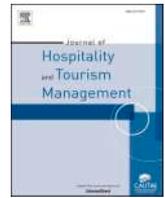


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Revenue management and CRM via online media: The effect of their simultaneous implementation on hospitality firm performance

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ABSTRACT

The study seeks to identify the effects of the simultaneous implementation of Revenue Management and CRM on business performance among hospitality firms and to determine whether Market Orientation constitutes a suitable business culture for fostering this joint approach in the online environment. A quantitative empirical study among chain hotels, based on structural equation modeling, is conducted. The results indicate that the simultaneous implementation of Revenue Management and CRM in the online environment positively influences business performance, and that the adoption of online Market Orientation is an antecedent of the implementation of both of these marketing processes.

1. Introduction

In recent years, Internet-related technologies have radically changed the structure of many industries, bringing with them new rules and roles (Raguseo, Neirotti, & Paolucci, 2017). To secure a competitive advantage, it is therefore essential that firms rethink and reshape their marketing strategies (Homburg, Jozić, & Kuehnl, 2017), not least because the online environment provides more extensive opportunities to relate more directly with customers (Wang, 2016). The formation of direct relationships between customers and firms is a key factor that service firms, and hospitality firms in particular, should take advantage of (as services are “perishable” and their supply is limited by the capacity of the firm) through the implementation of marketing processes that contribute to managing demand profitably and sustainably (Selmi & Chaney, 2018). Two key marketing processes in relation to demand-management in the online context are Revenue Management and Customer Relationship Management (CRM).

The literature shows that the implementation of Revenue Management and CRM has positive effects on the firm’s results (e.g. Choudhury & Harrigan, 2014; Noone,ENZ, & Canina, 2019). While Revenue Management helps stimulate demand (Sigala, 2015), CRM creates and sustains more valuable relationships with customers (Rahimi & Kozak, 2017), but they both share the same purpose: to increase the firm’s revenues and profitability through its relationships with customers (Wang, 2012a). However, each is based on a different perspective and

different mechanics. As Wang (2012b) observed, to prevent Revenue Management from reducing the stability of relationships and trust between firms and their key customers, it is important to ensure that this process is complemented by the proper use of CRM, to achieve the right balance between revenue-maximization and the sustaining of long-term customer relationships (Wang, Heo, Schwartz, Legohérel, & Specklin, 2015). In other words, CRM enables Revenue Management to be upgraded from what was originally a tactical tool to a more strategic approach (Erdem & Jiang, 2016). Similarly, CRM can leverage the possibilities offered by Revenue Management to identify the market segments in which to prioritize marketing actions and establish long-term relationships. Hence, the simultaneous implementation of CRM and Revenue Management will be a key success factor for firms (Denizci Guillet & Shi, 2019).

In this regard, there are several studies addressing the theoretical study of the adoption of a combined CRM and Revenue Management approach in the service sector (e.g. Hendler & Hendler, 2004; Vaez-tehrani, Modarres, & Aref, 2015; Vinod, 2008). One very recent study, by Denizci Guillet and Shi (2019), offers a theoretical framework and a qualitative study that identifies the key factors in the effective strategic integration of Revenue Management and CRM. However, to date, the literature has not provided empirical evidence of the effects of this strategic combined approach on hospitality firm performance (Wang et al., 2015). Hence, an important step in this direction is to analyze the internal mechanisms that enable hospitality firms to simultaneously

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employ Revenue Management and CRM, to better understand their effect on performance, and to study the firm's capacity to realize this simultaneous approach (Denizci Guillet & Shi, 2019; Noone, Kimes, & Renaghan, 2003). This capacity relies on a business culture that facilitates the implementation of marketing processes aimed at creating value for the market over the long term.

Market Orientation (MO) is recognized by the literature as one such type of business culture that enables firms to increase the positive effects of other marketing processes (Tsiotsou & Vlachopoulou, 2011). It has been found to help firms achieve a high degree of inter-functional coordination by guiding them toward the pursuit of greater value for the market, which, ultimately, will translate into improved business results (Polo-Peña, Frías-Jamilena, & Rodríguez-Molina, 2017). It is also considered particularly well-suited to being implemented via online media (hereafter, "online MO"). The literature recognizes that MO facilitates the implementation of both Revenue Management (Selmi & Chaney, 2018) and CRM (Liew, Ramayah, & Yeap, 2015). However, it is interesting to analyze in a novel way whether online MO is an antecedent capable of fostering their *simultaneous* implementation.

Thus, the present research seeks to provide empirical evidence of the effects of the simultaneous implementation of Revenue Management and CRM on business performance in the hospitality industry, and to establish whether MO constitutes an appropriate business culture to facilitate this simultaneous approach. More specifically, the aim of this study is to propose and validate a model based on the hospitality industry and the online environment to analyze whether: (1) the simultaneous implementation of Revenue Management and CRM positively influences the performance achieved by hospitality firms; and (2) the adoption of online MO is an antecedent of the simultaneous implementation of these two marketing processes.

We selected the hospitality industry for our analysis as it has witnessed widespread development of Revenue Management and CRM practices in recent years (Denizci Guillet & Shi, 2019), and because online media play a prominent role in fostering the simultaneous implementation of both practices in this sector (Erdem & Jiang, 2016). The literature highlights the need to study the marketing tools and processes that, in the online environment, mediate the relationship between MO and hospitality firm performance (Tsiotsou & Vlachopoulou, 2011).

2. Literature review

2.1. Effects of the simultaneous implementation of Revenue Management and CRM on hospitality firm performance

Revenue Management and CRM share the objective of increasing business profitability, but from different points of view: Revenue Management was traditionally regarded as more tactical and "inventory-centric", while CRM is more strategic in its focus on the firm's relationship with customers (Chawan, 2018).

Revenue Management can be defined as the process of assigning the right kind of capacity to the right type of customer, at the right price, at the right time, through the right distribution channel to maximize the firm's revenue or performance (Al Shehhi & Karathanasopoulos, 2020; Denizci Guillet & Shi, 2019; Kimes, 1989; Rodríguez-Algeciras & Talón-Ballester, 2017). As, by their very nature, services are "perishable" and have a limited capacity, Revenue Management plays an important role in business success and profitability among service firms (Selmi & Chaney, 2018).

