

ICT Applications in the Hotel Industry through an e-CRM Systems Theory Approach

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As the investment in and adoption of Information and Communications Technology (ICT) has become an indispensable component of the tourism and hospitality business sector, researchers increasingly seek to understand and communicate the significance of the new technologies, to investigate and interpret developments in ICTs, and to attempt to forecast the way ahead for both industry and technological development. This paper explores areas of ICT literacy and e-CRM (Electronic Customer Relationship Management) in the hotel industry, and draws attention to the need to support and promote ICT through an e-CRM systems theory approach in all the departments in the hotel sector, as the most effective tool for an effective marketing management policy for the ultimate goal of providing a holistic and coherent message towards tourists. It asserts that a collaborative marketing management network of information flows between businesses through ICT and e-CRM use should be vigorously developed in the hotel industry, as it enables the formation of cooperation in new, efficient ways to access unique or innovative resources. The whole approach should be based on trust and a business culture that values cooperation and ongoing dialogue between different hotel departments and the external business environment.

Key words: ICTs, tourism, hotel industry, e-CRM

Introduction

As an international industry and as the largest provider of jobs on the planet, tourism boasts a greater array of heterogeneous stakeholders than most other industries. The accelerating and synergistic interaction between technology and tourism in recent times has transformed the nature of tourism products, processes, businesses, and competition. Developments in Information and Communications Technology (ICT) have undoubtedly changed both business practices and strategies, as well as industry structures (Porter, 2001). Tourism businesses that have failed to master the right ICT systems find it difficult to direct and manage their information-intensive businesses without damaging their competitiveness (Law & Jogaratnam, 2005). More strategically,

ICTs are reshaping the fundamental structure of industry and society (Buhalis, 1998, 2003). The significance of crossing the threshold of ubiquitous communication access has brought the entire tourism industry to new levels of interactivity. Developments in search engines and in the carrying capacity and speed of networks have influenced the number of travellers around the world that use technologies for planning and experiencing their travels. The Internet is rapidly becoming the primary source of information for travel and tourism.

ICT has also radically changed the efficiency and effectiveness of tourism organisations, the way that business is conducted in the marketplace, and how consumers interact with organisations (Buhalis, 2003; Wang & Pizam, 2011). Accordingly, many ho-

tels have regarded ICT as a new and efficient marketing environment, and most travel arrangements are now conducted online (Li & Law, 2007). This paper addresses the roles of ICT in the hotel industry and asserts that applications of ICT as well as network creation, synergies and e-CRM practices should be carefully considered and taken full advantage of in the researching and developing of systems, such as room reservation, hotel management, internet advice etc. in all hotels' departments, which are discussed below. All these can be powerfully influential in promoting resource sharing and providing the most advanced information services, thus greatly improving work efficiency and reducing business costs (Hu & Gu, 2013). This paper offers a literature review of e-CRM practices integrating technological and marketing elements in the hotel industry, and an overview of the application of ICT and e-CRM practices in all hotel departments; it concludes with an approach that generates synergies, networking and trust between both the various hotel departments but also with the external business environment.

ICT and e-CRM in the Hotel Industry

ICT trends in the hotel industry are increasing on a daily basis. The development of ICT has dramatically changed the way customers interact and seek information, as well as the way they purchase services (Ip, Leung, & Law, 2010). Hotel managers are now fully aware of the benefits that ICT in the hospitality industry, and accordingly, are motivated to create greater awareness of the hotel with the goal of establishing mutually beneficial interactive relationships with guests. Having no geographical or physical barriers, the Internet is considered a competitive marketing channel in the hospitality and tourism industry (Doolin et al., 2002). Rather than actually going to a travel agent, travellers increasingly prefer interacting with the tourism business online to conveniently obtain information on destinations, prices or schedules (Greenspan, 2004). Hotels understand the Internet to be a tool that allows potential guests to find information about them and that motivates guests to make a reservation at the hotel (Milović, 2012).

In the dynamic business environment in which hotel organisations currently operate, a business's main priority is focused on improving services to

end users, and improving the quality of business processes. In a globally competitive environment, hotels must do everything to reach new customers, and more importantly, to retain loyal and profitable customers. Today, customers require the same information via Internet and mobile phone technology. In the context of Internet distribution and marketing in the hospitality industry, e-CRM is a business strategy supported by web technologies that allows hotels to engage guests in strong, personalised and mutually beneficial interactive relationships, thereby increasing profitability and sales effectiveness.

