Contents lists available at EKB

Minia Journal of Tourism and Hospitality Research

Journal homepage: https://mjthr.journals.ekb.eg/

Egyptian Knowledge Bank
بنك المعرفة المصري

Evaluating the Websites' Quality of Five and Four Star Hotels in Egypt

Samar A. Elrahem A. Elsater [a]   , **Abd El-Bary Ahmed Ali Dawood** [b]

Mohamed Ahmed Ali [b, c],   **Mostafa M. M. Hussein** [b]

[a] Hotel Studies Department, Faculty of Tourism & Hotels, Luxor University, Egypt.
[b] Hotel Management Department, Faculty of Tourism & Hotels, Minia University, Egypt.
[c] Princess Nourah Bint Abdulrahman University, KSA.

Keywords	Abstract
Website Quality Egyptian Hotels Website Evaluation Website assessment	The research aimed to assess the quality of hotels' websites and explore the defects that obstruct customers to purchase on hotels' websites. Website quality was defined as users' evaluation of a website's features meeting their requirements and reflecting overall superiority of the website A quantitative method was used to collect the data. A total of 421 valid questionnaires were collected out of 600. The questionnaire was directed to the guests of four and five-star hotels in Hurghada, Egypt. SPSS V. 25 was used to analyze data. Correlation, one-sample T-test, and one-way ANOVA was used. The findings revealed that the majority of respondents react neutrally regarding hotel website quality dimensions. The results also revealed that there were strong relationships between informational content, website design, ease of use, interactivity, and marketing image. It also revealed that there were no statistically significant differences between males and females or between four and five-star hotels regarding to hotels' websites quality. There were statistically significant differences between respondents regarding age and nationalities factors with respect to ease of use, informational content, design and interactivity. The current research recommended that hotel IT managers should exert more efforts to

improve the quality of their websites. This study contribution is exploring the defects that obstruct customers from using and browsing the hotels' websites. In addition to, addressing the statistically significant correlations among hotels' website quality dimensions.

1. Introduction

Technology became an important strategic tool for hospitality organizations to improve their performance and strategic competitiveness. Adoption and diffusion of technology in hospitality organizations were complex processes affecting both internal and external hospitality organization operations (Wang and Qualls, 2007). In recent years, the expansion of the internet became more and more apparent because of the increasing number of users and online services, such as E-banking and E-commerce (Antona and Stephanidis, 2016). The hospitality operations were greatly affected by the technology, especially in the area of communications, and the quantity and quality of information available (Sun *et al.*, 2017). Information technology development enabled most hotels to improve their business operations rapidly and effectively (Kim *et al.*, 2017). Nowadays, the hotel industry continuously was growing all over the world, so people had many options for choosing a hotel or resort. Hospitality was an old traditional activity, which has developed rapidly since the beginning of the 21st century (Lukanova and Ilieva, 2019; Sun *et al.*, 2022).

2. Literature Review
2.1 Dimensions of Hotels' Websites Quality

Qi (2016) stated that hoteliers and researchers have intensively focused on the performance of hotels' websites and sought to determine the factors that influence customers' online perceptions and choices. Escobar-Rodríguez and Carvajal-Trujillo (2013); Salavati and Hashim (2015); Ali (2016); Ostovare and Shahraki (2019) found that many academics were identified some factors for website evaluation according to research goals. Ali (2016) asserted that website quality was a complex multi-dimensional structure.

2.1.1 Website Informational Content

A high-quality hotel website could offer detailed information and users did not need to contact the hotel through travel agencies or third parties (Lin, 2009). Website informational content included a bunch of information such as the services and facilities details, products and services prices, room photos, order status, or tracking and distribution channels (Bellary, 2010; Abou-Shouk and khalifa, 2017; Koronios *et al.*, 2018). The presented information should be sufficient, trustworthy, timely, relevant, reasonably arranged, easy to understand, and characterized by the depth of details (Gupta, 2014; Abou-Shouk and khalifa, 2014; Hashim and Abbaspour, Abou-Shouk and khalifa, 2017; Raju *et al.,* 2018; Zhou *et al.*, 2019). The information quality was defined as a measure of value perceived by a customer of the presented material by a website (Hsu *et al.*, 2012). While Jamaludin *et al.* (2015) asserted that information quality referred to the quantity, accuracy, and the form of information about the products and services offered on a website. Ayob (2016) stated that a good quality hotel website presenting useful information might improve the sales volume, increase the hotel revenue and assist the hotel to be a reputable name.

2.1.2 Website Design

Cunliffe (2000) noted that poor website design resulted in about 50 percent loss of potential sales due to potential customers being unable to find what they want or search for. It also led to a 40 percent loss of potential repeat visits because of early negative experiences. Around 46.1% of customers made judgments about the credibility of websites based upon the design look of the site including layout, color scheme, and font size (Fogg *et al.,* 2003). Abdul Aziz *et al.* (2011) noted that a well-designed website led to an encouraging attitude toward a purchase behavior. Luo *et al.* (2012) mentioned that website design played a dynamic role in how customers find required information online.

