

## International Journal of Hospitality Management

### The Missing Link: Creating Value with Social Media use in Hotels

Garrido-Moreno, A., Lockett, N., King, S. and García-Morales, V.

Accepted for publication 14<sup>th</sup> March 2018

#### Abstract

Social Media has transformed the way firms relate to their markets. Hotels all over the world are increasingly using these tools, integrating them into their Customer Relationship Management (CRM) strategies to engage customers in active conversations. The use of Social Networking and Review Sites, like TripAdvisor, has become all pervasive, and hotels are investing large sums of money in engaging customers via Social Media. However, there is a certain degree of skepticism about how these technologies can help to create value. To shed light on the topic, based on a sample of 222 Spanish hotels, this study examines the real impact of Social Media use, showing the key role played by Social CRM Capabilities in the process of value creation with these tools. By building on the Resource-based theory, the proposed model shows the pathway between Social Media use and organizational performance, in terms of profitability, sales and customer retention.

**Keywords:** Social Media, Social Networking, Social CRM, value creation, hotel sector.

#### 1. Introduction

Social Media use is revolutionizing the way we communicate, collaborate, share and consume (Aral et al., 2013). Social Media refers to a “set of online tools that supports social interaction between users, facilitating the creation and sharing of knowledge, and transforming monologue (company to customer) into dialog” (Hansen et al., 2011; p. 12). It includes diverse Internet-based applications based on the ideological and technological foundations of Web 2.0 (Kaplan and Haenlin, 2010). They appeared as “game changer” tools, placing the customer at the center of the organization. Platforms such as Facebook, Twitter, YouTube, Instagram, Pinterest and Flickr have many millions of daily users and are said to capture the “wisdom of the crowd” (Luo et al., 2013). Social Media has transformed how firms relate to the market, creating a new array of possibilities and challenges (Kaplan and Haenlin, 2010). Initiatives based on Social Media use are

becoming increasingly popular among organizations as they allow firms to better understand their customers, facilitating increased revenue generation and service personalization (Baird and Parasnis, 2011).

In this new 2.0 environment, traditional Customer Relationship Management (CRM) strategies are morphing into Social CRM. The latest trend in CRM is to integrate Social Media tools in these initiatives, taking advantage of their relational properties to nurture customer interactions (Harrigan et al., 2015). Social CRM can be defined as a business strategy, sustained by technological tools, designed to engage customers in collaborative conversations that provide both parties with beneficial value in a trusted and transparent environment (Greenberg, 2010). Social Media allows firms to contact customers in a personal way, capturing their individual preferences and needs, to reinvent customer relationships.

Nevertheless, despite the eagerness on the part of firms to embrace Social Media tools to connect with customers, there is much skepticism about their efficacy (Rishika et al. 2013). In this regard, a study conducted by Aluri et al. (2015) revealed that the use of Social Media tools by hotels did not significantly increase customer satisfaction or purchase intention. Although how to measure the effectiveness of Social Media use is one of the most relevant research questions in the management arena (Hoffman and Fodor, 2010), few academic studies have examined it in a quantitative way (Leung et al., 2013). More specifically, the concerns regarding real impact arise because the precise mechanism through which Social Media use transforms into real value creation has not been clarified (Rishika et al. 2013).

On the other hand, hospitality has been one of the industries that has been greatly transformed by the emergence of Social Media. The use of Social Media tools has become increasingly relevant as part of the tourism experience, because it has changed the way that information about travel and tourism disseminated and shared (Munar and Jacobsen, 2014). More than one third of online travelers are somewhat influenced by Social Media, with Facebook and TripAdvisor being the main platforms, being used by millions of visitors each day (Cabiddu et al., 2014).

In spite of the widespread popularity of these tools, limited research has been undertaken, from an organisational perspective, examining the impact of Social Media use on hotel performance (Anderson, 2012; Kim et al., 2015a). Diverse authors suggest that there is a requirement for additional insight into how hotels can leverage these tools for effectively improving customer relationships, thereby creating value for the firm (Chan and Guillet, 2011; Jung et al., 2013).

This paper directly addresses this literature gap by empirically investigating Social Media use in a sample of 222 Spanish hotels. We address two research objectives: (1) Examining if the use of Social Media tools (Social Networking and Review Sites) is directly related to value creation; (2) Analyzing the role of Social CRM Capabilities, related to customer knowledge, as a relevant mediator in this process of value creation. We built on the Resource-Based View (RBV) to analyze if Social Media use can be a source of competitive advantage and how it can enhance firm capabilities for customer relationship management.

This study uniquely contributes to existing literature in hospitality by advancing our understanding of the real impact of Social Media use on value creation in hotels. Results emphasize the moderating role played by Social CRM Capabilities in this process. These Social CRM Capabilities, reflecting the hotel's ability to improve customer relationships based on knowledge captured via Social Media tools, emerges as the "missing link" connecting Social Media use with firm performance. Findings enrich the literature and provide valuable implications for hotel managers to guide their Social Media strategy to boost their business performance.

The remainder of the paper is organized as follows. In the next section, based on the literature review we propose the theoretical framework, our research hypotheses and describe the conceptual model. Then, we describe the methodology, data analysis and discussion of the results. We close the paper with concluding remarks and implications for future research.

## **2. Theoretical framework**

### **2.1 Social Media use and performance**

Social Media use has grown exponentially in recent years, and its impact in the business world and particularly in the tourism industry has become noteworthy (Kim et al., 2015a). Social Media platforms are the most appropriate tools for tourism firms for communicating with customers and building effective relationships with them, enabling the capture of real knowledge from the market (Escobar-Rodríguez and Carvajal-Trujillo, 2013). In view of the increasing importance of Social Media tools in hospitality in recent years, some literature reviews have been published deepening understanding of the topic (Leung et al., 2013; Zeng and Gerritsen, 2014). These studies highlight an increased attention on Social Media in tourism and hospitality, however some topics remain under researched. For example, there are no specific studies examining the effectiveness of these tools (Leung et al., 2013). And there have been few quantitative studies analyzing the impact of Social Media use on firm performance (Zeng and Gerritsen, 2014).

In order to summarize recent research on the topic, we have conducted a systematic review of the literature, using the following databases: Web of Science, Emerald, Science Direct, Scopus and Wiley. We ran several searches in them, looking for refereed papers online published from 2010 to 2016. To select relevant papers, we used as search terms combining several different items related to Social Media (Social Networking, Social Networks, Review Sites, Facebook, TripAdvisor) and firm value (performance, impact, value creation) in the hotel sector. With an initial sample of papers, we analyzed their content, methodology and results achieved. After a filtering phase, we eliminated several papers because they were non-empirical or because their central topic or focus was not the analysis of the examined phenomenon. Finally, 12 papers met all the mentioned criteria and were included in Table 1.

**Table 1:** Recent hospitality research examining the impact of Social Media use on performance

Authors	Topic/title	Social Media examined	Method	Main findings
Chan and Guillet (2011)	Use and impact of social media marketing in the Hong Kong hotel industry	Blogs, Microblogs, SN sites, virtual worlds, content community sites, sites for feedback	Descriptive research: hotels' performance was assessed by observing their actions on Social Media sites.	Results confirm that hotels generally have a poor performance when using Social Media for learning about customers
Anderson (2012)	Impact of user generated content and hotel performance in US	Aggregated data from five travel-related platforms including TripAdvisor	Logistic regression	Findings provide a numerical confirmation of the positive relation between review score (hotel reputation) and revenue per available room (RevPAR).
Leung et al. (2013)	Marketing effectiveness of two Social Media sites	Facebook and Twitter	Structural equation modelling (SEM)	Results confirm that social media experiences of hotel customers' significantly influence their