Knowledge about customers and recognition of their needs enables increased revenue opportunities through the increased number of services that hotel organisations can provide to the customer. Some of the most common reasons for acquiring an e-CRM system include achieving greater revenue and profitability, increased customer satisfaction, simplified processes and lower costs, as well as better insight and decision making (Russo, 2011; Milović, 2012).

Successful implementation of the selected systems for customer relationship management (e-CRM) is an essential element of modern business. Successful implementation needs an effective project management methodology that will enable risk and cost minimisation and have an impact on greater return on investment (ROI), thus providing maximum customer satisfaction. Assessing the ROI is useful for investments in specific e-CRM applications, such as sales automation in the system of evaluation of effectiveness or cost reduction (Payne, 2005). For example, O'Connor and Frew (2004) found the cost reduction by using electronic strategies in a cheaper distribution system to be one of the main advantages for hotels. As hotels use the Internet to sell and advertise their rooms and products, they can enhance their electronic strategies via a cheaper distribution system (O'Connor & Frew, 2004). Despite the benefits of online marketing, hotels still face substantial challenges since websites of online travel agents (OTA) still handle a significant portion of online reservations (Law and Cheung, 2006). Even though hotel reservations constitute the second most frequently purchased travel product online, according to the empirical study of Card et al. (2003), relatively little research has been devoted to a detailed examination of online hotel reservation websites. Furthermore,

to date there has been minimal research regarding e-service performance on reuse intentions for online hotel booking (Yoon, 2011).

E-CRM is the latest technique that companies are using to increase and improve their marketing skills and capabilities. Integrating technological and marketing elements, e-CRM covers all aspects of online user experience throughout the transaction cycle: pre-purchase, purchase and post-purchase (Alhaiou, Irani, & Ali, 2009; Milović, 2012). Thus, e-CRM applications in the context of on-line marketing and social media marketing techniques in the hotel industry for the pre-purchase and purchase stages of the transaction cycle, as well as in the techniques applied in the post-purchase stage in the hotel itself are discussed below.

e-CRM in Online and Social Media Marketing in the Pre-purchase and Purchase Stage of the Transaction Cycle in the Hotel Industry

Online marketing has changed almost the entire tourism industry; hotel websites, e-mails, social media, blogs, and other forms of online media can all be incorporated in an effective e-CRM strategy. A hotel website should provide all necessary information to guests, including room specifications and services offered. If a website is regularly updated, the visitor can find the latest information about the hotel. As a result, potential customers can easily compare the rooms and rates at different hotels. Usually, hotels have street maps on their websites so potential customers can easily find them; the website will also contain various pictures including of hotel rooms and other hotel facilities. This will allow guests to create a picture of how the hotel looks. Some hotels' websites also have virtual tours, such as a video that shows the hotel through the lobby, hallways, and rooms. ICT provides a platform for hoteliers to collect information on the guests. Many hotel websites invite customers to register and identify their interests, from which hotel managers can create personalised services and products and increase customer satisfaction (Ip, Leung, & Law, 2010). Personalisation increases the customers' emotional involvement in the experience, often improving their opinions about it as well as the service provider. Just as it is important to keep their guests informed, the responsibility

of hoteliers is also to keep information about the guests safe (Luck & Lancaster, 2003; Milović, 2012).

With the aim of being competitive, hotel managers should add value to their offers on hotel websites. Providing features such as reservations and reservation modifications, tracking transaction history, providing a level of personalisation, and understanding the specific needs and preferences of guests enhances the value that customers receive, which increases loyalty (Hamid, Cheng, & Akhir, 2011). Bookings that are done online are often much faster and cheaper. Hotel websites can enhance and increase reservations with online reservation systems (Milović, 2012). One-stop portal websites providing extensive useful information about travel products and deeply discounted rates have been attracting customers to visit and purchase the products on hotels' websites (Morosan & Jeong, 2008). According to Carroll and Siguaw (2003), selling large volumes of hotel rooms on OTAs' websites draws hotels into a »disadvantageous position« in the travel market. In order to avoid this, travellers are persuaded to reserve a room directly on the hotels' own websites (Morosan & Jeong, 2008; Yoon, 2011).