In this context, the implementation of Revenue Management has traditionally been based on the fact that prices and availability are dictated by predicted market demand, without taking into account the specific characteristics of the customers or their value to the firm over the long term (Noone et al., 2003). This approach to managing Revenue Management—in which the value of the long-term relationship with the customer is not taken into account—can result in scenarios in which a

given customer may ultimately not receive the desired service or may be forced to acquire it at an inflated price when demand is high. The latter scenario may enable the firm to maximize short-term revenue, but it will compromise its long-term profitability in the case of high-value customers, as they are very likely to simply switch to a competitor (Noone et al., 2003). Hence, it is becoming increasingly important for firms to adopt mechanisms that support them in orientating their efforts toward the management of long-term customer relationships (Brunger, 2013).

A critical factor in this process is the analysis of consumer buying patterns, based on their life-cycle, as this enables firms to identify the most valuable customers, with a view to building long-term relationships with them (Milla & Shoemaker, 2008). The firm's CRM system provides information with which to profile customer profitability and the value of the customer life-cycle (Vaeztehrani et al., 2015). CRM entered a new era with the emergence and subsequent development of online media. In this online context, CRM was defined by Bai, Hu, and Jang (2007, p. 35) as "a strategic marketing practice to establish, maintain, improve and commercialize customer relationships on the Internet through the fulfillment of the promises communicated." Online media provide important resources for the CRM of those firms that favor customer data-analysis, interaction in real time and through various channels, personalization, segmentation, and so on (Mastorakis, Trihas, Perakakis, & Kapanakis, 2015).

Thus, in the hospitality industry and related contexts, this vision of CRM, in which it is implemented through online media, has received significant attention from both scholars and firms (Sota, Chaudhry, & Srivastava, 2019). The studies that examine the use of CRM are very diverse, as shown in Table 1. These contributions show that, through online media, CRM enables firms to maintain close relationships with customers and understand their needs, behaviors, and preferences, to thus identify the most profitable customers with whom to actively build long-term relationships (Rahimi & Kozak, 2017).

In addition to the literature demonstrating the importance of Revenue Management and CRM for the hospitality industry in online media, there are also various authors who propose the combined implementation of both processes. This joint approach, they claim, elevates Revenue Management from a purely transactional approach focused on the product to an approach based on forming a relationship with customers (Hoang, 2007). Thus, the data obtained via the CRM system is used to inform the decision-making process behind Revenue Management to achieve a long-term strategic orientation based on the optimization of benefits. This approach also ensures a Revenue Management that is focused on the relationship with the customer, thus creating superior customer value, and a CRM that is geared to maximizing income. One of the key factors in the success of this combination is the use of online media (Denizci Guillet & Shi, 2019).

Table 2 summarizes various studies that address CRM and Revenue Management jointly. The majority of the studies are theoretical in nature, case studies (some of which are based on simulations), or qualitative. The work of Denizci Guillet and Shi (2019), however, provides a different vision. These authors distinguish four key factors that will influence the successful integration of CRM and Revenue Management: 1) the attitude of marketing and Revenue Management executives toward integration; 2) the implementation of loyalty programs to encourage integration; 3) the ICT infrastructure put in place to support and enable integration; and 4) the level of senior management support for integration. These contributions show the need for continued research on this topic (Wang et al., 2015), hence the present study constitutes an advancement toward a better understanding of the fully-integrated approach, by studying empirically the effect that *simultaneous* implementation of CRM and Revenue Management may have on performance.

In short, regarding the effects of Revenue Management and CRM on business performance: (a) the literature has shown that the implementation of Revenue Management has positive effects on hospitality firms' results (Chen & Schwartz, 2008; Dolasinski, Roberts, & Zheng, 2019; Noone et al., 2019; Ortega, 2016); and (b) the implementation of

Table 1
Studies dealing with CRM via online media.

Author and year	Sector	Geographical area	Principal contribution/ finding
Rodríguez et al. (2014)	Services	USA	Demonstrates that the effectiveness of CRM and the use of online media exert an indirect influence on the firm's sales performance.
Trainor et al. (2014)	Services	USA	Demonstrates that a firm's capabilities in CRM in online media exert a positive influence on performance in terms of customer relationships.
Harrigan, Ramsey, and Ibbotson (2011)	Services (SMEs)	Ireland	Identifies 8 factors that support CRM practices and processes in online media.
Lee-Kelley, Gilbert, and Mannicom (2003)	E-commerce	USA	Demonstrates that efforts to implement CRM via online media have a positive effect on customer loyalty.
Chierici et al. (2018)	E-commerce	Italy	Demonstrates a strong relationship between CRM capability via online media and performance in terms of customer relationships, and shows that, when this capability improves, so does the financial performance of the firm.
Kumar (2010)	Banks	Oman	Demonstrates the positive effect of CRM via online media on Web-based service quality.
Al-Dmour, Algharabat, Khawaja, and Al-Dmour (2019)	Banks	Jordan	Concludes that CRM via online media influences customer satisfaction, confidence, and retention, and that these influence the firm's financial performance.
Choudhury and Harrigan (2014)	Financial firms	Europe	Demonstrates that the use of online media in CRM implementation exerts a direct influence on performance in terms of customer relationships.
Hu, Han, Jang, and Bai (2005)	Universities	USA	Evaluates the electronic relationship management features on the website of university hospitality and tourism programs.
Sigala (2018)	Tourism firms	–	Proposes an approach of CRM via online media based on the co-creation of value, which recognizes customer empowerment as a result of technology.
Racherla and Hu (2008)	Hospitality	–	Develops a research framework incorporating various factors that influence the hospitality firms' adoption of CRM via online media.
Rosman and Stuhura (2013)	Hospitality	USA	Finds that CRM via online media can drive

Table 1 (continued)

Author and year	Sector	Geographical area	Principal contribution/ finding
Tian and Wang (2017)	Hospitality	China	business results by acquiring, retaining, and developing customer relations. Finds that the quality of CRM via online media produces positive effects on customer purchase intention via the hotel website.
Garrido-Moreno et al. (2018)	Hospitality	Spain	Demonstrates the positive influence of the firm's capability in CRM via online media on its CRM performance (in terms of customer acquisition and retention, cross-selling/upselling, sales, market share, and profitability).
Dewnarain, Ramkissoon, and Mavondo (2019)	Hospitality	–	Proposes a conceptual model to approach the relationships between CRM, online media, commitment to customers, positive word-of-mouth, and customer brand loyalty.

Source: The authors.