	(Facebook and Twitter) in the US hotel industry				attitudes toward the brand, positively affecting booking intention and Ewom.
Sparks et al. (2013)	The effects of content type, source, and certification logos of online travel reviews on consumer behavior, in the Australian market	Online Review Sites (platforms not specified)	Factorial analysis of variance (three way ANOVA)		Customer purchase intentions were influenced principally by their overall attitude toward the resort and their trust in its corporate social responsibility policies.
Xie et al. (2014)	The business value of online consumer reviews and management response to hotel performance	Online reviews from TripAdvisor	Linear regression		Results display the combined effects of online review factors and management responses on hotel RevPAR, confirming a positive influence.
Jung et al. (2013)	The role and the use of online social networking as a relationship marketing tool in the context of luxury hotels in UK	Online Social Networking (Facebook, Twitter, YouTube, TripAdvisor...)	Semi-structured interviews and qualitative analysis (constant comparative analysis)		Findings revealed that online social networks provided hotels with marketing opportunities (related to customer feedback and service personalization) and increased business value.
Tsao et al. (2015)	The influence of hotel reviews on booking intention from the perspective of consumer conformity, in Taiwanese hotels	User generated reviews on TripAdvisor	Analysis of variance (ANOVA)		Findings indicate that positive reviews significantly increases booking intention. They also confirmed that this influence was strengthened with the number of reviews
Alluri et al. (2015)	The effectiveness of embedded Social Media on hotel websites and the importance of social interactions and return on engagement, in US hotels	Facebook, Twitter and YouTube	Univariate statistics and ANOVA		The study proved that the embedded Social Media channels on the hotel Web site enhanced travelers' social gratifications. However, traveler satisfaction and purchase intentions were not increased by the presence of Social Media.
Palacios-Marqués et al. (2015)	The effect of online social networks on firm performance and how this technology can help to create value, in Spanish hospitality firms.	Online social networks (platforms not specified)	Structural equation modelling		Results show that there is a statistically significant positive relationship between online social networks and innovation capacity and that the relationship between online social networks and firm performance is fully mediated by innovation capacity
Philips et al. (2015)	The relationships among user generated online reviews, hotel features and Revpar, in Swiss hotels	User generated reviews on TripAdvisor	Artificial Neural Networks		Results further indicate that positive reviews can effectively contribute to hotel's financial performance
Kim et al. (2015b)	Effectiveness of managing online reviews on hotel performance	Online reviews from different platforms	Multiple regression analyses		Findings indicate that overall ratings are the most relevant driver of hotel performance, followed by hotel response to negative comments.
Neirotti et al. (2016)	Customer reviews and value creation in the Italian hospitality industry	User generated reviews on TripAdvisor	Regression analysis		Results suggest that online ratings from user-generated reviews on TripAdvisor have a positive effect on hotel revenue growth, so greater visibility online has a positive impact on sales revenue

A deeper analysis of the studies included in Table 1 enabled us to detect the main gaps in the literature. First, most studies focused specifically on the use of Social Networks or on Review Sites, such as TripAdvisor, but did not analyze Social Media use in a comprehensive way. Second, another research gap emerged regarding how to consistently measure value creation. Most of the studies focused on specific measures like customer satisfaction, purchase intention or sales revenue without using an integrative scale

including items related to both customer and business performance. Third, we have found that, although Spain is one of the largest tourist destinations in the world and Social Media has a strong presence in hospitality enterprises (Palacios-Marqués et al., 2015), there is limited empirical research on the topic in this country. Finally, most of the papers (with the exception of Palacios-Marqués et al., 2015) lacked a solid theoretical framework to consistently assess value creation with Social Media. Our study is intended to consistently address all the mentioned research gaps and expand the specific knowledge on the subject.

## **2.2 Social Media use and performance from the Resource-Based View**

The Resource-Based View (RBV) constitutes the theoretical foundation of this research. This theory has been widely used in management research as it provides a valuable tool for researchers to explore how Information Systems (IS) relate to firm performance (Melville et al., 2004; Wade and Hulland, 2004). Moreover, Keramati et al. (2010), building on a wide literature review, conclude that the attributes of the RBV make it an especially appropriate and useful framework to be applied in the context of customer management technologies. Consequently, literature from the fields of CRM, Social CRM and Social Media has fundamentally drawn on the RBV to investigate how resources impact customer-related capabilities and business performance.

First, focusing on CRM literature, several studies (Chuang and Lin, 2013; Rapp et al., 2010; Wang and Fen, 2012) have built on the RBV to empirically examine the relationships among firm resources (considering technology use as fundamental resource), capabilities and performance. Additionally, in the domain of Social CRM, diverse studies like Trainor (2012), Trainor et al. (2014) and Küpper (2015) used the resource approach to empirically analyze both the impact of technology use on Social CRM Capabilities and the contribution of these capabilities on business performance. In the same vein, Palacios-Marqués et al. (2015) drew on the RBV premises to assess if Social Media use can be a source of competitive advantage, enhancing relevant customer-based capabilities. Recently, Ahani et al. (2017) based on a review of the literature asserted that the RBV can not only help to explain the role of Social Media technologies as part of a CRM strategy, but it can be used to understand how those tools can impact organizational performance. Consequently, building on this evidence we have chosen the resource approach as an ideal lens to examine

value creation via Social Media use.

This theory argues that performance is derived from the firm's resource endowment and how effective the firm is in transforming these resources into effective capabilities (Barney, 1991; Day, 1994; Denicolai et al.; 2010). Therefore, the concept of capabilities plays a key role in the RBV. Capabilities are defined as the firm's ability to assemble, integrate and deploy valuable resources in combination to achieve superior performance (Day, 1994; Rapp et al., 2010). The RBV holds that the necessary condition for a firm success lies on its ability to create distinctive capabilities (Teece et al., 1997).

In the context of a Social CRM initiative, the ability to properly use these technologies to identify customers' needs and requirements to build durable relationships with them can be viewed as a distinctive capability (Rapp et al., 2010). Day (1994) emphasizes that these customer-linking capabilities, based on customer information, are among the most valuable for any organization, as they are difficult to replicate. In our study, we will conceptualize them as "Social CRM Capabilities" as they refer to a firm's competency in "generating, integrating and responding to information obtained from customer interactions that are facilitated by Social Media tools" to improve customer relationships (Trainor et al., 2014, p. 1202). As Sigala (2016) highlighted, these capabilities build on the use of Social Media applications and involve several processes to engage customers in collaborative conversations, which can lead to customer satisfaction, loyalty and retention.

As we can derive from the above definitions, Social CRM Capabilities are based on the use of Social Media tools, so it can be considered a basic enabler of these capabilities. In this vein, diverse empirical studies support this assumption. Küpper (2015) confirmed how Social Media technology use appears as a central component in the development of Social CRM Capabilities. Moreover, Trainor et al. (2014) observed that Social Media technology use exerted the most significant effect on Social CRM Capabilities, acting as its main determinant. In our study, building on this evidence, we consider the use of Social Media tools as the key building block in the development of Social CRM Capabilities.

Attending to its differential characteristics, and in order to enrich the analysis, we have split Social Media use into two specific components: Social Networking use and Review Sites use. This classification is based on Kaplan and Haenlin's (2010) typology, which is widely accepted in the literature. This classification is based on two key elements of Social Media tools, media richness and self-disclosure or exposure (degree of revelation of personal information). Thus, Social Networks score high in both dimensions as they enable the sharing of pictures, videos and other forms of media and involve a high self-disclosure (revealing personal preferences, likes, contacts). On the other hand, Social Review Sites score lower both in media richness (reviews are mainly text-based although they can include pictures) and self-disclosure (user simply comment and share their consumer experiences and evaluation of products).

In this vein, recent studies (Xiang et al., 2017) suggest that although Review Sites may be considered part of Social Media, these platforms have specific features and goals as they are intended to assist consumer decision making by providing and sharing trusted knowledge regarding product evaluations. In addition, the use of these platforms in hospitality is having a profound impact as online reviews have become one of the most important information sources in consumers' decision making (Xie et al., 2014). Consequently, we consider it appropriate to study their impact (both in Social CRM Capabilities and performance) in a disaggregated way.

Based on all the above, with the theoretical support of the RBV, our study explores if the strategic use of Social Media tools (Social Networking and Review Sites) positively influences firm performance, examining also the mediating role of Social CRM Capabilities in this process. In the next sections we will describe the research hypotheses and the proposed conceptual model.

### **3. Hypothesis development**

#### **3.1 Social Networking Use**

Online social networks have become a global phenomenon which promise an immense social and economic impact (Heidemann et al., 2012). Social Network sites can be defined as "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other



users with whom they share a connection, and view and traverse their list of connections and those made by others within the system” (Boyd and Ellison, 2007; p. 211). The popularity and strength of social networks continue to revolutionize communication, information accessibility, and the Internet itself; and its use presents multiple opportunities for hotels (Jung et al., 2013).

While the specific functions of the different social networking sites vary, most of their key technological features are similar. Essentially, these platforms enable users to manage friendship, finding contacts with similar interests, and locate content that has been created by other users (Heidemann et al., 2012; Hu et al., 2015). Based on prior studies (Boyd and Ellison, 2007; Cha et al., 2012; Hu et al., 2015), we will follow a wide categorization of social networking sites, including also in this category content-oriented sites such as Twitter, YouTube or Flickr, as they also enable social interactions and connections.

