

Website Evaluation of luxury Hotels in Algeria Using Advanced Content Analysis and eMICA Model

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Abstract:

This study examines the features offered by the websites of the top eight luxury hotels in Algeria, as listed in Booking and TripAdvisor in 2021. The study is based on the extended Model of Internet Commerce Adoption (eMICA) and content analysis. It involves a qualitative method of measurement and evaluation of the information provided by hotel websites by assessing fifty website features on the hotels' websites grouped according to the three eMICA stages and also grouped in seven dimensions determined by the content analysis.

The results of the website evaluation showed that El AURASSI hotel has more of the features than the rest of the hotels, and RODINA and SHERATON are the leading hotels in website development depth based on the eMICA model. However, it is worth noting that luxury hotels in Algeria are not utilizing the Internet to its full potential, particularly in terms of the use of websites.

Keywords: evaluation of hotel websites, content analysis, innovation, eMICA model, luxury hotels in Algeria.

JEL Classification Codes: M31, L83, L86, Z39

ملخص:

الغرض من هذه الدراسة هو تقييم الميزات التي تقدمها المواقع الإلكترونية لأفضل ثمانية فنادق فاخرة في الجزائر، حسب التصنيف الوارد في موقعي booking و tripadvisor في عام 2021. وتستند الدراسة إلى النموذج الموسع لاعتماد التجارة عبر الإنترنت (eMICA) وتحليل المحتوى. لقد تم الاعتماد على منهج نوعي لقياس وتقييم المعلومات المقدمة من مواقع الفنادق من خلال دراسة خمسين ميزة لمواقع الفنادق موزعة وفقاً لمراحل eMICA الثلاث، وكذلك حسب سبعة أبعاد يحددها تحليل المحتوى.

أظهرت نتائج تقييم المواقع الإلكترونية أن فندق El Aurassi يقدم بخصائص أكثر من باقي الفنادق، وأن فندق RODINA و SHERATON يحتلان الصدارة في مجال تطوير مواقع الويب على أساس نموذج eMICA. ومع ذلك، تجدر الإشارة إلى أن الفنادق الفاخرة في الجزائر لا تستفيد من الخدمات التي تقدمها الإنترنت من أجل تعزيز حضورها في الفضاء الإلكتروني، لا سيما فيما يتعلق باستخدام المواقع الإلكترونية.

كلمات مفتاحية: تقييم مواقع الفنادق، تحليل المحتوى، نموذج eMICA، ابداع، فنادق خمس نجوم بالجزائر.

تصنيفات JEL: M31, L83, L86, Z39

1. Introduction

Since internet has a huge impact on tourism in general and on hotels in particular, most of brand hotels changed their marketing practices, including website and social networks, which are considered nowadays as a competitive advantage. (Toh, R.S, DeKay, C.F, & Raven, 2011) research showed that 80 per cent of travelers look for hotel information's using websites and that more than 50 per cent of them make their decision by consulting customers' opinion on hotels' official pages in social media.

Because hotel's website plays a critical role in marketing and prosperity, studies on website's content and features have evolved over the years and brand hotels started to design their websites to reach others uses such as providing interactivity and personalizing theirs services. (Murphy, J., E, C, & R, 1996) Categorized thirty-two different site features into four groups: promotion and marketing, service and information, interactivity and technology, and management (Ting, Wang, Bau, & Chiang, 2013, p. 284), among the results obtained, Europe and Asia were the first continents in terms of the depth of development of websites based on the e-MICA model. Also, Chung and Law applied five dimensions to measure the efficacy of Hong Kong hotel websites through content (Ting, Wang, Bau, & Chiang, 2013, p. 285), the results obtained showed a wider use of the Internet by businesses compared to government sites, then (Yeung & Law, 2006) modified this approach by consideration the most the measure of usability.

Another study elaborated by (Wan, 2002) and completed by (Shuai & Wu, 2011) to evaluate four and five stars international tourist hotels and travel agency in Taiwan, based on user interface, variety of information and online reservation, communication and executing transactions.

The Extended Model of Internet Commerce Adoption (eMICA) established by (Doolin, Burgess, & Cooper, 2002) seems to be the suitable model to analyze technical of tourism websites in New Zealand. This study assessed the degree of website development in New Zealand's regional tourism organizations through the extended internet commerce adoption model, the results showed the importance of interactivity in measuring the relative maturity of tourism websites.