Hotel websites or other forms of presence on the Internet enable hotel managers to easily get and stay in touch with potential and regular guests on a personal basis. Today, web technologies are easily learned by hotel managers. For example, they can very easily update new information or pictures on their site. There is also an enhanced content management system (CMS) that allows the setting and use of multilingual content. It is thus very easy and cost efficient for the hotels to translate the messages into the languages of potential guests. Through the presence on the Internet, hotel managers very easily use the fundamental principles of hospitality marketing to increase the hotel's reputation. Effectively managed, websites can be the best medium for creating relationships with customers, developing the hotel brand, enhancing guest retention and encouraging repeat visits of the existing hotel guests (Milović, 2012).

Awareness regarding optimising hotel websites for search engines is vital. Each traveller or tourist uses search engines to obtain information about where they want to go. Hotel managers need to focus significant time and resources on this type of In-

ternet traffic, particularly in creating strategies that will help them increase their presence on search engines. Internet search engines are constantly changing the rules of ranking websites. It is, therefore, crucial for managers remain aware of the latest search engine optimisation trends (Milović, 2012). When a hotel has an effective site that is optimised for different web browsers, it results in increased reservations, customer loyalty and a good return on investment (ROI). Furthermore, online presence saves hotel staff time with automated processes on the site, such as typing the basic information about the guests, questionnaires, layout of conference rooms and other information that can be collected from the website. Moreover, it is easier for staff to collect the contact details of guests, which will encourage their return through regular blogs, newsletters, membership in an online community, promotions and other forms of contact. The use of questionnaires allows hotels to improve service quality, customer satisfaction, and to develop new capacities and avoid mistakes (Ip Law, & Lee, 2010; Milović, 2012).

Moreover, the tourism and hospitality industry is turning to social media to promote its services and to engage customers in a more personal way (Milović, 2012). Contact with potential customers can be achieved in several ways (Wilhite, 2010), for example by creating a presence on major social networks (Facebook, Twitter, Flickr, etc.) and sponsoring a group of people with common interests who live nearby is one of the ways to find guests, by providing in-depth, focused, and member-generated contents, engaging tourists through interactions with other members based on common attributes and interests, and retaining them by facilitating relationship building with other members (Wellman et al., 1996; Wang & Fesenmaier, 2004; Zhu et al., 2005) and so forth. 'Virtual' or 'social' networks can be defined as permeable structures without physical borders separating them from the environment, comprising a multiplicity of autonomous, interdependent, and self-organising actors that rely on the Internet infrastructure to integrate and exchange value (Pollock, 1998; Romano, Eliva & Passiante, 2001; Wang & Fesenmaier, 2004; Zhu et al., 2005; Katsoni, 2013a).

The biggest on-site opportunity for social media in the hospitality industry is at the intersection of social media and mobile phone technology. For exam-

ple, if mobile geolocation features alert a hotel that a guest is in the building, it creates the opportunity for them to offer relevant services. Perhaps when a guest arrives, for instance, management will encourage him to come down to the bar and enjoy a complimentary cocktail (Kessler, 2010). Hotels also need to join social networks that are specifically designed for tourists. Tourism-based user groups have several purposes; they provide an open forum for companies that offer products and services associated with the user group. TourNCare, Tripatini, and GoAbroad are examples of social networks exclusively for tourists and travellers. Marketing to these groups reaches the guests who have already been identified as interested in tourism. (Milović, 2012).

Blogs are one virtual form of networking among tourists, acting as media through which individuals and organisations present opinions and/or information about specific topics that are relevant to the tourist destination, such as images, photographs, links to related sites, critiques, variety of activities, reviews and opinions (Pühringer and Taylor, 2008). Hotels can benefit from the existence of blogs, as they can provide them with valuable information in the forms of 'e-word of mouth' messages, such as specific performance reviews, product and event evaluations, reviews of service standards, identification of product or infrastructure gaps. (Bickart & Schindler, 2002; Pühringer & Taylor, 2008). Hotel managers should have a blog to post information on activities, attractions, dining, shopping, or nightlife. It allows them to provide guests with suggestions on what to do. Moreover, it is a constant source of content that can be used on other social networks, such as Facebook and Twitter. Inviting guests to join the hotel's Facebook page, and asking them to post pictures of the hotel and their trip could enhance the hotel's reputation as well. Interacting with customers using Facebook and Twitter can improve customer service. Personalised customer service is also possible via the telephone, but it is immensely easier to accomplish with social media. Another option is having a Facebook or Twitter page to answer the questions that guests may ask. Instead of having to come to the hotel to collect brochures, guests could ask questions before they get to the hotel, from their rooms, or while they are out exploring. They would also have easy access to the questions other guests

asked and previous recommendations (Kessler, 2010; Milović, 2012).