Social Network sites have become increasingly popular in recent years. Facebook is globally considered the leading platform. It brings people together to share experiences, photos, likes, and is useful for tracing consumer preferences and attitudes towards a product (Weinberg and Pehlivan, 2011). Twitter has become increasingly popular as it allows sharing relatively shallow information with a short half-life. This tool has proven to be a useful channel for marketing purposes in the hotel sector (Leung et al., 2013). Hotels can use YouTube as a useful commercial platform, to present products and services to prospective customers, and also to engage them in specific initiatives to personalize their experience (Chan and Guillet, 2011). Finally, by using photo sharing platforms, such as Flickr and Instagram that include social networking features, hotels can exploit its potential by posting photos of their facilities or encouraging customers to share their own pictures. In summary, social networks have become incredibly significant in tourism, as consumers lean towards trusting other users and their recommendations as opposed to marketing messages (Jung et al., 2013).

Online content is now a primary source of travel information, and by using these platforms customers expect to become partners in creating and consuming personalized products with firms (Sigala, 2011). By using social networks, firms can capture valuable information about their customers’ preferences that can be used

to personalize services and create unique experiences. Social Media tools have become a rich source of information for companies, because every ‘tweet’, ‘like’ or ‘comment’ can be analyzed to better understand the market (Choudhury and Harrigan, 2014).

Hotels are now integrating social networking use with current CRM systems in order to create valuable Social CRM Capabilities. By combining social networking use with other customer-centric technologies, firms will be able to build Social CRM Capabilities based on customer information and enhance customer relationships (Trainor, 2012). In this vein, Palacios-Marques et al. (2015) empirically confirmed that using social networks, hotels can get the required knowledge from the individual customer’s perspective to personalize and improve their service. Hence, it can be argued that:

*Hypothesis 1A: Social Networking Use will positively affect Social CRM Capabilities.*

Social networks offer firms the possibility to establish multiple contacts with customers at a global level, and at lower cost than with other traditional communication tools. Consequently, social network use offers significant benefits, including the enhancement of economic value for organizations (Michaelidou et al., 2011). For all the above, hotel brands are integrating social networking platforms in their marketing strategies to reinforce consumer networks, and to improve performance in terms of sales and cash flows (Su et al., 2015).

Hoffman and Fodor (2010) emphasized that returns from Social Media investments cannot be measured exclusively in financial terms, but they do impact customer behavior. Specifically, they noted that social networking use will translate into brand awareness, customer engagement and positive word-of-mouth, which in turn will enhance economic value creation. In this vein, Trainor et al. (2014) confirmed that investment in Social Media technologies provides firms with substantial customer relationship management benefits, in terms of customer loyalty, satisfaction and retention. Additionally, Jung et al. (2013) observed how hotels are starting to recognize the potential of social networking as a key tool for improving customer relationships. Examining a sample of hotels in the UK, they noted that the use of social networks increases brand awareness, customer retention and sales.

We consider Social CRM Performance as the outcome of properly using Social Media tools for improving customer relationships, which will bring value and profit to an organization and its customers; and based on prior evidence we suggest that:

*Hypothesis 1B: Social Networking Use will positively affect Social CRM Performance*

### **3.2 Review Site Use**

The growing use of Social Media tools in tourism has increased the influence of electronic word-of-mouth in consumer decision-making (Philips et al., 2015). This phenomenon has prompted the emergence of diverse platforms capturing on line reviews and recommendations shared by customers. The hotel industry delivers experience-based products, so customers are not able to judge their attributes until they purchase (experience) them. Thus, word-of-mouth plays a critical role in this industry (Tsao et al., 2015).

Recently, Review Sites like TripAdvisor have gained immense popularity as the main platforms for customers to communicate with each other (Banerjee and Chua, 2016). TripAdvisor has become the largest online review community for travelers in the world. It includes customer testimonials and evaluations of their real experiences with hotels and destinations (Melián-González et al., 2013). This platform offers users ‘independent’ travel reviews and comments written from other members, so it has become a powerful platform for sharing experiences at little cost (Banerjee and Chua, 2016; Cabiddu et al, 2014). For this reason, hotels are using this site to gain customer insights that allow them to personalize their service and improve customer experience.

Through analyzing the comments posted on online communities such as TripAdvisor, hotels are better able to understand customer preferences and complaints (Leung et al., 2013). Additionally, by responding publicly to comments, interacting with reviewers, and demonstrating empathy and corrective actions, a positive company image can be developed and potential customers will gain confidence in the brand (Jung et al., 2013). Consequently, most hotels are engaged in discussions and responding to comments via Review Sites to enhance customer relationships. By properly managing these platforms, hotels will improve their competency in generating, integrating and properly using valuable customer information.

As stated previously, Social CRM Capabilities are based on customer knowledge, and involve the ability to understand the customer and develop products or services that fit with their requirements (Palacios-Marqués et al., 2015). Therefore, by capturing customer preferences derived from online reviews, hotels can personalize their service and improve guest experience. As Park and Allen (2012) observed, for hoteliers, the use of Review Sites has become an effective mechanism for problem-solving and a way to engage customers in deeper relationships. Consequently, their strategic use will enable the development of valuable capabilities in managing customer knowledge. Therefore, we propose that:

*Hypothesis 2A: Review Sites Use will positively affect Social CRM Capabilities*

The use of Review Sites like TripAdvisor, has evolved from a novelty to become common practice in the hotel sector (Baka, 2016). These platforms multiply the power of electronic word-of-mouth at an exponential rate, disseminating recommendations and travelers' reviews, so their use is of strategic importance in creating business value. Positive comments can enhance the market reputation of the company as well as promote repeat purchase, so properly handling customer reviews will increase customer loyalty (Serra-Cantallops and Salvi, 2014).

Jung et al. (2013) noted that carefully managing customer reviews and paying attention to opinions stated on Review Sites can contribute to the consumer–firm relationship, maintaining a positive hotel image, which will translate into greater value creation. In this regard, Philips et al (2015) empirically examined a sample of Swiss hotels and confirmed how the effective management of reviews can contribute to hotels' financial performance. Additionally, Baka (2016) noted how hotel managers recognized that using TripAdvisor was a powerful tool to boost their hotels' reputation. Xie et al. (2015) also found a positive relationship between online reviews in TripAdvisor and offline hotel performance. Hence, it can be argued that:

*Hypothesis 2B: Review Sites Use will positively affect Social CRM Performance*

### **3.3 Social CRM Capabilities and performance**

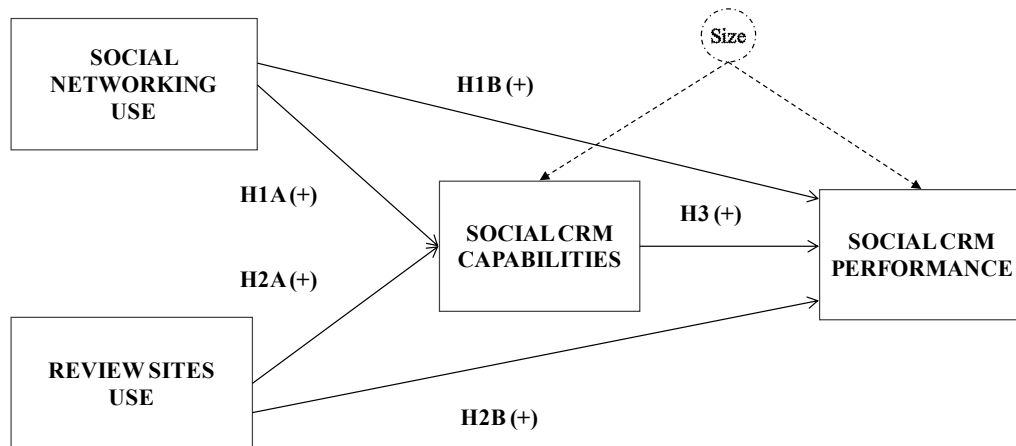
As previously mentioned, Social CRM Capabilities can be defined as the hotel's competence in generating customer information by using Social Media tools, integrating them across the organization and using them to better meet customer needs. These capabilities, which refer to firms' abilities in using and leveraging Social Media for improving customer relationships, are key mechanisms that help firms to create value (Braojos-Gómez et al., 2015). Prior research on CRM based on the RBV (Coltman, 2007) emphasized that the use of technological tools per se was not always sufficient to impact performance; it has to be transformed into distinctive capabilities. Social Media platforms allow hotels to know the preferences of the customer, but this knowledge has to be transferred to different areas of the business in order to deliver products or processes that satisfy these preferences. If these tools are used to create and manage new knowledge, it will help organizations to successfully innovate and face the challenges of the competitive environment (Palacios-Marqués et al., 2015).