CRM via online media also positively influences hospitality and service firms' results, both indirectly (Al-Dmour, Algharabat, Khawaja, & Al-Dmour, 2019; Choudhury & Harrigan, 2014; Rodríguez, Ajjan, & Peterson, 2014), and directly (Chierici, Mazzucchelli, Ceruti, & Gavinelli, 2018; Garrido-Moreno, Garcia-Morales, Lockett, & King, 2018; Trainor, Andzulis, Rapp, & Agnihotri, 2014). Based on these findings from the literature, it is expected that the simultaneous implementation of both processes will also positively influence the hospitality firm's performance, since this approach enables such firms to adopt a vision for managing relationships with customers that (i) focuses on generating demand that is profitable (the very perspective of Revenue Management) and (ii) is strategic in nature, taking into account the customer's life-cycle and the development of long-term customer relationships (the raison d'être of CRM). On this premise, the following research hypotheses are proposed:

H1. The hospitality firm's implementation of Revenue Management in the online environment has a significant and positive effect on its performance.

H2. The hospitality firm's implementation of CRM in the online environment has a significant and positive effect on its performance.

2.2. MO as antecedent of the simultaneous implementation of Revenue Management and CRM

MO has received significant attention in the marketing and management literature (Sin, Alan, Heung, & Yim, 2005), which highlights its role as a primary source of sustainable competitive advantage (Jogaratnam, 2017), its main objective being to provide superior customer value (Dabrowski, Brzozowska-Woś, Gołąb-Andrzejak, & Firgolska, 2019). Thus, MO fosters a culture of experimentation and focuses on continuously improving the processes and systems of the firm. This, in turn, will render the firm's capabilities more distinctive relative to its competitors, by enabling it to offer differentiated value and retain its customers even when their preferences change constantly (Kumar, Jones, Venkatesan, & Leone, 2011).

The current concept of MO developed in the early 1990s, when two

Table 2
Studies that address the combined implementation of Revenue Management and CRM.

Author and year	Sector	Geographical area	Type of study	Principal contribution/ finding
Chawan (2018)	Services	–	Theoretical	Explores different means of improving the performance of Revenue Management systems by using CRM data.
Jallat and Ancarani (2008)	Telecomms	–	Theoretical/ case study	Concludes that the integration of Revenue Management and CRM strategies is critical for companies looking for a long-term relational perspective.
Hendler and Hendler (2004)	Casinos	Las Vegas	Theoretical	Explains how Revenue Management and CRM can be combined to maximize profits.
Vinod (2008)	Airlines	–	Theoretical	Presents an approach to Revenue Management that is customer-focused, in which Revenue Management decisions are guided by the customer data obtained via the CRM system.
Metters et al. (2008)	Hospitality	USA	Case study	Describes how a hotel/casino integrates its Revenue Management and CRM systems.
Noone et al. (2003)	Hospitality	–	Theoretical	Proposes a method for setting prices based on the value of the customer life-cycle, derived from the CRM system.
Vaeztehrani et al. (2015)	Hospitality	–	Theoretical/ case study (computer simulation)	Drawing on the approach of Noone et al. (2003), and using data from the CRM system, segments customers according to the value of their life-cycle, with the aim of maximizing

Table 2 (continued)

Author and year	Sector	Geographical area	Type of study	Principal contribution/ finding
Milla and Shoemaker (2008)	Hospitality	USA	Qualitative	revenue over the long term. Concludes that the integration of CRM and Revenue Management is among the areas of greatest potential for the future of Revenue Management.
Wang (2012a)	Hospitality	International	Qualitative	Describes the motives that generate potential management conflicts between CRM and Revenue Management.
Denizci Guillet and Shi (2019)	Hospitality	China (Hong Kong)	Qualitative	Develops a framework for the integration of CRM and Revenue Management.

Source: The authors.

different perspectives emerged (Jaworski & Kohli, 2017), one focusing on behavior (Kohli & Jaworski, 1990) and the other on culture (Narver & Slater, 1990). Kohli and Jaworski (1990) defined MO as “the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it” (ibid.: 6). By contrast, Narver and Slater (1990) defined MO as the business culture in which all employees are committed to continuously creating superior value for consumers. In addition to these conceptualizations of MO, the literature recognizes others, such as those developed by Shapiro (1988), Ruekert (1992), and Deshpandé, Farley, and Webster (1993), these latter authors endeavoring to integrate the cultural and behavioral views of MO. Later, Narver, Slater, and MacLachlan (2004) distinguished between proactive and reactive MO.

Since scholarly research into MO first began, the literature has sought to understand its effect on business performance. The meta-analyses conducted by Kirca, Jayachandran, and Bearden (2005) and Ellis (2006), for example, identify that, depending on the context of application, there may be a direct and/or indirect relationship between MO and business performance. More recently, Gupta, Atav, and Dutta (2019) carried out a literature review in which, while most of the studies directly related MO to performance, some identified an indirect relationship between the two variables. These works highlighted that innovation is the main variable that mediates the relationship between MO and performance, followed by marketing capabilities and processes, learning, organizational structure, organizational commitment, and customer satisfaction.

The first applications of MO in the tourism sector originated in 2000, where it featured heavily in research focused on the hospitality industry (Fernandes-Sampaio, 2016). As can be seen in Table 3, the literature dealing with the hospitality industry has also addressed the relationship between MO and performance, both directly and indirectly.

In general terms, previous studies and meta-analyses show that the relationship between MO and performance can be complex and that the mechanisms via which this relationship is expressed (either directly or mediated by different variables) may depend on the area under study

Table 3
Studies that link MO to business performance in the hospitality industry.

Type of relationship	Studies		
Direct	Campo et al. (2014); Haugland et al. (2007); Hinson (2017); Kazemian, Djajadikerta, Roni, Trireksani, and Mohd-Sanusi (2020); McManus (2013); Polo-Peña, Frías-Jamilena, and Rodríguez-Molina (2011, 2013); Presutti, Savioli, and Odorici (2020); Sin, Tse, & Yim, 2005; Tse, Sin, Yim, and Heung (2005); Vega-Vázquez, Cossío-Silva, and Revilla-Camacho (2016); Wang, Chen, and Chen (2012); Wang and Chen (2011)		
Indirect	Type of mediation	Mediating variable	Studies
	Full	Innovation	Agarwal, Krishna Erramilli, and Dev (2003); Agarwal, Krishna Erramilli, and Dev (2003); Alnawas and Hemsley-Brown (2019); Ghantous & Alnawas, 2020; Sandvik and Sandvik (2003); Zhou et al. (2009) Zhou et al. (2009)
		Market differentiation	
		Use of non-financial performance measures	Bangchokdee, Mia, and Runglertkengkrai (2013)
		Strategic management accounting usage	Turner et al. (2017)
		Branding capability	Alnawas and Hemsley-Brown (2019)
Partial		Customer relation capability	Alnawas and Hemsley-Brown (2019)
		Corporate social responsibility	Qu (2009, 2014)
		Revenue management orientation	Selmi and Chaney (2018)
		Service quality	Fernandes-Sampaio, Hernández-Mogollón, and Rodrigues (2019)
	Loyalty	Fernandes-Sampaio, Hernández-Mogollón, and de Ascensão Gouveia Rodrigues (2020)	

Source: The authors.