The growth in the use of e-mail is one of the most important developments in business communication in the last quarter century. The widespread acceptance of e-mail has deeply influenced society and business, changing how individuals interact with each other and how businesses interact with customers (O'Connor, 2008). It is important to send an appropriate e-mail message to the right guest at the right time, all with the aim of improving the guest experience (Milović, 2012). Another way is the use of contact forms that suggest hotels. Internet users rarely divulge their personal information for marketing purposes (Katsoni, 2015), although the use of self-directed user contact forms requires the exchange of such information. This may include users who sign up for a mailing list and in return receive discounts or by entering their contact information get a chance to win a prize. These mailing lists can still be used for marketing campaigns of desired customers (Milović, 2012). Email marketing for hotels helps show the very best of the hotel in a single customised message. Not only does the email feature the hotel's logo and contact information, as well as a personalised greeting for the recipient, but it will also show all the hotel has to offer. Here, we can differentiate the following (Xotels, 2012): confirmation emails (email messages that guests receive immediately after completing online reservation in order to confirm it), pre-arrival emails (messages that are sent to remind guests about the reservation they made); thank-you emails, and finally guest satisfaction surveys (Milović, 2012).

With the use of e-CRM software and based on stay patterns and preferences, hotels can send targeted, relevant and high-quality emails to guests. This system for guest profiling with email marketing with newsletters and special offers is aimed at increasing the frequency of stays. The integration of e-CRM and PMS (Protection Management System) enables the automatic sending of emails that are highly personalised and customised for each guest.

e-CRM in the Post-Purchase Stage of the Business Cycle in the Hotel Industry

The results of electronic marketing campaigns can be measured with the help of an e-CRM system, as well as the knowledge about how much income has been

generated from each email and campaign. More can be known about the preferences of guests and their purchasing habits, and it is possible to receive feedback from guest satisfaction surveys. The most important thing is to be able to quantify this information, specifically concerning income (Milović, 2012; Katsoni, 2015). Applications of e-CRM can be found in the room division department and online reservation rooms, where customers often obtain a discount by using online booking in comparison to the traditional reservation method. Also, the Hotel Front Office System (HFOS) operates 24 hours a day and 365 days a year at the point of contact with the customer, offers a variety of information to frontline employees, and provides a safe and swift transaction time in order to decrease the time spent on the system and increase the time spent on customer service. The system also was designed using easy-to-understand language and technology (Aziz, Bakhtiar, Kamaruddin & Ahmad, 2012) and offers an up-to-date, relevant and necessary information to the user which will satisfy the users' needs (Bailey and Pearson, 1983; Eldon, 1997; Ahn, Ryu & Han, 2004; Kim, Lee & Law, 2008).

Restaurant management information systems (RMIS), (Aziz, Bakhtiar, Kamaruddin and Ahmad, 2012) are another form of e-CRM. According to Choe (1998) as well as Huber (2003), an RMIS is a system that supports the management in their decision-making processes as well as in traditional financial reporting, variance reporting, and forecasting. RMIS have been used to develop store performance in many ways, for example, producing reports that help in managerial decision-making, reducing food delivery times, improving service quality, producing forecasts that aid managers in ordering, planning food production and scheduling labour. Zhang and Lado (2001) said that by properly deploying RMIS at an operational level, companies may develop and support their unique operational resources and capabilities (Aziz et al., 2012). Finally, according to Choe (1998), an RMIS is regularly not only wide-scoped, covering external, nonfinancial information, and future-oriented material, but it also presents data or summarises it within periods of time or areas of interest in a timely and aggregated manner and in a diversity of ways (Aziz et al., 2012).

Furthermore, most hospitality facilities, such as hotels, motels, amusement parks, theme parks, ca-

sinos, and resorts, face many common problems associated with not being able to locate or communicate with their patrons. These problems may result in lost revenues for the hospitality facilities and in inconvenience for patrons (Halbritter et al., 2007). One aspect consistent with the present RMIS includes a method for providing communication services for a guest at a hospitality facility including a network, a server, and a plurality of terminals. This method, initially mentioned by Halbritter et al. (2007), relates generally to the field of interactive computer systems, and more particularly to a system and method for use in a hospitality facility enabling communication and an individualised content experience.