In this vein, prior literature supports positive and significant relationships of Social CRM Capabilities with company performance. Küpper (2015) observed that these capabilities effectively mediated the impact of Social CRM technology use on performance. Likewise, Trainor et al. (2014) empirically confirmed that the use of Social Media facilitates the creation of Social CRM Capabilities, which provide firms with substantial benefits in terms of improved customer satisfaction, loyalty and retention. Thus, we hypothesize that:

*Hypothesis 3: Social CRM Capabilities will positively affect Social CRM performance*

Figure 1 presents our conceptual model with the mentioned hypotheses.

**Figure 1:** Conceptual model.



## 4. Method

### 4.1 Sample and procedure

Based on the analysis of the literature, a qualitative pilot study was conducted with interviews of academic, consultants and general managers with knowledge of the use of Social Media. Building on the interviewees' suggestions an initial structured questionnaire was developed to perform this research. Second, a pilot test with twelve general managers of hotels was conducted to determine the clarity of the questions. Based on the feedback gathered, some of the items were slightly modified and refined. Third, the final research model was empirically tested through data collected from general managers in Spanish hotels of three-star to five-star rating. Hotel general managers were selected because they are knowledgeable about, and representative of, the beliefs, values, and ideas embraced by the firms (Trainor et al, 2014).

The tourism and hospitality industry is an economic driving force in Spain. Spain is the second largest tourism destination in the world, recording 76 million international arrivals in 2016 (WTO, 2018). To collect the data, we established a reliable list of hotels in Spain drawing on a database provided by Turespaña (an organization attached to the Spanish Ministry of Tourism). Calls and e-mail invitations to complete the survey were sent to the sample of 900 Spanish hotels (selected randomly) from June to October 2015 (Table 2). We obtained 222 valid responses (24.66% response rate). All these hotels affirmed to be using Social Media tools as part of their Customer Relationship Management Strategy.

To reduce a possible desirability bias and to increase the response rate we offered participants the option to receive the results of the investigation once it was completed, assuring anonymity and using the data at an aggregated level. No significant differences (through t-statistics and chi-square) were found between early and late respondents, between the type/size of hotel, or between the sample and respondents (Armstrong and Overton, 1977).

**Table 2:** Technical details of the research

Sector	Hotel companies
Geographical location	Spain
Methodology	Structured questionnaire
Universe of population	4640 firms
Sample (response) size	900 (222) firms
Sample error	3.3%
Confidence level	95%, p-q=0.50; z=1.96
Period of data collection	From June to October 2015

## 4.2 Measures

All the items of the questionnaire were based on prior empirical studies and followed 7-point Likert type scales (Table 3). We measured strategic Review Sites Use and Social Networking Use based on previous scales (Choudhury and Harrigan, 2014; Sigala, 2011) about frequency/extent of use (from 1 “never” to 7 “every time”) and strategic importance of these tools (from 1 “not at all important” to 7 “extremely important”). We used the average of the standardized values of frequency/extent of use and the importance of use for Review Sites Use and Social Networking Use. The choice of considering a single platform to measure Review Sites Use was based on the literature. As Kim et al. (2015b) pointed out, most prior studies which examined Social Media in the hospitality sector focused exclusively on the platform TripAdvisor to represent online reviews (e.g.: Melián-González et al., 2013; Neirotti et al., 2016; Philips et al., 2015; Tsao et al., 2015).

**Table 3:** Measurement items

Variable	Items	
Review Sites Use	REVISITE	TripAdvisor
Social Networking Use	NETWUSE1	Twitter
	NETWUSE2	Facebook
	NETWUSE3	YouTube
	NETWUSE4	Flickr
Social CRM Capabilities	CAPA1	In this business, we use Social Media (SM) to conduct market research
	CAPA2	We use SM to detect changes in our customers' preferences
	CAPA3	We use SM to detect fundamental shifts in our industry (e.g. competition)
	CAPA4	We integrate customer information from the various functions that interact with customers (such as marketing, sales, and customer service)

	CAPA5	We integrate internal customer information with customer information from SM
	CAPA6	We merge third party information (such as mailing lists) with our customer database
	CAPA7	We have frequent interdepartmental meetings to discuss market trends identified via SM
	CAPA8	Data collected using SM on customer satisfaction are disseminated at all levels on a regular basis
	CAPA9	When one department finds out something important about competitors using SM, it is quick to alert other departments
	CAPA10	We take action in response to changes in customers' needs detected via SM
	CAPA11	If a major competitor launched an intensive campaign targeting our customers, we would respond immediately using SM
	CAPA12	Customer complaints can be filed and tracked using SM in our firm
Social CRM Performance	PERFOR1	Customer acquisition
	PERFOR2	Customer retention
	PERFOR3	Customer extension (e.g. cross-selling or up-selling products or services)
	PERFOR4	Increase in sales
	PERFOR5	Increase in market share
	PERFOR6	Profitability (ROA)
Size	SIZE	Number of employees

Likewise, we made use of tested scales to measure Social CRM Capabilities related to aspects such as market research (Trainor et al., 2014), changes in customers' preferences (Trainor et al., 2014), fundamental shifts in the industry (Trainor et al., 2014), information integration (Chuang and Lin, 2013; Jayachandran et al., 2005, Choudhury and Harrigan, 2014), information dissemination (Trainor et al., 2004), responsiveness (Choudhury and Harrigan, 2014; Trainor et al., 2014) and information generation (Trainor et al., 2014). A scale (1 "strongly disagree", 7 "strongly agree") of twelve items enabled the analysis of Social CRM Capabilities (subsequent confirmatory factor analysis led to the elimination of item 8). We analyzed the unidimensionality of the scale by conducting a factorial analysis where we obtained a single factor. This is in line with other researchers that have verified the unidimensionality of this scale (eg., Trainor et al., 2014).

Finally, based on previous studies (Keramati et al., 2010; Roh et al., 2015; Trainor et al., 2014) we drew up a scale (1 "Much worse than my competitors", 7 "Much better than my competitors") of six items to measure Social CRM Performance in comparison with the main competitors. Different studies have considered performance in the context of a CRM initiative as a unidimensional construct (eg., Dong, 2012; Trainor et al., 2014; Wang and Fen, 2012). We developed confirmatory factor analyses to validate the scales and they confirmed that the scales of Review Sites Use, Social Networking Use ( $\chi^2_2=13.61$ , Normed Fit Index [NFI]=0.97, Non-Normed Fit Index [NNFI]=0.93, Goodness of Fit [GFI]=0.99, Comparative Fit [CFI]=0.98, Incremental Fit Index [IFI]=0.98), Social CRM Capabilities ( $\chi^2_{44}=126.38$ , NFI=.97, NNFI=.98, GFI=.98, CFI=.98, IFI=.98), and Social CRM Performance ( $\chi^2_9=53.74$ , NFI=.98, NNFI=.97, GFI=.99,



CFI=.98, IFI=.98) all presented unidimensionality, high validity and reliability.

Additionally, in order to capture other organizational forces that might have an impact on the variables of the mode, we included hotel size as a control variable. This variable was chosen because it was widely used in prior research on the topic (Chuang and Lin, 2013; Kim et al, 2015a, Wang and Fen, 2012). Building on these studies, we assume that hotel size, as measured by the number of employees, might influence Social CRM Capabilities and performance because larger hotels may have more resources that could lead to higher-quality processes for customer information management and higher performance (Chuang and Lin, 2013). Hotels in the sample were classified according to the number of employees. We consider the following categories: large hotels (250 or more employees); medium-sized hotels (50 to 249 employees); small hotels (10 to 49 employees) and micro hotels (fewer than 10 employees).

### **4.3 Data analysis**

The proposed research model was tested using structural equation modeling with the software LISREL 8.8. We used the two-step approach (Anderson and Gerbin, 1988) assessing first the quality of the measurements through the validation and reliability assessments of the measurement model (Hair et al., 2010) and then we tested the hypotheses through the structural model.

## **5. Empirical analysis and results**

### **5.1 Measurement Model**

Firstly, we analyzed the psychometric properties of the measures (see Table 4). We observed that all the items showed high factor loading ( $\lambda > 0.70$ ) and statistically significant t-values ( $t > 16.97$ ) reflecting convergent validity and unidimensionality (Bollen, 1989). Additionally, we performed an exploratory factor analysis including all the items of the scale and we observed how a single factor emerged for each of the proposed constructs of the model, confirming the unidimensionality of the proposed constructs. Besides, the Average Variance Extracted (AVE) for the different construct is higher ( $AVE > 0.60$ ) than the recommend minimum value of 0.50 (Fornier and Larcker, 1981), being the items significantly related to their construct, supporting convergent validity.