(Gupta et al., 2019), such as hospitality. In this sense, in the hospitality literature—and in the general literature—the variable that has received the most attention as a *mediator* in the relationship between MO and performance is innovation, followed by marketing processes. Ever since the Internet paved the way for the development of social media, online media have unquestionably become the primary means by which potential business innovation can be nurtured (Palacios-Marques, Zegarra-Saldaña, & Vila, 2013) and by which MO can be adopted and implemented in the firm. All of these possibilities lead to the need for the development of new research to better understand (a) the adoption of MO via online media and (b) the mediating role that online marketing processes may play in the effect exerted by MO on business performance.

In light of these factors, the second decade of the 2000s, in particular, has seen a proliferation of hospitality and service industry research dealing with MO in the online environment, which has largely concluded that online media can play an important role in the adoption of MO. This is backed by numerous studies that provide evidence regarding the adoption of MO in the online context (Table 4). The implementation of online MO enables firms to capture all the information that customers and competitors post online and convert it into market intelligence. It also facilitates internal coordination within the firm, between functions and departments, prioritizing innovation across all business strategies and ensuring that they respond to market preferences (Palacios-Marques et al., 2013). The studies summarized in

Table 4
Studies dealing with MO via online media.

Author and year	Sector	Geographical area	Principal contribution/finding
Min, Song, and Keebler (2002)	–	–	Proposes the concept of MO mediated by online media.
Celuch, Green, Saxby, and Ehlen (2007)	Financial services and retailers (SMEs)	USA	Demonstrates that MO has a positive effect on perceived behavioral norms regarding Internet usage.
Celuch and Murphy (2010)	Financial services and retailers (SMEs)	USA	Develops the construct of ICT MO, which positively moderates the relationship between the use of ICTs for stakeholder communication and strategic flexibility.
Caniëls, Lenaerts, and Gelderman (2015)	Professional services and retailers (SMEs)	Belgium	Demonstrates that MO exerts a positive effect on behavioral norms associated with the use of online media, and that these norms, in turn, exert a positive effect on the extrinsic motivations of using online media.
Nguyen et al. (2015)	Online technology firms	China	Demonstrates that MO influences brand innovation in online media, and that this relationship is positively moderated by the firm's strategic capacity in online media.
Yu, Nguyen, and Chen (2016)	Online technology firms	China	Develops the constructs of capability and alliance of the Internet of things, the antecedent of which is MO.
Shirazi (2017)	Banks	Iran	Demonstrates that MO strengthens the effect of e-marketing on business performance.
Lim, Zegarra-Saldaña, and Zegarra-Saldaña (2011)	Hospitality	Spain	Concludes that a firm's MO is positively related to its adoption of online media.
Tsiotsou & Vlachopoulou (2011)	Hospitality	Greece	Demonstrates that e-marketing mediates the relationship between MO and business performance.
Palacios-Marques et al. (2013)	Hospitality	Spain	Demonstrates that MO is related to the adoption of online media, which, in turn, is related to innovation.
Álvarez-Díaz (2014)	Hospitality	Spain	Demonstrates that the use of customer-orientated online media is an antecedent of MO adoption.
Chuang et al. (2018)	Hospitality	Taiwan	Demonstrates that e-marketing mediates the relationship between MO and value co-creation.

Source: The authors.

Table 4 show that implementing online MO constitutes a business culture that fosters marketing innovation through this medium.

The extant literature does not address the possible existence of variables that mediate the relationship between online MO and business performance. The one study that does touch on issues relevant to this question is that of Tsotsou and Vlachopoulou (2011), which showed that e-marketing (the degree to which online transaction, promotion, and database activities are undertaken by tourism firms) mediates the relationship between MO and performance in the hospitality sphere. These authors called for further studies to examine other online marketing processes that may mediate the relationship between MO and business performance.

Regarding this relationship, Alnawas and Hemsley-Brown (2019) suggest that, in the hospitality industry, MO *per se* does not directly affect the performance of firms, but rather MO has to be manifested via different marketing capacities or processes in order for it to influence performance. In fact, according to the conclusions from the meta-analysis conducted by Kirca et al. (2005)—which showed that, in the service firm context, MO often requires mediating variables for it to have any effect on performance—it is not surprising that subsequent literature has shown that the relationship between MO and performance in the hospitality industry may be mediated via variables such as high-order marketing capabilities, including customer relation capability (Alnawas & Hemsley-Brown, 2019), strategic management accounting usage (Turner, Way, Hodari, & Witteman, 2017), market differentiation (Zhou, Brown, & Dev, 2009), corporate social responsibility (Qu, 2009, 2014) and, of course, innovation (e.g. Ghantous & Alnawas, 2020).

Hence, it would be of interest to better understand whether the online medium provides an appropriate means of implementing MO and other mediating marketing processes that enable the firm to deliver superior performance. However, with the exception of the aforementioned work by Tsotsou and Vlachopoulou (2011), the literature has not yet identified which marketing processes implemented via online media may exert a mediating effect between online MO and business performance.

As MO includes customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990), a higher degree of MO adoption in the firm will encourage greater adoption of market-focused online processes—such as Revenue Management (Selmi & Chaney, 2018) and CRM (Liew et al., 2015). MO provides the firm with accurate information about customers and competitors, and enables it to combine Revenue Management and CRM to develop responses tailored to market conditions.

The suitability of MO for implementing Revenue Management is based on the need for this process to be positioned within a solid business culture that enables demand to be managed (Noone, Enz, & Glassmire, 2017) and is able to defend the firm against the actions and responses of competitors (Selmi & Chaney, 2018). This is because Revenue Management uses market intelligence to predict market demand and competitor behavior and, in turn, optimize business profitability (Cross, 2011).

The effect of MO on Revenue Management has scarcely been studied in the hospitality industry, nor has it been researched in relation to the online context. Among the few exceptions, the work of Selmi and Chaney (2018) concludes that Revenue Management plays a mediating role in the relationship between MO and the hospitality firm’s performance, although this study does not focus on the online context.

