benefits of customer management. (2002). *The Journal of Database Marketing*, 9(3), 267–275.
14. Critical success factors of CRM technological initiatives. (2003). *Canadian Journal of Administrative Sciences*, 20(1), 21–34.
15. Customer loyalty in e-commerce. (2002). *Journal of the Association for Information Systems*, 3, 27–51.
16. Dahman, H. (2020). Customer relationship management and achieving competitive advantage for service organizations – A case study of Mobilis [Doctoral dissertation, Akli Mohand Oulhadj University of Bouira].
17. Delineating the effects of social media marketing activities on Generation Z travel behaviors. (2022). *Journal of Travel Research*.
18. Development and diffusion of customer relationship management across disciplines: Fad or fashion? (2010). *Issues in Information Systems*, XI(1).
19. Development of a conceptual framework for relationships between social media marketing and intentions to stay at five-star hotels. (2021). *Journal of Business and Management Studies*, 4(4), 137–150.
20. Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brands. (2012). *Journal of Business Research*, 65, 1480–1486.
21. *Effective CRM using predictive analytics*. (2016). New York: John Wiley & Sons.
22. Effects of electronic customer relationship management on customer satisfaction: A temporal model. (2005). In *Proceedings of the 38th Hawaii International Conference on System Sciences*.
23. Elements of strategic social media marketing: A holistic framework. (2016). *Journal of Business Research*, 70, 118–126.

24. Engagement with social media and outcomes for brands: A conceptual framework. (2010). In Proceedings of the ANZMAC Conference. New Zealand.
25. Exploring the impact of social media marketing on tourism destination marketing and revisit intention: The extension of stimulus-organism-response (S-O-R) model. (2022). *Studies of Applied Economics*, 40(2).
26. *Gestion de la relation client*. (2005). Paris: Eyrolles Édition.
27. *Gestion de la relation client*. (2009). Paris: Pearson Éducation.
28. Integrating big data and marketing concepts into tourism, hospitality operations, and strategy development. (2022). *Quality & Quantity*, 1-18.
29. Internet integrated customer relationship management. (2002). *Journal of Computer Information Systems*, 7(7), 77-86.
30. Managing customer relationships in the social media era: Introducing the Social CRM House. (2013). *Journal of Interactive Marketing*, 27(4), 270-280.
31. Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. (2017). *Telematics and Informatics*, 34(7), 1294-1307.
32. Men and women online: What makes them click? (2001). *Marketing Research*, 13(2), 20-25.
33. Mir, A., & Sharif, M. (2020). *Theoretical foundations of customer behavior and loyalty programs*. Oman: Wael Publishing and Distribution House.
34. Nasfi. (2019). The effect of customer relationship management and its impact on customer loyalty in PT. BPR Rangkiang Aur. *Menara Ekonomi*, 11.
35. Razzaq, Q. A. (2022). The role of social media marketing in customer relationship management: A case study of Ooredoo mobile customers [Doctoral dissertation, Djillali Bounaama University, Khemis Miliana].
36. Sabrina. (2019). Technological and organizational factors affecting the effectiveness of customer relationship management: A field study in a sample of Algerian banks [Doctoral dissertation]. Algeria.
37. SmartPLS 3 (Version 3.2.6). (2015). Boenningstedt: SmartPLS GmbH.
38. *Social CRM for dummies*. (2011). Chichester: Wiley.
39. *Social media marketing: Emerging concepts and applications*. (2018). Palgrave Macmillan.
40. Social customer relationship management (S-CRM) in the Nigerian banking sector. (2017). University of Applied Science, Specialization in International Business.
41. The antecedents and consequences of customer-centric marketing. (2000). *Journal of the Academy of Marketing Science*, 28(1), 55-66.
42. The effect of social media marketing activities on brand awareness, brand image, and brand loyalty. (2018). *Business and Management Journal (BMJ)*, 6(11), 128-148.
43. The impact of social media marketing on building brand loyalty through customer engagement in Jordan. (2019). [Master's thesis, Al al-Bayt University].
44. The implications of social media on customer relationship management and the hospitality industry. (2013). *Journal of Management Policy and Practice*, 14(3), 18-26.
45. The mediating effects of perceived value between the relationship of social media marketing and purchase intention. (2022). *DLSU Business & Economics Review*, 31(2).
46. The perception of social media as a promotional mix element in star-graded accommodation establishments in the Western Cape Province of South Africa. (2014). [Master of Commerce thesis, University of South Africa].
47. The role of social media marketing activities in increasing brand loyalty. (2022). *Jurnal Ekonomi*, 27(3), 478-499.
48. Tyron, W. Y. (2022). The mediating effects of perceived value between the relationship of social media marketing and purchase intention. *DLSU Business & Economics Review*, 31(2).
49. Understanding the effect of social media marketing activities: The mediation of social identification, perceived value, and satisfaction. (2019). *Technological Forecasting and Social Change*, 140(1-2), 22-32.
50. Using social media marketing to create brand awareness, brand image, and brand loyalty in the tourism sector in Indonesia. (2021). *The Winners*, 22(2), 173-182.