Secondly, we tested that the squared multiple correlations ( $R^2$ ) of the all the items were higher than 0.5, supporting reliability. The Composite Reliability (CR) of the constructs reflects the percent variance in a measurement captured by the trait variance and it is a more rigorous estimate for reliability than the Cronbach's Alpha. The Alpha for the constructs in this research ( $\alpha > 0.83$ ) and the CR ( $CR > 0.86$ ) are higher than the recommended value of 0.70. The CR, AVE and the Cronbach's Alpha values support the internal consistency and reliability of the scales (Bagozzi, 1980; Fornier and Larcker, 1981; Hair et al., 2010). The measurement model also presents a good model fit ( $\chi^2$  (204 d.f.)=604.81 ( $p > 0.01$ ); NFI=0.95; NNFI=0.96; IFI=0.96; Parsimony Goodness of Fit Index [PGFI]=0.57; Estimated Non-centrality Parameter [NCP]=400.81; Relative Fit Index [RFI]=0.94; CFI=0.96; Root Mean Square Error of Approximation [RMSEA]=0.08).

**Table 4: Measurement-model results**

Latent Variables	Items	Completely Standardized Latent Construct Loading				$R^2$	C.R.	AVE
		Social Networking Use $\alpha=0.838$	Review Sites Use	Social CRM Capabilities $\alpha=0.936$	Social CRM Performance $\alpha=0.923$			
Social Networking Use	NETWUSE1	0.75***(17.26)				0.56	0.863	0.613
	NETWUSE2	0.80***(22.66)				0.65		
	NETWUSE3	0.80***(27.16)				0.63		
	NETWUSE4	0.78***(20.78)				0.60		
Review Sites Use	REVISITE		1.00***(29.73)			1.00		
Social CRM Capabilities	CAPA1			0.78***(25.34)		0.61	0.945	0.609
	CAPA2			0.86***(38.71)		0.74		
	CAPA3			0.84***(31.03)		0.71		
	CAPA4			0.76***(19.00)		0.57		
	CAPA5			0.83***(30.80)		0.69		
	CAPA6			0.72***(18.71)		0.51		
	CAPA7			0.75***(17.75)		0.56		
	CAPA9			0.71***(16.97)		0.50		
	CAPA10			0.81***(27.17)		0.66		
	CAPA11			0.77***(19.84)		0.59		
	CAPA12			0.74***(21.16)		0.55		
	Social CRM Performance	PERFOR1				0.81***(21.88)		
PERFOR2					0.75***(18.79)	0.57		
PERFOR3					0.80***(21.34)	0.64		
PERFOR4					0.93***(42.30)	0.86		
PERFOR5					0.91***(25.71)	0.83		
PERFOR6					0.88***(35.75)	0.77		
Goodness-of-fit statistics	$\chi^2_{204}=604,81$ ( $P > 0.01$ ) ECVI=3.18 AIC=702.81 CAIC=918.54 NFI=0.95 NNFI=0.96 IFI=0.96 PGFI=0.57 PNFI=0.84 NCP=400.81 RFI=0.94 CFI=0.96 RMSEA=0.08							

Notes:  $\lambda^*$  = Standardised structural coefficient (t-students are shown in parentheses);  $R^2$ =Reliability; C.R.=Composite reliability; AVE=Average variance extracted; \*\*\*  $p < 0.001$  (two-tailed).

Thirdly we examined discriminant validity (Table 5). The levels of AVE are higher than the squared correlation between each pair of constructs, the highest correlation between any two constructs had a value of 0.61 which is significantly different from unity. We observed also that no confidence interval in the

estimation of the correlation between each pair of factors contains the value 1 reflecting that each construct differs from others supporting discriminant validity (Anderson and Gerbin, 1988; Fornier and Larcker, 1981). Likewise, we performed a chi-square difference test between the values obtained for an unconstrained model and a constrained model (a model that constrains the estimated correlation parameter between each pair of latent to 1.0) and its results reflected that the constructs are not perfectly correlated also supporting the existence of discriminant validity (Anderson and Gerbin, 1988).

**Table 5: Discriminant validity**

Variable	1	2	3	4
1. Social Networking Use	<b>0.613</b>	(0.20, 0.49)	(0.50, 0.72)	(0.19, 0.47)
2. Review Sites Use	0.115	<b>1.000</b>	(0.38, 0.63)	(0.31, 0.57)
3. Social CRM Capabilities	0.372	0.260	<b>0.609</b>	(0.41, 0.63)
4. Social CRM Performance	0.108	0.193	0.270	<b>0.122</b>

*Notes:* Numbers on the diagonal show the AVE. Numbers below the diagonal represent the squared correlation between the constructs. Numbers above the diagonal represent the confidence interval between each pair of constructs (95%).

Finally, we analyzed the possibility of existence of common method bias (Podsakoff et al., 2003; Podsakoff and Organ, 1986). To avoid it, we communicated the study goals, assured the survey's anonymity, used previous validated scales and used items with a random order. Additionally, we conducted a Harman's one factor test (the largest single component did not explain the majority of the variance in our data – 44.41% , and four components emerged with eigenvalues of more than 1.0, globally explaining over 69% of the total variance). We also developed a one-factor model and compared it with the measurement model (the fit was worse for the one-dimensional model than for the measurement model), and added a first-order factor (common latent factor) with all of the measures as indicators to the researcher's theoretical model (there were no differences greater than 0.200 between indicator loading before and after adding the common latent factor). All these tests indicated that common method bias was not a serious threat to our data.

## 5.2 Structural Model

We used a recursive structural model, with Social Networking Use ( $\xi_1$ ) and Review Sites Use, as the exogenous latent variables, Social CRM Capabilities ( $\eta_1$ ) as the first-grade endogenous latent variable, and Social CRM Performance ( $\eta_2$ ) as the second-grade endogenous latent variables. Size ( $\xi_3$ ) was introduced as an exogenous latent variable of control. We tested the structural paths proposed by our hypotheses and analyzed the estimate direct, indirect and total effects with the covariance and asymptotic covariance matrix

as input using SEM (Table 6). We used reflective constructs based on their theoretical structure, estimated reliability statistics (Coltman et al., 2008), and previous studies that considered these variables as reflective measures (Chang et al, 2010; Li, 2001; Sin et al., 2005).

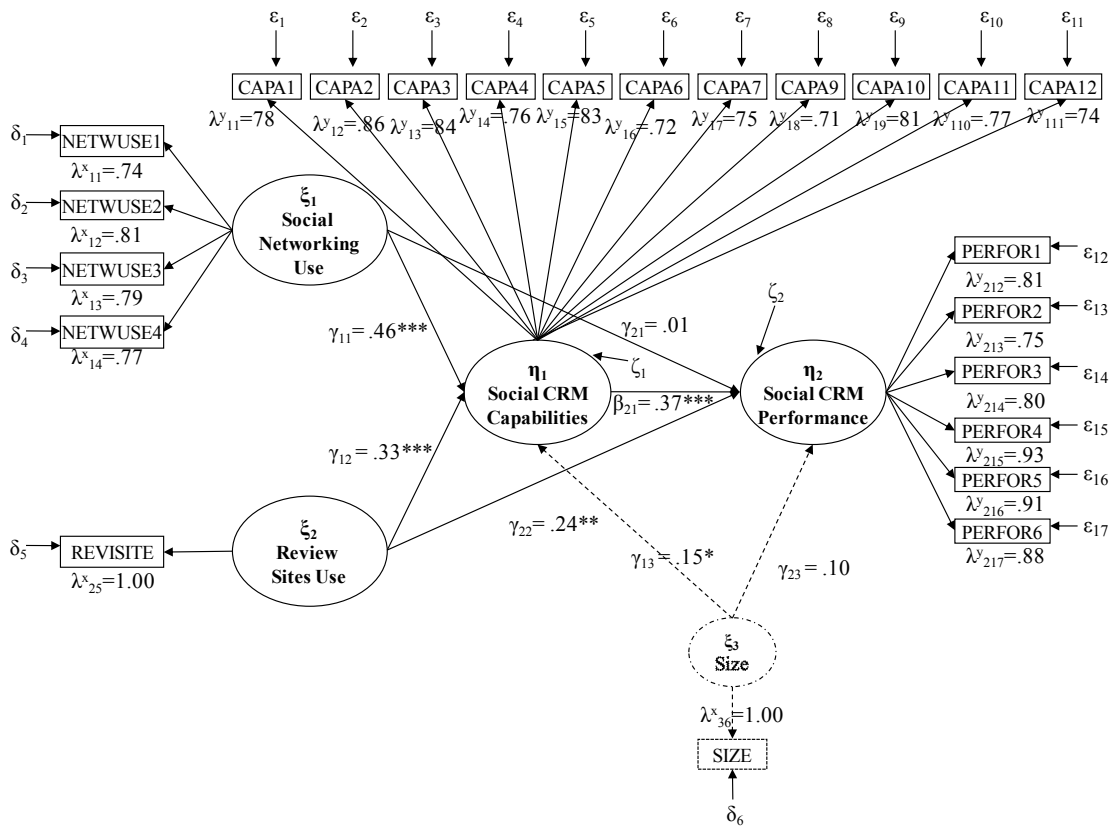
**Table 6:** Structural propose model result (direct, indirect, and total effects)