Studies on hotels' use of digital marketing practices, particularly the use of websites, have evolved over the years and are very easy to find in the literature. While luxury Algerian hotels were not examined in earlier studies carefully, and the few established ones still enable to determinate exactly on what influence the internet has on luxury hotels marketing.

Therefore, the primary objective of this research is to examine hotel website features, by conducting both, a content analysis and the modified Extended Model of Internet Commerce Adoption (eMICA). Thus, the research problem can be

formulated by the following questions:

Q1. What are the existing dimensions and features in the evaluation of hotel's website?

Q2. Which luxury Algerian hotel has the most developed website according to the content analysis and eMICA model?

2. Literature Review

2.1 Digital marketing in hotel industry

With the launch of superior internet technologies, the rules of marketing have been redefined, even the way of doing business has been affected by this change all over the world.

Digital marketing had become an indispensable condition to succeed businesses by creating interactivity between brands and their customers, which has given a whole opportunity to marketers to have a better comprehension of customer behavior and satisfy their needs.

Digital marketing could be defined as "The application of the Internet and related digital technologies in conjunction with traditional communications to achieve marketing objectives". Also, (Digital Marketing) the promotion of products or brands via one or more forms of electronic media, differs from traditional marketing in that it uses channels and methods that enable an organization to analyze marketing campaigns and understand what is working and what isn't – typically in real-time.

As all kinds of businesses, the hotel industry has adopted new modes of marketing to provide services on holidays. Now, customers can compare hotels' services and purchase a suitable offer for them online with only a click of a button.

2.2 Hotel's Website

Because a hotel's website (Batinić, 2015) plays an essential role in marketing the property; it the property, including online booking (Wong & Law, 2005) (Tso & Law, 2005), (Batinić, 2015) must be attractive and well designed in order to attract customers to visit it, keep them for a while and make them frequently come back to their website. Also, hotel website should contain reliable and updated information about products and services, destination, events etc. A good hotel website should be designed in a way that there is enough breathing space between various rubrics, to give customers time to read clearly and focus on the service and price lists. In addition, websites are significant for hotel brands, and, thus, managers have to create websites that will support their brand names in two ways: as a direct marketing tool and as a direct sales medium.

2.3 Hotel's website evaluation

Numerous researches have studied and classified hotel's website, however, there are only a few who had been established in Algeria. The majority of these

researches have used contents analysis without considering the depth and technical details that might be helpful for both customers and brands.

Models that had been presented and developed were based on particular dimensions, and each model is based on those that precedes it and complete it. (Murphy, J., E, C, & R, 1996) categorized thirty-two different site features into four groups: promotion and marketing, service and information, interactivity and technology, and management (Ting, Wang, Bau, & Chiang, 2013). Moreover, (Chung & Law, 2003) applied five dimensions to measure the efficacy of Hong Kong hotel websites through content analysis (namely, facilities information, customer contact information, reservation information, surrounding area information, and website management) (Ting, Wang, Bau, & Chiang, 2013), then (Yeung & Law, 2006) modified the approach of website evaluation by the measure of usability in a study of all hotels websites associations members in Hong Kong.

Another study elaborated by (Wan, 2002) to evaluate four and five stars international tourist hotels and travel agency in Taiwan, applied user interface, variety of information and online reservation. This study was completed by (Shuai & Wu, 2011) work based on information, communication and executing transactions, to evaluate 48 internationals hotels' websites in Taiwan.

Otherwise, (Baloglu & Pekcan Y, 2006) presented a content analysis of four and five stars in Turkey and they found that hotels website have different types of design characteristics (i.e., interactivity, navigation, and functionality) and site marketing practices.

In relation to the above, (Burgess & Cooper, 1999) have founded the extended model of Internet Commerce Adoption (eMICA) to describe and evaluate the extent commercial development of tourism websites in New Zealand. The eMICA model consists of three levels of business process (promotion, provision and processing), and incorporates a number of layers of functionality and complexity, ranging from the lowest to the highest sophisticated. The eMICA is shown in table 01.

Table 01: The extended Model of Internet Commerce Adoption (eMICA)

eMICA	Example of functionality
STAGE 1 – PROMOTION	
Layer 01: basic information	Company name, physical address and contact details, area of business.
Layer 02: rich	Annual report, email contact, information

information	on company activities
Stage 2— PROVISION Layer 01 :low interactivity Layer 02: medium interactivity Layer 03: high interactivity	Basic product catalogue, hyperlinks to further information, online enquiry form. Higher-level product catalogues, customer support (e.g., FAQs, sitemaps), industry-specific value added features. Chat room, discussion forum, multimedia, newsletters or updates by email.
Stage 3— PROCESSING	Secure online transactions, order status and tracking, interaction with corporate servers.