The objective of hotels when creating websites was to make them as attractive as possible so that potential customers' first impressions and attitudes were positive. In this context, it was essential that the interface conveying information had an attractive design for potential buyers (Demangeot and Broderick, 2010). Ladhari and Michaud (2015) noted that there were several factors, which determine the quality of a website; these factors were professional website design and appeal, navigability and ease of use, and quality of information on the site. Suarez (2016) and Huang *et al.* (2017) asserted that the appearance and the usability of the websites were considered key factors to determine satisfaction. Website design could be presented in two main sections Technical aspects and Visual appeal as follows:

- **Technical Aspects**

Many studies had analyzed the features of hotels' websites, but most had focused on website service quality and information quality without considering their technical depth (Ting *et al.*, 2013). When a hotel offered its services online, it had to focus on having updated and working links on the website so that people were able to use the links easily with no technical problems to purchase the products. If the links on a website were not properly working, people would not spend time on that website trying to purchase products and they were most likely to be dispirited from using that website again (Vrontis *et al.*, 2008).

- **Visual Appeal**

It was a challenge to create a website with an up-to-date layout with fine usability (Chang and Su, 2011). The layout design of the website was not only the first impression of the website but also was an important key factor for user experience. Either from the perspective of business profit or from the perspective of user requirements (Jiang and Wang, 2018). Online service providers sought to find the elements and webpage layouts that would most attract users and contribute to motivating them to purchase from the website (Semerádová and Weinlich, 2020).

2.1.3 Website Ease of Use

Perceived ease of use was defined as the extent to which one found that using a particular system would be easy and free of complexity (Jeon, 2009). Website ease of use improved the efficiency of using the service and increased customer satisfaction (Kassim and Abdullah, 2008). Website usability was defined as a website's capability to be used easily and competently by users (Fang and Holsapple, 2011). The website usability/ ease of use was defined by Dianat *et al.* (2019) as perceived ease of navigation of the website and purchasing through it without difficulty. Easy to use, easy login, and time-saving were the main features of the website's usability. Usability satisfaction could be achieved by ensuring that the website included current and updated information and suitable language (Abou-Shouk and khalifa, 2014). Website usability affected customers' online behavior (Huang *et al.*, 2017).

2.1.4 Interactivity

One of the most important internet benefits was the possibility of interaction between customers and the establishment (Abdullah *et al.* 2016). The interactivity was the extent of responsiveness to the customers and the potential to facilitate interpersonal communication (Boushra, 2008). Interactivity was defined by Pilelienė and Grigaliūnaitė (2016) as two-way communication through a website between an organization representative and customers. Interactivity was defined also as the ability of the company's website to allow users and personnel to communicate, in addition to allowing users to search for information, and transactions across the website (Iliachenko, 2006; Abou-Shouk and Khalifa, 2017). The website was a strong and effective communication platform between the hotel and its customers and potential customers (Cantoni *et al.*,

2011; Ayob, 2016). The main features of website interactivity consisted of responsiveness and social media:

- **Responsiveness**

Responsiveness was the willingness to provide customers with prompt services. Important features of responsiveness were the service representative's availability, replying to website visitors' queries timely, and gathering relevant information to create touchpoints for potential customers. They could influence customers' decision-making (Gupta, 2014). Exploring customer requirements and developing the service according to the responsive feedback enhanced service quality, achieve customer satisfaction, and increased customer trust (Kassim and Abdullah, 2008).

- **Social Media**

Social media sites such as Facebook, Instagram, YouTube, and so on attracted millions of users (Sharma *et al.*, 2021). Those users integrated social media into their daily habits. In addition, social media became a powerful and quick marketing tool (Devece *et al.*, 2014). The current spreading fever of social media showed that social media shopping represented the main upcoming e-commerce opportunities. For academics, it should be one of the most critical and challenging research topics (Hu *et al.*, 2016). Web 2.0 and social media played an important role in the field of hospitality through facilitating active communication and interactivity between firms and customers. Web 2.0 simply was the improved version of the first worldwide web, characterized specifically by the change from static to dynamic or user-generated content and the growth of social media. The use of web 2.0 and social media, and the insertion of their icons in the websites of tourism or hospitality organizations would simplify interactivity with potential customers and this in turn would lead to the maintenance of a relationship with them (Escobar-Rodríguez and Carvajal-Trujillo, 2013; Herrero *et al.,* 2015).