Effect from	To	Direct Effects <sup>a</sup>	<i>t</i>	Indirect Effects <sup>a</sup>	<i>t</i>	Total Effects <sup>a</sup>	<i>t</i>
Social Networking Use	→ Social CRM Capabilities	0.46***	6.06			0.46***	6.06
Social Networking Use	→ Social CRM Performance	0.01	0.05	0.17**	2.91	0.18*	2.01
Review Sites Use	→ Social CRM Capabilities	0.33***	5.01			0.33***	5.01
Review Sites Use	→ Social CRM Performance	0.24**	2.65	0.12**	2.92	0.36***	4.47
Social CRM Capabilities	→ Social CRM Performance	0.37***	3.59			0.37***	3.59
Size	→ Social CRM Capabilities	0.15*	2.28			0.15*	2.28
Size	→ Social CRM Performance	0.10	1.54	0.05*	2.12	0.15*	2.32
Goodness of Fit Statistics	$\chi^2_{222}=637.53$ ( $P>0.01$ ) ECVI=3.37 AIC=745.53 CAIC=983.28 NFI=0.94 NNFI=0.96 IFI=0.96 PGFI=0.57 NCP=415.53 RFI=0.94 CFI=0.96 RMSEA=0.08						

Note: <sup>a</sup> Standardised Structural Coefficients; \* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ (two-tailed).

The analysis of the fit of the structural model (Anderson and Gerbin, 1988) indicated that the model showed a good overall fit ( $\chi^2$  (222 d.f.)=637.53 ( $p>0.01$ ); NFI=0.94; NNFI=0.96; IFI=0.96; PGFI=0.57; NCP=415.53; RFI=0.94; CFI=0.96; RMSEA=0.08). The standardized path coefficients of the structural model provide evidence of the hypothesized relationships (Figure 2).

**Figure 2:** Structural result of proposed model.



Regarding the hypotheses test, we observed that hypothesis H1a was supported and Social Networking Use was related to Social CRM Capabilities ( $\gamma_{11}=0.46$   $p<.001$ ), but H1b was not supported ( $\gamma_{21}=0.01$   $p>.10$ ). Nevertheless, we found an indirect effect of Social Networking Use through Social CRM Capabilities ( $0.46 \times 0.37$ ) on Social CRM Performance ( $0.17$   $p<.01$ , see Bollen (1989) for calculation rules). The total influence of Social Networking Use on Social CRM Performance is thus  $0.18$  ( $p<.05$ ). Results supported H2a, evidencing how Review Sites Use is related to and affects Social CRM Capabilities significantly ( $\gamma_{12}=0.33$   $p<.001$ ), and H2b was also supported reflecting how Review Sites Use directly affects Social CRM Performance ( $\gamma_{22}=0.24$   $p>.01$ ). Review Sites Use also impacts Social CRM Performance indirectly ( $0.12$   $p<.01$ ) through Social CRM Capabilities ( $0.33 \times 0.37$ ). The total influence of Review Sites Use on Social CRM Performance is thus  $0.36$  ( $p<.001$ ). Comparing the magnitudes of these effects, we observed that the global effect of Review Sites Use on Social CRM Performance is larger than that the effect of Social Networking Use on Social CRM Performance.

Likewise, Social CRM Performance is affected significantly by Social CRM Capabilities ( $\beta_{21}=0.37$   $p>.001$ ) supporting H3. Globally, Social CRM Capabilities ( $R^2=0.50$ ) and Social CRM Performance ( $R^2=0.32$ ) are well explained by the model. Direct effect of size on Social CRM Capabilities ( $\gamma_{22}=0.15$   $p<.05$ ) is significant. Direct effect of Size on Social CRM Performance ( $\gamma_{23}=0.23$   $p>.05$ ) is not significant. The indirect and total effect of size can be observed in Table 6.

Finally, comparisons with alternative models are recommended to show that a hypothesized model is the best representation of the data (Hair et al., 2010). The structural proposed model is tested with alternative models and is the most acceptable, parsimonious and preferable model, supporting the relationships among the constructs analyzed (Table 7). So, if we compare Model 1 (structural proposed model) with Model 2, we can see that the latter has a worse RMSEA ( $\Delta=0.003$ ), ECVI ( $\Delta=0.09$ ), AIC ( $\Delta=26.56$ ), and NCP ( $\Delta=27.56$ ). So, results show that Model 1 is preferred to Model 2 ( $\Delta\chi^2=28.56$ ) and to the other models.

**Table 7: Structural proposed model against alternative statistics model**

Model	Description	$\chi^2$	$\Delta\chi^2$	RMSEA	ECVI	AIC	NCP
1	Structural proposed model	637.53		0.082	3.37	745.53	415.53
2	W.R. Social Networking Use to Social CRM Capabilities	666.09	28.56	0.085	3.49	772.09	443.09
3	W.R. Review Sites Use to Social CRM Capabilities	658.26	20.73	0.084	3.46	764.26	435.26
4	W.R. Review Sites Use to Social CRM Performance	647.30	9.77	0.083	3.41	753.30	424.30
5	W.R. Social CRM Capabilities to Social CRM Performance	615.47	10.66	0.085	3.22	711.47	410.47

Notes: W.R. = Without relationship

## 6. Discussion and conclusions

Social Media tools are revolutionizing the way companies relate to the market, and their impact is being particularly felt in the hospitality industry. However, despite the relevance of the phenomenon, empirical research on the topic remains limited and there is a need for additional research examining the effectiveness of Social Media use and its impact on value creation in a hotel context. Our study is a first effort to comprehensively address this research gap.

By building on the RBV, we developed a research model to examine the effect of the use of Social Media tools on Social CRM Performance. We conceptualized Social CRM Performance as a multidimensional construct including not only customer related measures like customer retention or loyalty, but also financial measures, like increase in sales or profitability. Building on prior literature, we assume that Social Media

use can act as a relevant enabler of Social CRM Capabilities. Attending to its differential features, we categorized Social Media use in two main groups: Social Networking Use and Review Sites Use. Drawing on a sample of 222 Spanish hotels, results expose the critical role of Social CRM Capabilities on creating value with Social Media use.

This research has key implications for theory. First, as commented, results emphasize the strategic relevance of Social CRM Capabilities in the process of value creation. These capabilities can be considered as the missing link that connects Social Media use with real performance; as they will lead companies towards achieving business value with Social Media investments. Social CRM Capabilities, based on customer knowledge captured via Social Media, allow hotels to better understand the customer and develop services that better fit with their requirements. Our findings confirm, in a hospitality context, the evidence obtained by prior studies (Küpper, 2015; Trainor et al., 2014) which demonstrate the key contribution of Social CRM Capabilities to business success. Social CRM Capabilities, which included the ability to identify customer preferences to improve customer service, have emerged in our study as distinctive capabilities that can be a source of competitive advantage for hotels. Building on the RBV assumptions, results ratify also prior literature (Rapp et al., 2010; Wade and Hulland, 2004) asserting that it is necessary to examine intermediate variables, in our case Social CRM Capabilities, when examining how technology use (Social Media) relate to firm performance.

Second, regarding Social Networking sites (Facebook, Twitter, YouTube, Flickr), results show that their use is not directly related to Social CRM Performance. Perhaps surprisingly, we have observed how the simple fact of having an active presence on these platforms does not seem to translate into improved customer relationship performance. However, Social Networking Use proved to impact Social CRM Capabilities, which were drivers of Social CRM Performance. Consequently, we confirmed how the use of Social Networks can help to create valuable competencies based on customer information. Only when information captured using these tools is integrated into the whole organization and used to understand customer needs and personalize service accordingly, will it have a positive impact on value creation.