Source: (Doolin, Burgess, & Cooper, 2002)

3. Methodology

Booking and Tripadvisor were used to identify the hotels to be analyzed. Both websites listed more than 48 five-star hotels in Algeria, 67% of them had their website address listed. Most of hotels are located in well-known cities as Algiers, Oran, Annaba, and Oued Souf.

The total number of sites has been reduced to eight due to the fact that several hotel chains located in different cities of Algeria were using the same website on the national territory use the same website

Table 02: details of selected hotels

Hotel	Websites	Administrator	Location
Sheraton	https://www.marriott.com/hotels/travel/orsni-sheraton-oran-hotel	Private	Algiers
Al Aurassi	https://www.el-aurassi.com/	Private	Algiers
AZ	https://azhotels.dz/montana/	Private	Mostaghanem
Holiday Inn	https://www.ihg.com/holidayinn/hotels/fr/fr/cheraga-alger/algct/hoteldetail	Private	Algiers
Gazelle D'or	http://www.hotel-lagazelledor.com/	Private	Oued Souf
El Djazair	https://www.chaineeldjazair.com/hotel-el-el-djazair/	Government	Algiers
Sofitel	https://all.accor.com/hotel/1540/index.fr.shtml	Private	Algiers
Rodina	https://www.rodinahotel.com	Private	Oran

Source: <https://www.booking.com/index.fr.html>

First, we considered only seven dimensions with a total of fifty features to evaluate websites' content: interactivity, navigation, functionality, marketing, service, innovation, online processing (see table 03).

Also, we adapted the eMICA model to evaluate hotel's websites technical maturity level. This model classifies website interfaces according to a three-stage rubric, namely, promotion, provision, processing, and it comprised fifty-nine features (see table 04).

Features included in hotels' websites analysis can be evaluated into two main columns to evaluate website's content and depth by answering yes or no.

Table 03: Dimension of Hotel Website Features

Dimensions	Features	Scale
Interactivity	offline reservation, telephone number for worldwide reservation, special request forms, general description/history, map, rewards, latest news, address, fax, telephone, e-mail, chat or discussion forum, newsletter, FAQ, privacy policy.	0 (no) - 1 (yes)
Navigation	Site map, keyword search.	0 (no) - 1 (yes)
Functionality	Currency converter, membership system, downloads facilities.	0 (no) - 1 (yes)
Marketing	Service prices, packages and promotions, restaurants, bars, photos or photo album, video, route information, rewards, special offers.	0 (no) - 1 (yes)
Service	Arrival and departure dates, hotel rooms and suites, activities and entertainment, restaurants, bars, conference and meeting rooms, map, route information.	0 (no) - 1 (yes)
Innovation	Consultation or cancellation of the reservation, virtual tours, local time.	0 (no) - 1 (yes)
Online processing	online reservation, currency converter, view or cancel a reservation, payment options, special request forms, weather, local time, membership system, chat or forum, share this page.	0 (no) - 1 (yes)

Source: (Ting, Wang, Bau, & Chiang, 2013)

Table 04: The extended model of Internet Commerce Adoption (eMICA)

eMICA Stages	Features	Scale
Stage1:Promotion		
Layer 1: Basic information	Phone number, address, fax, telephone for reservations worldwide.	0 (no) - 1 (yes)
Layer 2: Rich information	Prices and costs of products and services, important contacts of the organization, arrival and departure times, general description and history, awards, e-mail, privacy policy.	
Stage 2: Provision		
Layer 1: Low interactivity	Offline reservations, packages and promotions, currency converter, hotel rooms and suites, activities and entertainment, restaurants, bars, conference and meeting rooms, photos or photo album, map, weather, local time, travel guides, latest news, tips, share this page.	0 (no) - 1 (yes)
Layer 2: Medium interactivity	reservation consultation or cancellation, payment options, special request forms, site map, itinerary information, membership system, FAQs, special offers, keyword search, download facilities.	0 (no) - 1 (yes)
Layer 3: High interactivity	Video, virtual tours, multilingual support, schedules or travel plans, chat or discussion forum, newsletter.	0 (no) - 1 (yes)
Stage3:Processing		
Advanced applications	Digital signature, online reservation, online purchase or gift shop, special request forms.	0 (no) - 1 (yes)

Source: (Doolin, Burgess, & Cooper, 2002)