Systems, methods, and articles of manufacture consistent with the present invention allow a user, such as a patron or a person affiliated with a hospitality facility, to locate and/or communicate with another patron at a hospitality facility. For example, such a system may assign to each patron a unique patron identifier (e.g., account number) and a sending device (such as a magnetic card or a transmitter). Moreover, each location in the hospitality facility (e.g., restaurant, hotel lobby, and hotel room) may include a unique location identifier and a receiving device (such as a card reader or a receiver). Whenever a patron enters or exits a location, the receiving device may receive the patron identifier from his/her sending device. Then, the receiving device may send, for example, to a server, both the patron identifier and the location identifier for storage (Halbritter et al., 2007). Furthermore, a user (such as a patron or a person affiliated with the hospitality facility) may locate or communicate with a particular patron using a client terminal or a similar device. After the user enters the name of a particular patron, the client terminal may retrieve the location (or last-known location) from a database on a server. The user may then send a message, initiate a voice over network (VON) call to the patron, or obtain the patron's current location or last-known location. For example, a patron may send a personal message, such as »Meet me in the lobby in five minutes,« to another patron. Similarly, a person affiliated with the hospitality facility may inform a patron of the status of an event, such as the status of an offline game, or notify a patron of a promotion. The message may be of any type, such as an instant message, an e-mail message, or a voice message. The

location information may include information identifying the location, such as »Front Desk,« and/or directions to that location (Halbritter et al., 2007).

Another example is customer service in Marriott hotels. Inherent to good customer service is a superior responsiveness to customer needs. For example, Marriott's reservation system manages the booking of more than 355,000 hotel rooms globally. This system offers Marriott an invaluable opportunity to gather information about the characteristics, habits, and preferences of their guests. In fact, the 12 million customer profiles stored in Marriott's frequent-lodger program are the largest such database in the lodging industry. This information allows Marriott to cross-reference the personal profiles of customers with product preferences. By doing so, Marriott can target incentives and promotions with unprecedented precision and thus offer distinctive customer service (Bilgihan et al., 2011).

Trump SoHo also implemented Cisco solutions for the hotel's network, pervasive wireless access, and unified communications to provide a highly personalised guest experience. Hotel employees wear a wireless IP voice badge that operates over the same Cisco Unified Communications system used for typical voice calls. When the bellhop asks the guest's name at the door, the check-in staff hears so that a moment later they can greet the guest by name. When guests arrive in their room, the colour display on the IP phone shows a personalised welcome message. Furthermore, guests can use the IP phone's touch screen for voicemail, weather by zip code, airport information, and e-mail. Employees can also use the in-room phones to confirm that a room is ready for the next guest. The room attendant enters a code on the phone, which updates the PMS. Finding out right away that a room is ready helps the hotel to accommodate guests who would like to check-in early, thus improving customer service (Bilgihan et al., 2011).

Creating Network Technologies in the Hotel Industry

A hotel can be viewed as a network in which many teams are working in the various departments and divisions within it. Many authors have presented characteristics of effective teams, which are usually associated with »complementary skills who are committed to a common purpose, performance goals and

approach for which they hold themselves mutually accountable», as Katzenbach and Smith (2000) state. Leadership and trust among members of the team are significant for the hotel's successful performance, which in turn, influences team's processes and interaction, such as coordination to perform different tasks. The systems theory approach is associated with the elements of interdependence and relationships, coordination of activities between and within teams and, at the same time, distinctive roles for the implementation of the superordinate goal that is clearly defined and shared among the network team (Mickan & Rodger, 2000). Although social network theory argues that the attributes of individuals are less important than their relationships and connections to other actors within the network, at times loose or even non-symbiotic relationships among members or teams, personal expectations, or the way others perceive the roles of the members of the group may influence the way networks function and the results of the network (Mickan & Rodger, 2000; Ooi & Pedersen, 2010; Povilanskas & Armaitienė, 2010; Kavouira & Katsoni, 2013).