2.1.5. Marketing Image

In the hospitality industry, technology was considered one of the most powerful marketing tools (Akincilar and Dagdeviren, 2014; Li *et al*., 2017; Ezzaouia and Bulchand-Gidumal, 2020). Marketing image was the website's ability to correctly reflect the firm's image (Abou-Shouk and khalifa, 2017). Hotels' adoption of traditional methods of marketing such as newspapers or telemarketing took them out of the competitive race; consequently, to survive in this competitive environment, hoteliers should decrease marketing costs by adopting new distribution channels (Abdul Aziz *et al*., 2011; Diaz and koutra, 2013; Abou-Shouk and khalifa, 2014). Some technological tools existed to make the marketing and sales process more flexible and easy such as a booking engine, which was rooted in a hotel's website (Akincilar and Dagdeviren, 2014; papetti *et al.*, 2018). In addition to marketing and purchasing procurement activities were one of the most important benefits of information technology. The website marketing activities were particularly beneficial for hotel businesses due to their intangible nature (Rahayu and Day, 2015; Ezzaouia and Bulchand-Gidumal, 2020).

2.1.6 Online Processes

Ting *et al*. (2013) classified features of online processes as online availability, online booking, view or cancel reservations, virtual tours, and payment options. Ayob (2016) asserted that hotels, which have possessed their own hotel reservation system, had a good reputation. Bilgihan and Bujisic (2014) declared that hotel reservation percentage was considered the second most frequently purchased travel product online. Cantoni *et al*. (2011) stated that the hotels should design online reservation forms to be simple and easy to complete. Ayob (2016) noted that the hotel reservation system should be flexible in payment methods and guarantee online-secured payment. Ding (2011) asserted that direct online channels like hotels reservation systems should ensure a flexible cancellation

policy. Han *et al.* (2020) noted that the purchasing decision-making depended on the quality of the organization reservation's system.

2.2 Website Evaluation

A website was a software application directed to many different characters of people. As such, all the considerations and the issues regarding its usability were extremely important for assuring its acceptance by the users. The evaluation of a website was important for at least two reasons; firstly, it could provide managers with key information useful to maximize the number of the potential guests and thus increase revenues. Secondly, it could help study the behavior of the users and their reactions to the contents and services offered online (Corigliano and Baggio, 2006). Website evaluation has measured the grade to which a website could assist the target user to achieve certain purposes quickly, efficiently, and professionally (Qu *et al.*, 2017). The main purpose of website evaluations was to check and identify their strengths and weaknesses so that the results could be used to develop the quality of their content and services (Niazi *et al.*, 2020). Therefore, the process of evaluating hotel websites was vital in shedding light on whether websites could deliver valuable and respected information to potential guests (Baki, 2020). The evaluation of websites could help organizations to improve and modernize their targets and services (Tandon *et al.*, 2018: Le *et al.*, 2020). Previous research on the evaluation of tourism destination websites has been widely explored however; there was no standardized model for website quality evaluation (Martínez-Sala *et al.*, 2020).

3. Methodology

Research methodology adopted to answer questions proposed in this research. It presents the research population and sample, data collection tool, data analysis procedures and the statistical tests used. Validity and reliability issues were also addressed in this section.

According to Jonker and Pennink (2010), the quantitative approach was adopted to know the degree of a phenomenon or a specific behavior happened or not, and testing hypotheses (Neuman, 2014; Sekaran and Bougie, 2019). Therefore, the researchers applied the quantitative approach in the current research to assess the performance of hotels' website through a self-administered questionnaire.

3.1 Research population and sample

The population was a set of people, items, or objects from among which samples were taken for measurement (Singh, 2007; Saunders *et al.*, 2012). The target population of this study was the guests who visited five and four-star hotels at Hurghada in Red Sea Governorate in Egypt who visited the hotel's official websites and purchased from them. The city of Hurghada was chosen because most tourists went to it during the research period due to the conditions of the COVID 19 pandemic. In addition to, taking into account the scientific research service of the surrounding community. As for choosing the four and five-star categories because of the hotels' dependence on their website as a marketing tool and a window for their services and facilities (Baloglu and Pekcan, 2006). According to Cochran's formula result the appropriate sample size for this study was 411 participants.

Cochran's formula was the common formula for determining the infinite population sample size (Chaudhuri and Dutta, 2018). The appropriate use of Cochran's sample size formula for both continuous and categorical data (Bartlett *et al.,* 2001).

$$n = \frac{z^2 \, \sigma^2}{e^2}$$

Where:

n: Required sample size
σ: The variance of the population.
z: The value corresponds to the level of confidence (1.96 at the confidence level of 95 %).
e: Maximum allowed error (margin of error 5%).