With regard to the suitability of MO for the implementation of CRM, it is important to highlight that the latter process requires a business culture that provides appropriate support, to ensure that the needs and expectations of customers are understood and recognized throughout the firm—such as an MO culture (Rahimi, 2017). The effectiveness of CRM implementation relies on an orientation that enables the firm to collect, integrate, and analyze large volumes of market data. An MO culture provides such an approach, as it determines a) how the firm

adapts to its environment and to consumers’ ever-changing preferences and b) how the firm achieves a position of advantage through the intelligent use of technology, processes, and customer relations (Wang, Hu, & Hu, 2013). In short, the more the firm is orientated toward the market, the greater its knowledge of customers, which facilitates the management of customer relationships and renders these relationships more durable and of greater value to the firm (Javalgi, Martin, & Young, 2006).

There are several studies that provide empirical evidence of the relationship between MO and CRM in the service sector (although none of them is focused on the hospitality industry). Liew et al. (2015) demonstrated that the intensity of CRM implementation plays a mediating role in the relationship between MO and CRM performance in the web-hosting industry. Subsequently, Cambra-Fierro, Centeno, Olavarria, and Vazquez-Carrasco (2017) found that, in the Spanish banking sector, MO positively influences the success of CRM; and Wang et al. (2013) concluded that the MO of a firm is positively associated with its ICT support for CRM (in the field of Taiwanese service firms).

Recognizing the importance of Revenue Management and CRM to hospitality firms, some authors conclude that the most beneficial approach is to pursue the simultaneous implementation of both (Chawan, 2018), as this will enable the hospitality firm to manage its customer relationships while taking advantage of the direct customer interactions it enjoys thanks to the online environment (Hudson, Huang, Roth, & Madden, 2016) within a long-term vision (Denizci Guillet & Shi, 2019). MO represents a business culture that enables the hospitality firm to establish the necessary mechanisms for collecting accurate information about customers and competitors and implement key marketing processes (such as Revenue Management and CRM) simultaneously (Tajeddini, Altinay, & Ratten, 2017). In fact, this information-gathering and inter-functional coordination are facilitated by online media and the multiple contact points with the market that they provide (Habibi, Hamilton, Valos, & Callaghan, 2015). It is therefore of interest to determine whether MO is a suitable antecedent that fosters the simultaneous implementation of Revenue Management and CRM.

On the basis of these previous contributions to the literature, the following research hypotheses are proposed:

- H3. The adoption of online MO has a positive and significant effect in terms of fostering the implementation of Revenue Management in the hospitality firm.
- H4. The adoption of online MO has a positive and significant effect in terms of fostering the implementation of CRM in the hospitality firm.

The proposed research model is shown in Fig. 1.

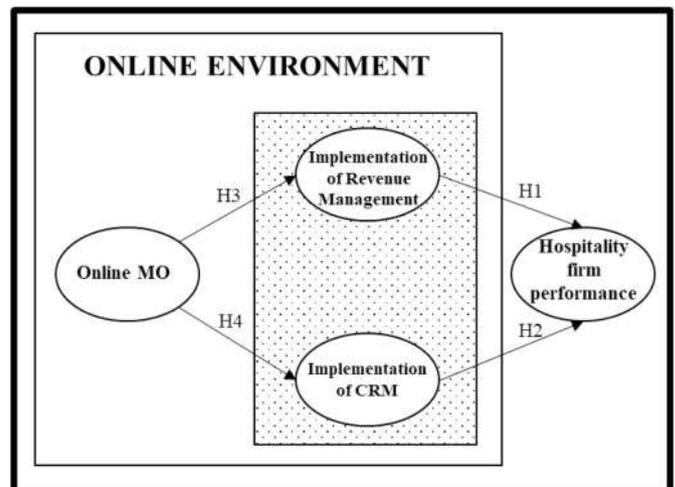


Fig. 1. Proposed research model.

3. Methodology

3.1. Research population and sample

The research objectives of the present study required an empirical analysis to be conducted in a sector characterized by innovation in the implementation of online marketing processes such as Revenue Management and CRM. Consequently, the hospitality industry was selected as the context for the present research, because 1) this is an extremely competitive service sector characterized by innovative behaviors (Orfila-Sintes & Mattsson, 2009) and 2) in recent years, there has been a major emphasis on Revenue Management and CRM among hospitality firms in particular (Denizci Guillet & Shi, 2019). Specifically, this research focuses on hotels belonging to chains with a presence in Spain because the practices of hotel chains tend to be more innovative and professional than those of independent establishments, and chains therefore devote more resources to marketing plans and the acquisition and integration of ICTs (Flecha Barrio, Talón Ballester, Figueroa Domecq, & Abad Romero, 2016). Moreover, this sector is an important economic driver in Spain, this being the second most-visited country in the world (Garrido-Moreno et al., 2018).

The population under study was built on the basis of the two Hosteltur Rankings, one of which covers large hotel chains (defined as those with over 1000 rooms), and the other covering smaller chains (with fewer than 1000 rooms) (Hosteltur, 2018). These annual rankings published by Hosteltur (a communications group specializing in professional tourist information) collect data on the size, billing, and international presence of Spanish hotel chains. It is therefore the primary ranking for identifying such chains (Luengo, 2016). Since the Hosteltur rankings only cover the Spanish market, a further search was performed on Booking.com to identify other hotel chains with a presence in Spain, even if foreign-owned. Booking.com is the biggest online travel agency in the European Union, with a 62% market share (Martin-Fuentes & Mellinas, 2018). Altogether, a total of 303 hotel chains with a presence in Spain were identified. Because the sample frame was relatively small, we opted to access the entire universe of hotel chains with a presence in Spain—a tactic suggested by various authors (Flecha Barrio et al., 2016; Hair, Black, Babin, & Anderson, 2018).

The data-collection was carried out between June and September 2018. The online marketing managers of hotels within various chains were contacted by telephone and, subsequently, a questionnaire was administered to them via email. Some 137 hotels belonging to chains responded, representing 33% of the universe of chains with a presence in Spain, which can be considered a relatively high percentage and an adequate sample size, given that it comprises firms in the hotel sector (e.g. Nieves & Quintana, 2018; Nieves & Segarra-Ciprés, 2015). The sample characteristics are shown in Table 5.

3.2. Measurement scales

To complete the questionnaire, respondents had to assess various items on the constructs of online MO, implementation of Revenue Management, implementation of CRM, and the business performance of the hospitality firm. These items were adapted from various studies and were measured on 7-point Likert scales (see Table 6).

First, with regard to online MO, the present study adopted the cultural perspective of MO proposed by Narver and Slater (1990), adapting it to the online context. To conduct this adaptation, we selected and modified items relating to the different dimensions of MO, taken from Campo, Diaz, and Yagüe (2014), Brodie, Winklhofer, Coviello, and Johnston (2007), and Trainor et al. (2014) and validated by them in this environment. Thus, the online MO scale comprised seven items grouped into three dimensions: customer orientation (3 items); competitor orientation (2 items); and inter-functional coordination (2 items). To measure the implementation of Revenue Management, three items taken from Selmi and Chaney (2018) were selected and adapted to the online

Table 5
Sample characteristics.