4. Results and Discussion

4.1 Hotels' websites content analysis

Table 05: Analysis of content features of worldwide hotels webs

Dimension	Sheraton	AZ	El Djazair	Holiday -Inn	El Aurassi	Sofitel	Rodina	Gazelle d'Or
Interactivity « 15 items »	80%	47%	67%	67%	73%	67%	73%	40%
Navigation « 2 items »	50%	50%	50%	50%	50%	0%	50%	0%
functionality « 3 items »	34%	0%	0%	67%	67%	67%	67%	0%
Marketing « 9 items »	67%	78%	55%	67%	56%	56%	56%	55%
Service « 8 items »	100%	100%	100%	100%	100%	100%	100%	87,5%
Innovation « 3 items »	33%	33%	0%	33%	67%	0%	33%	0%
Online Processing « 10 items »	50%	50%	20%	60%	90%	40%	70%	20%
Somme des items 50 items /100%	68%	58%	52%	68%	74%	58%	70%	40%

Source: prepared by the researchers.

Using the terms determined in the content analysis, the qualitative evaluation of the websites involved fifty features. We found that 74% of features are well implemented in El Aurassi hotel, 70% in Rodina hotel, 68% in Sheraton and Holiday-Inn hotel, 58% in both AZ and Sofitel hotel, and 52% in El Djazair hotel and finally La Gazelle d'Or with 40% of features.

El Aurassi's website showed leading performance: with online processing, innovation and functionality, and Sheraton's website unregister the highest score of interactivity. All hotels' websites seems quite equal in term of service, while the values of the navigation dimension vary between 0% and 50%. We judge that AZ hotel, El Djazair hotel and la Gazelle D'or hotel must improve their websites' functionality by implementing: Currency converter, membership system, download facilities.

4.2 Hotels' websites evaluation based on eMICA model:

Table 06: Analysis of the Worldwide Hotel Websites Based on the Modified eMICA

eMICA Stages	Sheraton	AZ	El-Djazair	Holiday-Inn	EL - Aurassi	Sofitel	Rodina	Gazelle d'Or
Stage1:Promotion								
Layer 01: Basic information	100%	75%	75%	75%	100%	100%	100%	100%
Layer 02: Rich information	57%	14%	57%	71%	43%	43%	43%	28%
Stage2: Provision								
Layer 01: Low interactivity	75%	66%	58%	75%	84%	77%	70%	66%
Layer 02: Medium interactivity	63%	27%	18%	36%	54%	36%	36%	09%
Layer 03: High interactivity	20%	40%	40%	20%	67%	67%	50%	40%
Stage 3Processing								
Advanced applications	20%	0%	20%	20%	40%	0%	20%	0%

Source: prepared by the researchers.

Based on the data from the adapted eMICA perspectives (shown in table 04), we found that all hotels had implemented first stage (promotion) with all continents at 75% or 100% for basic information. For the next layer, rich information, five out eight studied hotels have less than 50% of features.

Contrary to previous results, Sofitel and El Aurassi have the highest interactivity rate in terms of second stage (provision). Also, we see that the medium and the high interactivity features are being recently implemented.

For the last stage (processing), hotels showed a weak implementation rate of 20% except El Aurassi which had a 40 percent implementation of features.

Since processing is the most significant stage in eMICA model, we judge that luxury hotels in Algeria are limited in term of implementation ratio of advanced features, and this may be justified by investment hesitation this features or fundamental functionality. Moreover, the provision stage clarifies that hotels are more likely to create low interactivity and this might impact their website maturity.

5. Conclusion and implication

This research took up for the first time the topic of website evaluation of luxury Hotels in Algeria. This evaluation combines both, the modified Extended Model of Internet Commerce Adoption (eMICA) and content analysis, by using a qualitative method.

The findings lead to many practical implications for hotel managers, marketers and web designers. It demonstrates that fundamental hotels' websites features (as basic information, marketing and services) are well implemented, and those hoteliers must improve high interactivity features on their website and integrate other innovative tools in order to use websites as a competitive advantage.

Overall, the evaluation of five star hotels websites in Algeria put forward El Aurassi hotel followed by Rodina hotel, Sheraton and holiday Inn in terms of website evaluation.

Furthermore, it is essential to mention that the marketing practices adopted by luxury hotels in Algeria are based on social networks, particularly Instagram, with a regular number of publications per week, and a high level of interaction with followers. Also, managers' attention should be oriented to the uses of mobile marketing, especially mobile applications. We can't deny that it is an expensive tool, but it has a lot of benefits, such as increasing hotel website traffic and proving real-time interaction with customers.

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