Saunders *et al*. (2012) declared that the margin of error must be within acceptable limits. "The greater the level of confidence and the greater the level of accuracy, the bigger the size of the sample" (Denscombe, 2010, P.43). Taherdoost (2017) mentioned that a 5% margin of error was acceptable in the social research. Researchers in business and management researches were content to estimate the population's characteristics at a confidence level of 95% within plus or minus 3 to 5 percent of its true values (Saunders *et al*., 2012; Taherdoost, 2017). Traditionally, previous social research have used the 95 percent confidence level (Zikmund *et al*., 2013).

The researcher conducted a pilot study consisting of 30 questionnaires to obtain the estimated variance value of the population, the researcher relied on the website design variable as one of the most important variables of the study. The variance value of website design variable was 0.517.

σ	.517
z	1.96
e	5%

Consequently,

$$n = \frac{1.96^2 \times .517^2}{5\%^2}$$

n=410.726 → 411 Respondents.

3.2 Pilot study

A questionnaire used to quantify the measured constructs. To gain high-quality and trusted results, a good research study with appropriate design and accurate performance was required. The first step in the whole research procedure was a pilot study and it often supported the planning and modification of the main study (In, 2017). The pilot study was conducted in this research in September 2021. The aim of the pilot study was to ensure that the questionnaire well designed and easily understood by potential respondents, to examine the reliability of the research tool as well as to develop and refine measures of the questionnaire.

3.3 Questionnaire Design

A self-completed questionnaire was adopted because it was the most effective and convenient data collection tool for achieving research aim and objectives (Saunders *et al*., 2016). The questionnaire was divided into three sections:
Section *I*: Demographic information, such as gender, age, educational level, and nationality.
Section *II*: Five screening questions selected specifically for the nature of the research**.**
Section *III*: It consisted of 44 rating questions by asking each respondent about he/she disagreed/ agreed with these statements which covered the study's main constructs, on a five-point Likert-style rating scale. The main constructs were represented in six variables. All of them were shown in table three. The main variables were website informational content that involved 9 statements were designed according to (Abdinnour and Chaparro, 2007; Qi *et al*., 2009; Abdul aziz *et al*., 2011; Hsu *et al*., 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2013; Abou-Shouk and khalifa, 2017; Petelin and Krizaj, 2021), followed by website design that included 11 statements and were designed according to

(Abdinnour and Chaparro, 2007; Karahanna *et al*., 2009; Qi *et al.* 2009; Abdul aziz *et al*., 2011; Escobar-Rodríguez and Carvajal-Trujillo, 2013; Ali, 2016; Li *et al*., 2017; Ongsakul *et al.,* 2020; Petelin and Krizaj, 2021). Furthermore, website ease-of-use/ usability encompassed 5 statements and were designed according to (Karahanna *et al*., 2009; Escobar-Rodríguez and Carvajal-Trujillo, 2013; Abou-Shouk and khalifa, 2017; Li *et al*., 2017; Raju *et al*., 2018), followed by website interactivity that comprised 7 statements and were designed in line with (Qi *et al*., 2009; Noor, 2011; Hsu *et al*., 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2013; Salem and Cavlek, 2016; Raju *et al*., 2018; Le *et al*., 2020; Petelin and Krizaj, 2021) Moreover, marketing image that involved 6 statements and were designed according to (Abdinnour and Chaparro, 2007; Hsu *et al*., 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2013; Petelin and Krizaj, 2021), followed by online processes that included 6 statements and were designed according to (Qi *et al*., 2009; Abdul aziz *et al*., 2011; Wang *et al*., 2015; ÇETİNSÖZ, 2016; Qi, 2016; Abou-Shouk and khalifa, 2017; Ongsakul *et al.,* 2020; Petelin and Krizaj, 2021). Closed questions were popular in hospitality and tourism research (Huang *et al*., 2017). Accordingly, closed-ended questions were utilized for this study. All the main constructs were measured by asking respondents to express their experience with the hotel website quality and for each item using a five-point Likert-style rating scale, where (1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree).

3.4 Data collection procedures
. The questionnaire form was written and distributed in Arabic, English, and Russian languages during the period between November 2021 and December 2021. A total of 600 questionnaires were distributed evenly to four and five-star hotel guests in Hurghada. The returned forms were 500 forms, which represented 83.3 % of distributed forms. The valid forms were 421 forms which represented 84.2 % of returned forms

3.5 Data analysis
The gathered data was checked, coded, entered, and analyzed by using the Statistical Package for Social Sciences (SPSS) version 25. Appropriate statistical analyses were performed such as descriptive statistics, Cronbach's Alpha to measure internal consistency, correlation, independent sample T-test, and one-way ANOVA to detect the significant difference between respondents regarding gender, hotel grade, age, educational level, and nationality.