Characteristic	Number of hotels (1 respondent per hotel)	% of sample (n = 137)
Hotel category		
1-star	5	3.65%
2-star	5	3.65%
3-star	29	21.17%
4-star	82	59.85%
5-star	16	11.68%
Years in operation		
Up to 5 years	27	19.71%
6–10 years	17	12.41%
Over 10 years	93	67.88%
Gender of online marketing manager		
Male	69	50.40%
Female	68	49.60%
Age of online marketing manager		
18–29 years	17	12.41%
30–44 years	87	63.50%
45–65 years	33	24.09%
Educational level of online marketing manager		
No university studies	20	14.60%
University studies	117	85.40%
Extent of experience of the respondent in online marketing management		
Up to 5 years	29	21.17%
6–10 years	41	29.93%
More than 10 years	67	48.90%

context. To measure CRM implementation, we used three items taken from Sin, Tse, and Yim (2005), and, again, adapted them to the online context. These items were validated in previous studies (e.g. Garrido-Moreno & Padilla-Meléndez, 2011; Kasim & Minai, 2009). Finally, the hospitality firm’s performance was measured using three items from the scale developed by Campo, Diaz, and Yagüe (2014), which we also adapted to the online environment.

4. Results

The proposed research model (Fig. 1) shows the relationships included in the research hypotheses. It is proposed that the simultaneous implementation of Revenue Management and CRM via online media has a positive effect on the performance of the hospitality firm and that online MO is an antecedent of the implementation of Revenue Management and CRM. Online MO is a second-order construct with three dimensions (customer orientation, competitor orientation, and inter-functional coordination), while the implementation of CRM, the implementation of Revenue Management, and the hospitality firm’s performance are first-order constructs.

The analytical process consisted of, first, confirming the adequacy of the measurement scales used for the different variables, by means of structural equation modeling (SEM) with AMOS V.18 software. Next, using the same analysis technique, the proposed relationships between the variables were tested. SEM is well-suited to both validating measurement scales and verifying causal relationships between constructs, as it enables a distinction to be made between measurement instruments and the structural model, and also takes into account measurement errors in the estimation of the model (Hair et al., 2018).

In evaluating the psychometric properties of the proposed model, as the multivariate normality test of the variables was found to be significant, we opted to perform the estimation using the maximum likelihood model combined with the Bootstrap methodology (Yuan & Hayashi, 2003). Regarding goodness-of-fit, a valid reference is normed Chi-square, which produced a value of 1.77 and was therefore within the range recommended by the literature. As for the overall fit of the model, the RMSEA value was acceptable (0.07), below the maximum recommended threshold. The incremental fit measures of CFI (0.95), IFI (0.95), and TLI (0.94) also presented adequate values. Thus, it can be

Table 6
Variable measurement scales.

Construct/Dimension/Item	Reference
Online MO	
<i>Customer orientation</i>	
CUSTOR1. Via online media, we offer customers useful information about the hotel and the local area.	Brodie et al. (2007); Trainor et al. (2014)
CUSTOR2. Via online media, we communicate our offer.	
CUSTOR3. Via online media, we communicate any improvements we have made and any changes in our offer requested by customers.	
<i>Competitor orientation</i>	
COMPOR1. Via online media, we continually search for, and collect, information about our competitors' activities.	Campo et al. (2014)
COMPOR2. Via online media, we detect changes in the sector.	
<i>Inter-functional coordination</i>	
COORD1. Via online media, we quickly communicate important information about our competitors to the relevant departments.	Campo et al. (2014)
COORD2. Via online media, we coordinate market-facing activities.	
<i>Implementation of Revenue Management</i>	
RM1. Our Revenue Management practices, via online media, enable us to optimize our market segmentation.	Selmi and Chaney (2018)
RM2. Our Revenue Management practices, via online media, ensure dynamic capacity-management.	
RM3. Our Revenue Management practices, via online media, enable us to manage and create demand for each market segment.	
<i>Implementation of CRM</i>	
CRM1. Via online media, we identify mechanisms for retaining our most profitable customers.	Sin, Alan, Heung, and Yim (2005)
CRM2. Via online media, we develop a customer database that is centrally-managed and up-to-date.	
CRM3. Via online media, we have access to individualized information on each customer via all contact points.	
<i>Hospitality firm performance</i>	
Looking back over the last 3 years, the online marketing strategy implemented by the hotel has helped achieve increased ...	
PER1. Profits from direct reservations.	Campo et al. (2014)
PER2. Gross profits.	
PER3. Return on investment.	

affirmed that the model fit is acceptable, in line with the recommendations of Hair et al. (2018).

Next, we evaluated the measurement model to check that the measurement scales correctly measured each of the dimensions of the latent variables (online MO, implementation of Revenue Management, implementation of CRM, and hospitality firm performance). We examined the statistical significance of each load obtained between the latent variable and its indicator. These loads measure the direct relationship between first-order dimensions and directly-observable variables (or between second-order and first-order dimensions), and they should be significant and have a standardized value greater than 0.70 (Hair et al., 2018). As can be seen in Table 7, all the load values were above this threshold, the confidence interval did not include the value “0”, and the values presented a significant p-value. We then estimated the individual reliability or R² of each item (and of the first-order dimensions). In this case, all values were greater than 0.50, as recommended by the literature (Hair et al., 2018). Regarding the internal consistency of each of the scale dimensions, both the composite reliability and the variance extracted yielded values above the reference thresholds recommended in the literature (0.70 and 0.50, respectively) (Hair et al., 2018), as can be seen in Table 7.

Finally, we evaluated the discriminant validity among the different variables and dimensions included in the research model. Discriminant validity can be verified, as the correlations between variables were no

greater than 0.8 (Bagozzi, 1994) and the confidence interval of the estimated coefficient did not include the value “1” (Anderson & Gerbing, 1988) (see Table 8). The results achieved in relation to the measurement scales used in the study indicate that the scales are adequate for measuring each of the variables included in the research model.

Next, as depicted in the proposed research model (Fig. 1), the relationships between online MO, implementation of Revenue Management, and implementation of CRM and the performance of the hospitality firm were analyzed. In light of the results, we now discuss the following points of particular note, in relation to the research hypotheses.