Although initially surprising, our results are consistent with recent studies on the topic in a hospitality context. In this vein, Aluri et al. (2015) observed that traveler satisfaction and purchase intention were not directly increased by the presence of Social Media channels. Palacios-Marqués et al. (2015) also found that the direct relationship between online social networks use and hotel performance was not significant and concluded that the main advantage provided by Social Media is its capacity to assist in the management of customer knowledge. So Social Networking use can be considered a necessary but not sufficient condition to create business value.

Third, with regard to Review Sites, results confirmed that their use not only impacted the creation of Social CRM Capabilities, but also exerted a direct impact on performance. These findings confirmed the strategic relevance of Review Sites like TripAdvisor on the hospitality industry, evidencing how electronic word-of-mouth plays a fundamental role in this industry. Our results demonstrate that the effective utilization and management of customer reviews can contribute significantly to value creation. Findings are consistent with prior research which emphasized the strategic relevance of online reviews for hotel performance (Neirotti et al., 2016; Tsao et al., 2015; Xie et al., 2014). If hoteliers analyze content in these platforms and remain conscious of customers' satisfaction levels the potential damage of negative word-of-mouth can be reduced. To the extent managers properly address complaints, customers feel that their concerns are taken seriously. Such behavior can reduce customer dissatisfaction, preventing negative WOM. Additionally, positively interacting with reviewers can enhance hotel reputation and foster customer loyalty. Our findings support prior evidence (Philips et al., 2015) asserting that the impact of Review Sites Use on performance can be both direct and indirect (mediated by Social CRM Capabilities).

This study offers several contributions to the existing literature by providing empirical evidence of the positive effect of firms' strategic use of Social Media tools on value creation, specifically in a hospitality context. First, in the study Social Media use is examined in a comprehensive way, including the use of both Social Networking platforms and Review Sites. In addition, the topic is studied in the Spanish hotel sector, one of the most relevant markets in the world, where the subject has been scarcely analysed. Further, the current study builds on a solid theoretical base, the RBV, which has been widely used in prior literature to



analyze the strategic impact of technology use on performance. Drawing on a solid sample, results highlight the specific relevance of building Social CRM Capabilities in the process of value creation via Social Media use. Social CRM Capabilities emerged as a distinctive element (the missing link), mediating the impact of Social Media use on performance. When considering how little empirical research has been undertaken to examine the benefits of hotels' use of Social Media tools, the current study's findings clearly enrich the literature and advance our knowledge about the phenomenon.

Regarding managerial implications, our findings can also help practitioners to adjust their use of Social Media in the context of their marketing strategies. According to the results, practitioners should focus on the development of Social CRM Capabilities, since they have proven to exert the strongest impact on firm performance. Social Media cannot be used exclusively as an additional channel for advertisement or promotion. So, posting only promotional information and specific sales may not be the optimal strategy. Instead, these platforms need to be used strategically to foster connections between guests and hotels, engaging both in valuable conversations.

Hotel managers should implement specific processes to capture customer information with Social Media, which can be useful for detecting changes in customer needs and preferences. In addition, this information should be shared and disseminated throughout the whole organization, so different departments can work together to improve customer interactions. Finally, it seems paramount to effectively use this knowledge to improve service and foster customer engagement, which will subsequently enhance customer relationship performance. Our findings also emphasize how Review Sites are a fundamental tool to create business value, so hotel managers need to pay special attention to these platforms and develop a specific strategy to manage customer reviews, measuring and monitoring these tools to understand their impact on reputation.

We acknowledge some limitations of the study, which highlight opportunities for further research. First, the use of a single source for both independent and dependent variables could produce common method bias. Although different tests indicated no evidence of this problem, it would be interesting to strengthen the research with a collection of independent and dependent variables from diverse data sources (Podsakoff et

al., 2003). The second limitation is the cross-sectional nature of the data, which makes it difficult to capture the dynamic nature of the phenomenon under study. Longitudinal studies are needed to reinforce the obtained results. The third limitation is that all hotels examined are based in Spain. Future research should validate the model in different countries. Future research replicating the study by using data in other geographic contexts are needed to test the generalizability of our findings. Likewise, although the scales used in this research for Social CRM Capabilities and Social CRM Performance have proved to be unidimensional, future research could contemplate these constructs under a multidimensional perspective to enrich the analysis. Furthermore, we have considered Social Networking and Review Sites use as basic enablers of Social CRM Capabilities. Although an acceptable proportion of these capabilities (50%) is explained by both variables, future studies could consider additional factors to enrich the analysis. Finally, we relied on a single platform (TripAdvisor) to examine the use of Review Sites. Future studies could extend the measure of these sites introducing additional platforms in the scale to improve its robustness.

### **Acknowledgements**

We thank the anonymous reviewers for their valuable input in the review of this article and the public funding of the projects P11-SEJ-7988 and ECO2017-88222.

### **References**

- Ahani, A., Rahim, N. Z. A., Nilashi, M. 2017. Forecasting social CRM adoption in SMEs: A combined SEM-neural network method, *Computers in Human Behavior* 75, 560-578.
- Aluri, A., Slevitch, L. Larzelere, R. 2015. The effectiveness of embedded Social Media on hotel websites and the importance of social interactions and return on engagement, *International Journal of Contemporary Hospitality Management* 27(4), 670-689.
- Anderson, C. (2012). The impact of social media on lodging performance, *Cornell Hospitality Report* 12(15), 1-12.
- Anderson, J. C. Gerbin, D. W. 1988. Structural equation modeling in practice: a review and recommended two-step approach, *Psychological Bulletin* 103, 411-423.
- Armstrong J. S., Overton T. S. 1977. Estimating nonresponse bias in mail surveys, *Journal of Marketing Research* 14, 396-402.
- Aral S., Dellarocas C., Godes D. 2013. Introduction to the special issue Social Media and business transformation: A framework for research, *Information Systems Research* 24(1), 3-13.

- Bagozzi R. P. 1980. *Causal Models in Marketing*, Wiley, New York.
- Baird C. H., Parasnis G. 2011. From social media to social CRM, *Strategy & Leadership* 39(5), 30-37.
- Baka V. 2016. The becoming of user-generated reviews: Looking at the past to understand the future of managing reputation in the travel sector, *Tourism Management* 53, 148-162.
- Barney, J. 1991. Firm resources and sustained competitive advantage, *Journal of Management* 17(1), 99–120.
- Banerjee, S., Chua, A. Y. K. 2016. In search of patterns among travellers' hotel ratings in TripAdvisor, *Tourism Management*, 53, 125-131.
- Bollen K. A. 1989. *Structural Equations with Latent Variables*, Wiley-Interscience Publication, USA.
- Boyd D. M., Ellison N. B. 2007. Social network sites: definition, history, and scholarship, *Journal of Computer-Mediated Communication* 13 (1), 210–230.
- Braojos-Gomez J., Benitez-Amado J., Llorens-Montes F. J. 2015. How do small firms learn to develop a social media competence?, *International Journal of Information Management* 35(4), 443-458.
- Cabiddu F., De Carlo M, Piccoli G. 2014. Social media affordances: Enabling customer engagement, *Annals of Tourism Research* 48, 175-192.
- Cha M., Benevenuto F., Ahn Y., Gummadi K. 2012. Delayed information cascades in Flickr: Measurement, analysis, and modeling, *Computer Networks* 56 (3), 1066–1076.
- Chan, N. L., Guillet, B. D. 2011. Investigation of social media marketing: How does the hotel industry in Hong Kong perform in marketing on social media websites?, *Journal of Travel & Tourism Marketing* 28(4), 345-368.
- Chang, W., Park, J. E., Chaib, S. 2010. How does CRM technology transform into organizational performance? A mediating role of marketing capability, *Journal of Business Research* 63 (8), 849–855.
- Choudhury M., Harrigan P. 2014. CRM to social CRM: the integration of new technologies into customer relationship management, *Journal of Strategic Marketing* 22 (2), 149-176.
- Chuang S., Lin H. 2013. The roles of infrastructure capability and customer orientation in enhancing customer-information quality in CRM systems: Empirical evidence from Taiwan, *International Journal of Information Management* 33, 271– 281.
- Coltman T. 2007. Why build a customer relationship management capability?, *Journal of Strategic Information Systems* 16(3), 301–320.
- Coltman, T., Devinney, M., Midgley, D. F., Venaik, S. 2008. Formative versus reflective measurement models: Two applications of formative measurement, *Journal of Business Research* 61, 1250–1262.
- Day, G. S. 1994. The capabilities of market-driven organizations, *Journal of Marketing* 58(4), 37–52.
- Denicolai, S., Cioccarelli, G., Zucchella, A. 2010. Resource-based local development and networked core-competencies for tourism excellence, *Tourism management* 31(2), 260-266.
- Dong, J. Q., Wu, W. 2015. Business value of social media technologies: Evidence from online user innovation communities, *Journal of Strategic Information Systems* 24, 113–127.