3.6 Research Aim and Objectives
The research aimed to assess and identify the strengths and weaknesses which help to enhance the quality of the hotels' websites and deliver valuable services to the potential customers of four and five-star hotels. To achieve the research aim; there are some objectives were targeted as follows:
1. To explore the weaknesses that faced customers when using the hotels' websites.
2. To detect the relationships among hotels' website dimensions.
3. To find out if there are differences or not between the four and five-star hotels regarding hotel website quality.
4. To find out if there are differences or not between the nationalities, ages, gender, and educational level of respondents regarding hotel website quality.

3.7 Research Questions
1. What are the weaknesses that faced customers when using the hotels' websites?
2. Are there relationships between hotels' websites dimensions?

3. Are there differences between the four and five-star hotels regarding hotel website quality?
4. Are there differences between the nationalities, ages, gender, and educational level of respondents regarding hotel website quality?

3.8 Validity

To ensure the content validity of the questionnaire, the initial questionnaire has been given to five referees to judge its content validity and the clarity of its items' meaning to avoid any misunderstanding as well as to assure its attached to the research objective. The experts recommended deleting some statements, modifying the wording of some statements, and clarifying the meanings of some statements.

Table (1): Reliability analysis of the variables used in the study

The Dimensions	No. of Statements	Alpha Coefficient
Hotel website Informational content	9	.925
Hotel website Design	11	.919
Hotel website Ease of use	5	.916
Hotel website Interactivity	7	.920
Hotel website Marketing Image	6	.919
Hotel website Online Processes	6	.925

Alpha Coefficient was a measure of internal consistency of a test or scale which ranges between 0 and 1 (Tavakol and Dennick, 2011). Whenever Cronbach's Alpha was acceptable if it was more than 0.70 (Nunnally, 1978). For reliability of questionnaire dimensions, Cronbach's alpha coefficient was calculated, and it exceeded 0.9 for all dimensions as shown in table one. It meant that all items were reliable (Tavakol and Dennick, 2011).

5. Results and Discussion

Table (2): Respondents' profile

		Frequency	Percentage
Gender	Male	219	52 %
	Female	202	48 %
	Total	421	100 %
Age	less than 18 years	18	4.3 %
	18 - 24 years	65	15.4 %
	25 - 34 years	165	39.2 %
	35 – 44 years	85	20.2 %
	45 – 54 years	41	9.7 %
	55- 64 years	21	5 %
	65 and more	26	6.2 %
	Total	421	100 %
Educational Level	High school or technical school	103	24.5 %
	College degree	225	53.4 %
	Post graduate (Diploma, Master, PhD)	85	20.2 %
	Other	8	1.9 %
	Total	421	100 %
Nationality	Egyptian	102	24.2 %

	Polish	63	15 %
	German	62	14.7 %
	Ukrainian	56	13.3 %
	Russian	84	20 %
	Belorussia	18	4.3 %
	English	36	8.6 %
	Total	421	100 %

As shown in table 2 males and females were almost equal in number that represented 52 %, and 48 % respectively of the respondents. As well, more than 39 % of the respondents were between 25 to 34 years, more than 20 % of them were between 35 to 44 years and more than 15% of them were between 18 to 24 years. It displayed that a variety of the respondents' age groups and 74 % of them were youth. Additionally, more than half of the respondents (53.4 %) had college degree, while 24.5 %, and 20 % of them got high or technical school, and post graduate degree respectively. It revealed the variety of the respondents' education levels. The nationalities of the respondents were divided into Egyptian which represented about 24%, Russian 20%, Polish 15%, German 14.7 %, Ukrainian 13.3 %, English 8.6 % and Belarusian by 4.3%. Thus, it showed that the main nationalities that have visited Hurghada were Egyptian, Russian, Polish, German, and Ukrainian.

Table (3): Descriptive Statistics of dimensions of hotels' website quality

Constructs	Items		Mean(M)		Standard Deviation(SD)		Rank	
Informational content	IC1	Contact details are clearly stated on the website	3.50		1.041		1	
	IC2	Weather report is clearly available	3.25		.975		7	
	IC3	Destination information/main attractions of the city are clearly available	3.26		.994		6	
	IC4	Hotel /room facilities are clearly available	3.40	3.31	.984		2	
	IC5	Price range of different products / services are clearly available	3.21		1.022	.758	8	5
	IC6	Availability of rooms are present online	3.25		1.021		7	
	IC7	The information provided by hotel website is accurate	3.35		.931		3	
	IC8	The information provided by hotel website is up-to-date	3.31		.913		5	
	IC9	Generally, the website provides me with all the information I need to make my booking decision	3.33		1.010		4	
Hotel website Design	WD1	The hotel website is designed to be compatible with different electronic devices	3.45		.926		6	
	WD2	Hyperlinks are easy to read	3.43		.890		8	
	WD3	The website loads quickly	3.48		.940		4	
	WD4	Text is clear and readable	3.64		.806		1	
	WD5	The website has multi languages	3.28	3.46	1.008		11	2
	WD6	There is sufficient contrast between text and background	3.44		.848	.693	7	
	WD7	There is effective use of webpage space	3.38		.844		10	
	WD8	The website has user friendly layout	3.42		.900		9	
	WD9	There are images and videos available to reinforce webpage text content	3.58		.817		2	
	WD10	Website has a high quality photos and video galleries	3.52		.869		3	
	WD11	The website design is innovative	3.47		.890		5	
Hotel website Ease of use	EU1	The website is easy for you to navigate	3.55	3.48	.820	.750	1	1
	EU2	The website has an effective and clear navigation tools in each page	3.48		.874		4	