H1 proposes that the implementation of Revenue Management in the online environment has a positive influence on hospitality firm performance. The results showed a statistically-significant relationship between the two variables (p-value < 0.01) and a direct effect of 0.54, while the confidence interval was between 0.32 and 0.69. Thus, this hypothesis finds empirical support.

H2 proposes that the implementation of CRM in the online environment has a positive influence on hospitality firm performance. The results showed a statistically-significant relationship (p-value < 0.01), with a direct effect of 0.34 and a confidence interval of between 0.15 and 0.5. Therefore, this hypothesis also finds empirical support.

H3 proposes that the adoption of online MO has a positive and significant effect in terms of fostering the implementation of Revenue Management. The results showed a statistically-significant relationship between online MO and the implementation of Revenue Management (p-value < 0.01). The direct effect was 0.52, with a confidence interval of between 0.31 and 0.68. Thus, there is empirical support for this hypothesis.

H4 proposes that the adoption of online MO has a positive and significant effect in terms of fostering the implementation of CRM. The results show a statistically-significant relationship between MO and the implementation of CRM (p-value < 0.01). The direct effect was 0.68, with a confidence interval of between 0.51 and 0.80. Therefore, there is empirical support for this hypothesis.

Finally, the results also indicate that there is a significant indirect relationship between the adoption of online MO and hospitality firm performance, through the simultaneous implementation of Revenue Management and CRM (p-value < 0.01), with an effect of 0.51 and a confidence interval of between 0.37 and 0.66. Thus, we can conclude that the simultaneous implementation of Revenue Management and CRM plays a mediating role in the relationship between online MO and the performance of the hospitality firm. In short, the results show that an appropriate approach for the hospitality firm in the online environment is the simultaneous implementation of Revenue Management and CRM within an MO culture, since an overall effect is achieved (the result of the direct effect of Revenue Management and CRM, and the indirect effect of online MO, on hospitality firm performance) that is greater than the isolated effect of either Revenue Management or CRM on performance.

5. Discussion of results, conclusions, and business implications

Online media present new possibilities for hospitality firms to manage customer relationships profitably (Garrido-Moreno et al., 2018). To examine this potential, the present paper analyzes the effect of the simultaneous implementation of Revenue Management and CRM in an online environment on the hospitality firm's performance, within a business culture characterized by MO. The study demonstrates that MO is a business culture capable of fostering the simultaneous implementation of two key marketing processes aimed at profitably managing customer relationships. An empirical study was carried out to validate a model that captures the variables implemented in the online environment: online MO, implementation of Revenue Management, implementation of CRM, and hospitality firm performance.

Several contributions to the literature are derived from this work.

Table 7
Convergent validity and internal consistency indicators for the scales.

FIRST-ORDER DIMENSIONS					
Factor	Items/Dimension	Standardized loadings and confidence interval	R ² and confidence interval	Composite reliability	AVE
Customer orientation	CUSTOR1	0.73 (0.57; 0.84) *	0.54 (0.33; 0.71) *	0.83	0.62
	CUSTOR2	0.74 (0.54; 0.86) *	0.55 (0.29; 0.74) *		
	CUSTOR3	0.85 (0.76; 0.96) *	0.73 (0.58; 0.92) *		
Competitor orientation	COMPOR1	0.78 (0.67; 0.87) *	0.61 (0.45; 0.75) *	0.83	0.71
	COMPOR2	0.86 (0.78; 0.92) *	0.74 (0.60; 0.85) *		
Inter-functional coordination	COORD1	0.83 (0.75; 0.90) *	0.69 (0.56; 0.82) *	0.89	0.81
	COORD2	0.95 (0.88; 1.01) *	0.90 (0.77; 1.00) *		
IMPLEMENTATION OF REVENUE MANAGEMENT	RM1	0.92 (0.85; 0.97) *	0.84 (0.73; 0.93) *	0.94	0.85
	RM2	0.91 (0.84; 0.96) *	0.83 (0.71; 0.92) *		
	RM3	0.92 (0.85; 0.96) *	0.84 (0.73; 0.92) *		
IMPLEMENTATION OF CRM	CRM1	0.80 (0.67; 0.90) *	0.64 (0.45; 0.81) *	0.87	0.69
	CRM2	0.82 (0.71; 0.90) *	0.67 (0.50; 0.81) *		
	CRM2	0.83 (0.74; 0.89) *	0.68 (0.54; 0.80) *		
HOSPITALITY FIRM PERFORMANCE	PER1	0.82 (0.72; 0.88) *	0.66 (0.51; 0.77) *	0.94	0.84
	PER2	0.94 (0.90; 0.97) *	0.89 (0.81; 0.95) *		
	PER3	0.95 (0.91; 0.98) *	0.91 (0.83; 0.96) *		
SECOND-ORDER DIMENSIONS					
ONLINE MO	Customer orientation	0.72 (0.50; 0.85) *	0.52 (0.25; 0.72) *	0.88	0.71
	Competitor orientation	0.96 (0.84; 1.04) *	0.92 (0.71; 1.08) *		
	Inter-functional coordination	0.86 (0.77; 0.94) *	0.74 (0.59; 0.88) *		

*p-value<0.01.

Table 8
Discriminant validity.

Construct	Online MO	Implementation of Revenue Management	Implementation of CRM	Hospitality firm Performance
Online MO	1			
Implementation of Revenue Management	0.51 (0.30; 0.68) *	1		
Implementation of CRM	0.68 (0.51; 0.81) *	0.38 (0.21; 0.56) *	1	
Hospitality firm performance	0.46 (0.24; 0.66) *	0.66 (0.47; 0.80) *	0.55 (0.37; 0.70) *	1

Estimated coefficient (confidence interval); *p-value<0.01.

First, it identifies the effect of simultaneously implementing Revenue Management and CRM in hospitality firms. This finding adds to those of Denizci Guillet and Shi (2019) and Wang et al. (2015), who emphasized the need to adopt quantitative techniques to investigate the combined use of Revenue Management and CRM. Most of the extant studies are theoretical, qualitative case studies, or simulations that lack a strategic approach to the combination of Revenue Management and CRM. The only exception is the work of Denizci Guillet and Shi (2019), which, although a qualitative study, provides a strategic vision of the integration of these two processes. The present study is therefore the first to use an empirical quantitative methodology (based on SEM analysis) to study the simultaneous implementation of CRM and Revenue Management.