ICT and particularly e-CRM applications play a critical role in the competitiveness of hotels, as well as in the entire tourism industry as a whole. Not only do ICTs and e-CRM systems support consumer-centricity, with consumers being able to identify, customise and purchase tourism products, but they also support the globalisation of the industry by providing effective tools for hoteliers to develop, manage and distribute their offered services worldwide (Buhalis, 1998; Katsoni, 2015). e-CRM provides companies with the means to implement interactive, personalised and relevant communication with customers through both electronic and traditional channels. It uses a complete overview of the customer to make decisions about what is the best way to approach customers. Proponents of e-CRM will recognise that a comprehensive understanding of customers' activities, personalisation, relevance, permits, and timeliness metrics are means to the end of optimisation (Milović, 2011). It is important to understand that CRM is a way to run a hotel, rather than just a tool to use within the way a hotel is run (Nikolis, 2009). e-CRM can be used to personalise individual experiences that will give individual customers a feeling that they are fully taken care of, which opens up new

marketing opportunities based on customer preferences and history. Ideally, e-CRM enables organisations to adapt their products and services to each client and fully meet the needs and expectations of the client. Increasing global competition and transparency among suppliers and prices has resulted in users being more demanding and more mobile between service providers. As a result, the quality of the service itself is no longer sufficient to increase customer loyalty and repeat purchases (Sigala, 2008). High-quality information about customers, their habits and the services they use, as well as rapid responses to their wishes, can produce competitive advantage.

The internal business departments should have mutual networking, and be linked with tourism management departments, public security, travel agents, etc., especially between different hotels so as to realise online booking. Synergies and interdependence among those involved can reinforce relations and the coordination of activities when all parts involved cooperate to promote a uniform and complete tourist experience (Kavouira & Katsoni, 2013). All of these may lead to a win-win situation for the effective marketing management practice of the hotel, since all teams and divisions involved cooperate to promote a complete tourist experience.

Conclusion and Managerial Implications

The hotel industry must market its product through a variety of channels, expand their market share, and gain a firm foothold in the international market; therefore, it is necessary to participate in international information networks and to collect information about international tourism markets. Indisputably, the following trends for the future need to be recognised (Rauch, 2011; Milović, 2012; Katsoni, 2015), such as the need to invest in ICT implementation and e-CRM systems leading to the renovation of the majority of the hotel's facilities, such as lobbies, restaurants, bars and fitness centres, as well as replacing beds, TVs, and more; online and especially mobile bookings will continue to grow, as increasing numbers of travellers will be turning to their mobile devices not only to research lodging and travel options but to book and communicate room preferences directly with the hotel. It is crucial that hoteliers optimise their website for mobile usage to cap-

ture potential mobile transactions. Furthermore, social media will continue to transform connections with travellers, and it has become necessary for hotels to add social media to their marketing mix.

This paper argues that a hotel collaborative marketing management network of information flows between businesses through ICT use and e-CRM applications should be vigorously developed, as it enables the formation of cooperation in new expeditious ways to access unique or innovating resources. The whole approach should be based on a trust and business culture that values cooperation and ongoing dialogue between not only the different hotel departments, (Levy et al., 2003; Turban et al., 2004; Inkpen and Tsang, 2005; Kavaratzis and Ashworth, 2008; McGehee et al., 2010: 486; Kavoura & Katsoni, 2013), but also between the internal and external environment in the hotel industry, in a balanced and holistic way. Missing any stage of the e-CRM application in any aspect analysed above will result in a loss of satisfaction for customers and become a possible source of conflict and inadequate service between the involved stakeholders. An e-CRM system can be used as an effective tool for applying a systems theory approach in the hotel industry, as its successful implementation is associated with the elements of interdependence and relationships, and the coordination of activities between and within teams; at the same time, distinctive roles for the implementation of the superordinate goal that is clearly defined and shared among the network team, as defined by Mikan and Rodger (2000), which is essential to the success of the firm.

To this end, the role of e-CRM is of significance for an effective marketing management policy and facilitates the ultimate goal of providing a holistic and coherent experience towards tourists (Kavoura & Katsoni, 2013), in all aspects of online user experience throughout the hotel industry transaction cycle, i.e. the pre-purchase, purchase and post-purchase stages analysed in the present article. A collaborative internal and external marketing management policy, aimed at achieving the full automation of reservation, rooming, accommodation, guest market analysis, financial planning, and other aspects in all hotel departments and the determination of the target market competition in the market of guest sources

are all guaranteed by ICT and application of e-CRM systems.

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