	EU3	The home button is available in each page	3.53		.874		3	
	EU4	The website is easy to use	3.54		.852		2	
	EU5	I can finish my business with the hotel by the website easier than other tools	3.34		1.014		5	
Hotel website Interactivity	I1	The search time on the hotel website is reasonable	3.46	3.32	.893	.722	1	4
	I2	The hotel website is responsive to my inquiries	3.42		.873		4	
	I3	The response time of the hotel website is appropriate	3.43		.868		3	
	I4	The hotel website has 24-hours chat room/live chat	3.12		1.042		6	
	I5	The hotel website has links/ icons to social media networks	3.45		.951		2	
	I6	I feel this hotel website had excellent interactive features to keep me engaged	3.39		.890		5	
	I7	The hotel website has a search facility in its database	3.05		1.086		7	
Marketing Image	MI1	Logo is reflected in all pages	3.60	3.28	.904	.692	1	6
	MI2	Slogan is reflected in all pages	3.50		.904		2	
	MI3	The special packages/ promotion are offered in the website	3.31		.985		4	
	MI4	The virtual tours are provided through the website	3.28		.977		5	
	MI5	The text clearly describes the uniqueness of the hotel's customer services	3.38		.943		3	
	MI6	Past customer testimonials/ recommendations are included on the site	2.65		1.165		6	
Online Processes	OP1	Online booking confirmation is provided	3.52	3.39	1.001	.790	**5**	3
	OP2	Online booking cancellation is provided	2.69		1.182		6	
	OP3	Reservation policies is provided	3.53		.952		4	
	OP4	Payment options is provided	3.54		.996		3	
	OP5	The website had privacy policy relating to customers' personal data	3.55		.998		2	
	OP6	Website ensure financial security/safe payment system	3.56		.953		1	

This section has explained the research's constructs and items' scores (M: Mean, and SD: standard deviation). In table 3 the descriptive statistics of the hotel website quality dimensions were shown. Mean and standard deviation values indicated that the majority of respondents place greater agreement level on (1) the hotel website ease of use dimension by overall score (M=3.48; SD. =.750), followed by (2) hotel website design dimension by overall score (M=3.46; SD. = .693), then (3) online processes dimension by overall score (M=3.39: SD= .790), followed by (4) website interactivity dimension by score (M=3.32; SD. = .722), followed by (5) informational content by overall score (M=3.31; SD. = .758), and finally (6) marketing image dimension which achieved a lower mean of their overall score (M=3.28; SD. = .692). The mean scores ranged from 3.28 to 3.48 that meant neutral to agree. To get customers to revisit their hotels' website and repeat purchases, hoteliers have needed to improve customers' satisfaction levels. It has meant that a customer's satisfaction might be enhanced through improving several quality features of the hotel's website such as website online processes, interactivity, informational content and marketing image dimensions. For a deeper understanding of the above constructs score, table 3 provided the items' scores within each construct, as detailed below.

As shown in table 3, informational content construct overall score was (M=3.31; SD. = .758) that has meant respondents were neutral in response of this dimension. This finding was inconsistent with previous research conducted by Abou-Shouk and Khalifa (2017) who asserted that respondents agreed that hotels offered adequate informational content on their websites. This requires the development of the informational content of the hotel sample of the current research. While the result was in line with Qi (2016) who proved that informational content was perceived the lowest importance. Informational content consisted of nine items, the respondents agreed that "contact details are clearly stated on the website" which was ranked first (M= 3.50; SD= 1.041), the last ranked item was "Price range of different products / services are clearly available" (M=3.21; SD. = 1.022). Therefore, the respondents were neutral of this item. This finding was in line with the result of Abou-Shouk and Lim (2010), who found that prices were offered on only 13.6% of travel agents' websites in Egypt. The current study asserted that respondents were neutral regarding room facilities availability. This result was incompatible with the result of Salem and Cavlek (2016) who verified that customers rank the availability of price/rates as more important. Where the hotels of the current research omitted the price range of rooms and hotel facilities.