The study demonstrates that there is a positive, direct, and significant relationship between the simultaneous implementation of Revenue Management and CRM in the online environment and the performance of the hospitality firm. This contributes to the literature by providing empirical evidence of this effect, thereby responding to the call for further research proposed by Denizci Guillet and Shi (2019). Furthermore, although the relationship between Revenue Management and business performance has previously been demonstrated by other studies (e.g. Noone et al., 2019; Ortega, 2016), the present research is the first to do so in the online context. This responds to the need for further research, identified by Wang et al. (2015), to examine the

possible effect that using online media as part of a Revenue Management system may have on business performance. With regard to the relationship between CRM and business performance, the present findings are similar to those derived by other authors (Chierici, Mazzucchelli, Ceruti, & Gavinelli, 2018; Garrido-Moreno et al., 2018; Trainor et al., 2014).

Second, the present work finds MO to be an appropriate business-culture framework for implementing online media marketing processes to manage customer relationships profitably. In doing so, the present investigation responds to the call by Wang et al. (2015) to develop research examining the antecedents of the combination of Revenue Management and CRM. This result is of particular interest, as it demonstrates that MO promotes the simultaneous implementation of two key marketing processes—Revenue Management and CRM—in such a way that they provide mutually-beneficial feedback, together ensuring that the development of long-term customer relationships, which is the primary objective of CRM (Rahimi & Kozak, 2017), is compatible with the stimulation of demand to maximize income, which is the main purpose of Revenue Management (Sigala, 2015). More specifically, this study shows that the adoption of MO is an antecedent of the implementation of Revenue Management in the online environment. These findings are consistent with those obtained by Selmi and Chaney (2018) in the hospitality industry. However, the present research progresses a step further, by applying this relationship in the online environment. The study also demonstrates that the adoption of MO is an antecedent of the implementation of CRM in the online environment. While there are previous studies that have demonstrated this direct relationship (Camba-Fierro et al., 2017; Liew et al., 2015; Wang et al., 2013), this work approaches it in a new way, since it is focused on the online environment in the hospitality industry context.

Finally, the present study demonstrates that the adoption of online MO exerts an indirect effect on the performance of the hospitality firm through Revenue Management and CRM. This result is consistent with the work of Jackson and Chang (2004), who argued that the relationship between MO and business performance depends on the extent to which online media are incorporated into marketing processes. Thus, this research represents a significant advancement for the literature, as it takes a novel approach to verify the indirect effect of online MO on business performance via the implementation of online marketing

processes. The work thereby responds to calls from scholars for future research that (1) studies the role played by MO in online media (Nguyen, Yu, Melewar, & Chen, 2015), (2) studies in greater depth the mediating effects between MO and business performance (Gupta et al., 2019), and (3) deepens the study of marketing processes via online media that mediate the relationship between MO and performance (Tsiotsou & Vlachopoulou, 2011). In this sense, we conclude that the overall effect of online marketing processes (in this case, Revenue Management and CRM) combined with the MO cultural perspective will achieve superior performance for the hospitality firm.

5.1. Practical implications

The results of this study are useful for the professional sector because they provide knowledge with which to identify the business orientation and the marketing processes that hospitality firms can adopt to manage their customer relationships more profitably. The results can also help professionals understand how these processes contribute to achieving improved performance. The insights generated by this study can be used by hospitality firm managers in adapting to the current environment—characterized by direct interaction between firms and customers through multiple contact points—and in taking advantage of the possibilities offered by online media to: create valuable relationships with customers by directly interacting with them; acquire information about consumers and competitors; and coordinate between the various functional areas of the hospitality firm.

First, the findings show that, if the hospitality firm is seeking to achieve better results from its online performance, the simultaneous implementation of Revenue Management and CRM is a suitable approach. More specifically, by taking this joint approach, hospitality firms can: optimize market segmentation; manage their capacity dynamically and identify new market segments to target, via Revenue Management; and complement this with CRM, which helps ensure that customer databases are kept up-to-date and shared by all parts of the hospitality firm. CRM also requires the firm to retain personalized information on each customer for each of its contact points, and to put mechanisms in place to retain the most profitable customers.

Thus, hotel firms must use their CRM system to organize and distribute all the information they have obtained via online media, which will enable them to develop in-depth knowledge of the customer, their characteristics, and their needs. This, in turn, will help Revenue Management to carry out successful market segmentation by identifying the most profitable customer segments that CRM must target in order to achieve long-term relationships with them and to design loyalty programs and/or promotions that match the preferences of each customer profile. Ultimately, by implementing the simultaneous approach, the hotel will be able to manage customer relationships more effectively, taking into account their life-cycle, and will be able to tailor its communication campaigns according to the relative value of different customers, accommodating their specific needs and creating superior value for them.

Second, we propose the adoption of online MO, because this is a type of business culture that enables the hospitality firm to focus on understanding the needs of customers, identifying the strengths and weaknesses of competitors, and coordinating the actions of all internal departments in the pursuit of delivering superior value for customers. This orientation encourages the hospitality firm to implement specific processes in online media to manage customer relationships profitably, such as Revenue Management and CRM. Thus, hotel firms will improve their MO online if they foster a culture that: (1) makes employees aware of the importance of continuously gathering information about customers via online media (which, as we have seen, will be channeled and used by CRM and Revenue Management) and keeping them informed at all times (again, via online media) about their offer and about any changes made to it thanks to customer feedback; (2) encourages employees to keep themselves up-to-date about changes in competitors and

sector trends, and to act accordingly; and (3) fosters coordination between the different departments so that the information obtained via online media is shared and market-facing activities are designed and implemented jointly. This translates into designing a high-quality customer journey throughout all interactions with the firm—from the very first contact to final consumption of the services—and working on the customer relationship post-stay, based on effective coordination between all departments that form part of this journey. This orientation encourages the hotel firm to adopt specific marketing processes implemented via online media to manage customer relationships profitably, such as Revenue Management and CRM.

In short, if hospitality firms—and hotels, in particular—aim to achieve improved performance (such as more direct sales, higher gross profit, or greater return on investment), they should implement Revenue Management and CRM simultaneously to facilitate the management of their relationships with customers, within a MO business culture in the online environment. This will lead to customer relationships that are managed profitably through the multiple contact points provided by the online environment.

5.2. Limitations and future lines of research

Like all academic research, the present study has limitations that may point to potential lines of research for the future. For example, we selected a specific type of firm that is characterized by its extensive efforts to manage relationships directly with customers (that is, the chain hotel), and we focused on a single country (Spain). Hence, any generalization from the results should be treated with caution. A possible research direction for the future would be to replicate the study among other types of hospitality firms that operate through online media and in other geographical areas.

Finally, a further line of future research would be to include other marketing processes implemented through online media in the research model, such as online reputation management. Other results related to business performance in terms of customer behavior, such as customer loyalty or brand equity, could also be considered.

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Declaration of competing interest

None.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jhtm.2021.02.004>.

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