- Escobar-Rodríguez, T., Carvajal-Trujillo, E. 2013. An evaluation of Spanish hotel websites: Informational vs. relational strategies, *International Journal of Hospitality Management* 33, 228–239.
- Fornell C., Larcker D. F. 1981. Evaluating structural equation models with unobservable measurement error, *Journal of Marketing Research* 18, 39-50.
- Greenberg P. 2010. The impact of CRM 2.0 on customer insight, *The Journal of Business and Industrial Marketing* 25(6), 410–419.
- Hair J. F., Anderson R. E., Tatham R. L., Black W. C. 2010. *Multivariate Data Analysis*, Prentice Hall, New Jersey, USA.
- Hansen D. L., Shneiderman B., Smith M. A. 2011. *Analyzing social media networks with NodeXL: Insights from a connected World*, Morgan Kaufmann, Burlington.
- Harrigan P., Soutar G., Choudhury M. M., Lowe M. 2015. Modeling CRM in a social media age, *Australasian Marketing Journal* 23, 27-37.
- Heidemann J., Klier M., Probst F. 2012. Online social networks: A survey of a global phenomenon, *Computer Networks* 56(18), 3866–3878.
- Hoffman D. L., Fodor M. 2010. Can you measure the ROI of your Social Media Marketing?, *MIT Sloan Management Review* 52(1) 41-49.
- Jayachandran S., Sharma S., Kaufman P., Raman P. 2005. The role of relational information processes and technology use in customer relationship management, *Journal of Marketing* 69 (4), 177–192.
- Jung T. H., Ineson E.M., Green E. 2013. Online social networking: Relationship marketing in UK hotels, *Journal of Marketing Management* 29 (3-4), 393-420.
- Kaplan A. M., Haenlein M. 2010. Users of the world, unite! The challenges and opportunities of Social Media, *Business Horizons* 53(1), 59–68.
- Keramati A., Mehrabi H., Mojir N. 2010. A process-oriented perspective on customer relationship management and organizational performance: An empirical investigation, *Industrial Marketing Management* 39 (7), 1170–1185.
- Kim, S., Koh, Y., Cha, J., Lee, S. 2015a. Effects of social media on firm value for US restaurant companies, *International Journal of Hospitality Management* 49, 40-46.
- Kim, W. G., Lim, H., Brymer, R. A., 2015b. The effectiveness of managing social media on hotel performance, *International Journal of Hospitality Management* 44, 165–171.
- Küpper, T. 2015. *Evaluating Social CRM Performance: An Organizational Perspective*, Doctoral Thesis, University of St. Gallen.
- Leung D., Law R., Van Hoof H., Buhalis D. 2013. Social media in tourism and hospitality: A literature review, *Journal of Travel & Tourism Marketing* 30(1-2), 3-22.
- Li, P. 2001. *The Critical Success Factors of Customer Relationship Management (CRM) Technological Initiatives*, Doctoral Thesis, Concordia University.
- Luo X., Zhang J., Duan W. 2013. Social media and firm equity value, *Information Systems Research* 24(1), 146-163.

- Melián-González S., Bulchand-Gidumal J., López-Valcárcel B. G. 2013. Online customer reviews of hotels: As participation increases, better evaluation is obtained, *Cornell Hospitality Quarterly* 54(3), 274-283.
- Melville, N., Kraemer, K., Gurbaxani, V., 2004. Review: Information technology and organizational performance: an integrative model of IT business value, *MIS Quarterly* 28(2), 283–322.
- Michaelidou N., Siamagka N. T., Christodoulides G. 2011. Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands, *Industrial Marketing Management* 40(7), 1153–1159.
- Munar A. M., Jacobsen J. S. 2014. Motivations for sharing tourism experiences through Social Media, *Tourism Management* 43, 46-54.
- Neirotti, P., Raguseo, E., Paolucci, E. 2016. Are customers' reviews creating value in the hospitality industry? Exploring the moderating effects of market positioning, *International Journal of Information Management*, <http://dx.doi.org/10.1016/j.ijinfomgt.2016.02.010>
- Palacios-Marqués, D., Merigó, J. M., Soto-Acosta, P. 2015. Online social networks as an enabler of innovation in organizations, *Management Decision* 53(9), 1906-1920.
- Park S. Y., Allen J. P. 2012. Responding to online reviews: Problem solving and engagement in hotels, *Cornell Hospitality Quarterly* 54(1), 64–73.
- Philips P., Zigan K., Marcos-Silva M. M., Schegg R. 2015. The interactive effects of online reviews on the determinants of Swiss hotel performance: A neural network analysis, *Tourism Management* 50, 130-141.
- Podsakoff P. M., MacKenzie S. B., Lee J. Y., Podsakoff N. P. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies, *Journal of Applied Psychology* 88(5), 879-903.
- Podsakoff P. M., Organ D. W. 1986. Self-reports in organization research: problems and prospects, *Journal of Management* 12, 531-544.
- Rapp A., Trainor A. J., Agnihotri R. 2010. Performance implications of customer-linking capabilities: Examining the complementary role of customer orientation and CRM technology, *Journal of Business Research* 63, 1229–1236.
- Rishika R., Kumar A., Janakiraman R., Bezawada R. 2013. The effect of customers' social media participation on customer visit frequency and profitability: An empirical investigation, *Information Systems Research* 24(1), 108-127.
- Roh T., Ahn C. K, Han I. 2005. The priority factor model for customer relationship management system success, *Expert Systems with Applications* 28, 641–654.
- Serra-Cantalops A., Salvi F. 2014. New consumer behavior: a review of research on eWOM and hotels, *International Journal of Hospitality Management* 36, 41–51.
- Sigala M. 2011. eCRM 2.0 applications and trends: The use and perceptions of Greek tourism firms of social networks and intelligence, *Computers in Human Behavior* 27, 655–661.

- Sigala, M. 2016. Social CRM Capabilities and readiness: Findings from Greek tourism firms, *Information and communication technologies in tourism 2016* (Springer) 309-322.
- Sin, L. Y. M., Tse, A. C. B., Yim, F. H. K. 2005. CRM Conceptualization and scale development, *European Journal of Marketing* 39 (11/12), 1264–1290.
- Sparks, B., Perkins, H., Buckley, R., 2013. Online travel reviews as persuasive communication: the effects of content type, source, and certification logos on consumer behavior, *Tourism Management* 39, 1–9.
- Su, N., Mariadoss, B. J., Reynolds, D. 2015. Friendship on social networking sites: Improving relationships between hotel brands and consumers, *International Journal of Hospitality Management* 51, 76–86.
- Teece, D.J., Pisano, G., Shuen, A. 1997. Dynamic capabilities and strategic management, *Strategic Management Journal* 18(7), 509-533.
- Trainor K. J. 2012. Relating social media technologies to performance: A capabilities-based perspective, *Journal of Personal Selling and Sales Management* 32(3), 317–331.
- Trainor K. J., Andzulis J., Rapp, A., Agnihotri R. 2014. Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM, *Journal of Business Research* 67(6), 1201-1208.
- Tsao, W.C., Hsieh, M. T., Shih, L. W., Lin T. M. Y. 2015. Compliance with eWOM: The influence of hotel reviews on booking intention from the perspective of consumer conformity, *International Journal of Hospitality Management* 46, 99-111.
- Wade M., Hulland J. 2004. The resource-based view and information systems research: review, extension, and suggestions for future research, *MIS Quarterly*, 28(1), 107–142.
- Wang, Y., Feng, H. 2012. Customer relationship management capabilities: Measurement, antecedents and consequences, *Management Decision*, 50(1), 115–129.
- Weinberg B. D., Pehlivan E. 2011. Social spending: Managing the social media mix, *Business Horizons* 54, 275-282.
- World Tourism Organization. 2018. Tourism Highlights. 2017 Edition, <https://www.e-unwto.org/doi/pdf/10.18111/9789284419029> (accessed 15.01.2018).
- Xiang, Z., Du, Q., Ma, Y., Fan, W. 2017. A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism, *Tourism Management* 58, 51-65.
- Xie, K. L., Zhang, Z., Zhang, Z. 2014. The business value of online consumer reviews and management response to hotel performance. *International Journal of Hospitality Management* 43, 1–12.
- Zeng, B., Gerritsen, R. 2014. What do we know about social media in tourism? A review, *Tourism Management Perspectives*, 10, 27–36.