Hotel website design consisted of 11 items. The respondents agreed that "Text is clear and readable" which was ranked first by score (M=3.64; SD. = .806), while the last ranked item was "The website has multi languages" by score (M=3.28; SD. = 1.008). Thus, the respondents were neutral of this item. These results were not consistent with the results of Abou-Shouk and Khalifa (2017) who concluded that both travel agents' and hotels' respondents comment negatively on design issues. This is due to the interest of hoteliers of the sample of the current research, in designing hotel websites in a way that satisfies the interest of customers.

The current research findings also not mached with the results of Abou-Shouk and Khalifa (2017) regarding website visual appealing whereas the current research respondents approved that hotels' website visually appealing while the Abou-Shouk and Khalifa's study (2017) was not. The results of current study were in line with the study of

Abdul Aziz et al. (2011) who declared that visual appearance the most important element attract respondents to the hotels' website.

The third construct hotel website ease of use consisted of five items. The respondents agreed that "The website is easy for you to navigate" by score (M=3.55; SD. =.820), which was the first item. The last item was "I can finish my business with the hotel by the website easier than other tools" by score (M=3.34; SD. =1.014). Thus the respondents were neutral of this item. Ease of use dimension ranked first and respondents agreed it and this was in line with the study of Ongsakul et al. (2020) who mentioned that respondents responded agree. Also this result was in line with the result of Abou-Shouk and Khalifa (2017) who asserted that ease-of-use of websites was agreed by customers of travel agents and hotels to be a key factor affecting their purchasing decision making.

Hotel website interactivity construct involved seven items. The respondents agreed that "The search time on the hotel website is reasonable" which was ranked first by score (M=3.46; SD. =.893). While the last ranked item was "The hotel website has a search facility in its database" by score (M=3.05; SD. =1.086). Therefore, the respondents were neutral of this item. The finding of this research assured that the respondents were neutral regarding hotel website interactivity. This result inconsistent with the study of Ongsakul et al. (2020) who mentioned that the hotel website an interactive communication channel. This is due to the neglect of the current research sample hotels for the tools of interaction with customers. The current research findings were in line with the findings of Noor (2011) who asserted that Customer had a high perception about responsiveness of the website. These result also in line with the results of Petelin and Krizaj (2021) who verified that most hotels' websites had embedded various online social networks.

Hotel website marketing image construct consisted of six items. The respondents agreed that "Logo is reflected in all pages" by score (M=3.60; SD. = .904), which was the first ranked item. The last ranked item "Past customer testimonials/ recommendations are included on the site" by score (M=2.65; SD. = 1.165). Thus, the respondents were neutral of this item. These result was in line with the result of Abdinnour and Chaparro (2007) who mentioned that hotel' websites fared poorly on marketing effectiveness. While the study of Petelin and Krizaj (2021) was incompatible with the current study regarding the virtual tours. The current study proved that the respondents replied neutral about the virtual tours offered through the hotel website, while the Petelin and Krizaj's study (2021) had a virtual tour in the websites. The current study proven that respondents were neutral towards special packages and promotions. This result inconsistent with the result of Salem and Cavlek (2016) who confirmed that the special packages were offered in79% of the hotels. The results of current research revealed that there is lack of hotels' websites for virtual tours, promotions and special packages. The findings of current research were in line with the study of Abou-Shouk and Khalifa (2017) regarding the marketing image where proven that the hotel website does not convey the marketing image.

The last construct was hotel website online processes which consisted of six items. The respondents agreed that "Website ensure financial security/safe payment system" was the first ranked item by score (M=3.56; SD. = .953). While the last ranked item was "Online booking cancellation is provided" by score (M=2.69; SD. = 1.182). Therefore, the respondents were neutral of this item. The result showed that online booking was not available. This was consistent with the result of Salem and Cavlek (2016). These result was not in line with the result of (Ding, 2011) who asserted that hotels reservation system should ensure flexible cancellation policy. These result was in line with result of Abou-

Shouk and Khalifa (2017) who asserted that just four travel agents out of 317 supported online booking via their websites. This lack of online booking services could affect customer satisfaction negatively. The results of current study were consistent with Ali (2016) who asserted that security and privacy were important features to develop customers' perceived flow, resulting in customer satisfaction.

Hence, the previous results achieved the first objective and answer the first question of the current research.

Table (4): The Relationship between dimensions of hotels' websites quality

	Informational content	Design	Ease of use	Interactivity	Marketing Image	Online Processes
website Informational content	1					
website Design	.716**	1				
website Ease of use	.639**	.730**	1			
website Interactivity	.602**	.661**	.759**	1		
website Marketing Image	.572**	.674**	.718**	.695**	1	
website Online Processes	.531**	.635**	.635**	.568**	.671**	1
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 4 showed the relationships among the dimensions of the hotels' websites quality. The results revealed that there was a positive and significant correlation between all dimensions of websites quality. The stronger relationships among dimensions were reported as follows:
There was a strong relationship between ease of use and interactivity (R= 0.759, P=.000). There was also a strong relationship website design and ease of use (R= 0.730, P=.000). Moreover, there was a strong relationship between ease of use and marketing image (R= 0.718, P=.000), and there was a strong relationship between informational content and website design (R= 0.716, P=.000). It meant that any increase in quality of any dimension of a hotel's website quality dimensions was offset by an increase in the others especially, between informational content, website design, ease of use, interactivity, and marketing image. These results were inconsistent with findings from the study of Abou-Shouk and khalifa (2014), which indicated that the relationship between informational content and website design was very weak, there was no relationship between ease of use and interactivity, and there was a weak relationship between design and ease of use. The findings of the current research were harmonized with the findings of Vladimirov (2012), which revealed that there was a relationship between website usability and website design. The current research revealed that there was a moderate relationship between informational content and interactivity (R= 0.602, P=.000). These result was compatible with the result of Abou-Shouk and khalifa (2014). The current research revealed that there was a moderate relationship between ease of use and online processes (R= 0.635,

P=.000). These result was consistent with the result of Wang *et al.* (2015). While Martínez-Sala *et al.* (2020) concluded that there was no correlation between graphic design and usability which completely contradicts the results of the current study.

Hence, the previous results achieved the second objective and answer the first question of the current research.

Table (5): The Differences between Gender and hotels' categories concerning the hotel website quality dimensions

Dimension	Hotel Category				Gender				
		N	Mean	St. D	Sig.		N	Mean	St. D	Sig.
Informational content	four star hotel	168	3.343	.765	.559	male	219	3.332	.767	.616
	five star hotel	253	3.299	.755		female	202	3.299	.750	
Design	four star hotel	168	3.533	.606	.089	male	219	3.487	.670	.446
	five star hotel	253	3.415	.743		female	202	3.435	.718	
Ease of use	four star hotel	168	3.538	.723	.259	male	219	3.459	.746	.425
	five star hotel	253	3.453	.766		female	202	3.517	.755	
Interactivity	four star hotel	168	3.404	.690	.080	male	219	3.295	.708	.320
	five star hotel	253	3.278	.739		female	202	3.365	.737	
Marketing image	four star hotel	168	3.376	.565	**.030***	male	219	3.320	.643	.292
	five star hotel	253	3.226	.760		female	202	3.249	.741	
Online processes	four star hotel	168	3.440	.750	.351	male	219	3.431	.735	.342
	five star hotel	253	3.366	.816		female	202	3.358	.846	
*Statistically-significant differences, where p < 0.05.									

As shown in table 5 there were no statistically significant differences between males and females regarding hotels' website quality dimensions. These result was not concurred with the results of Suarez (2016) who mentioned that there was a significant difference between males and females regarding website design and website usability.

There were no statistically significant differences between five-star and four-star hotels with respect to hotel website quality dimension except marketing image dimension and its statistically significant at level 0.030 which was less than 0.05. These differences were in favor of four star hotels (Mean=3.376) against five star hotels. These result was inconsistent with the result of Qi (2016) who declared that five star hotels received the highest average scores for website functionality versus four and three star hotels. This result was in line with the findings of Lee and Morrison (2010) who asserted that most upscale hotels were not effectively using the website from the marketing perspective. The results of current research were not consistent with the result of Baloglu and Pekcan (2006) who declared that four-star hotels paid more attention to website design than five-

star hotels. Sun *et al*. (2017) concluded that the website performance of five-star hotels was better than other hotel classes which disagreed with the current research findings.

Hence, the previous results achieved the third objective and answer the third question of the current research.

Table (6): Differences between respondents' age, educational level and nationalities with respect to the hotel website quality dimensions using ANOVA test

Hotels' website quality dimension	Age		Educational level		Nationalities	
	F	Sig.	F	Sig.	F	Sig.
Informational content	.721	.633	.251	.861	3.723	**.001***
Design	1.451	.194	.304	.822	3.600	**.002***
Ease of use	2.705	**.014***	.140	.936	1.694	.121
interactivity	1.401	.213	1.097	.350	3.219	**.004***
Marketing image	1.724	.114	.759	.517	1.343	.236
Online processes	1.077	.375	1.813	.144	1.282	.264
*Statistically-significant differences, where p < 0.05.						

The tabulated data in table 6 revealed that there was only statistically significant difference between respondents' ages regarding to ease of use dimension where the significance level was 0.014. Furthermore, there were statistically significant differences between the respondents' nationalities regarding to informational content, design, and interactivity at 0.001, 0.002, and 0.004 significance levels respectively. All of previous variables' significance level were less than 0.05 that meant that were statistically significant differences between respondents' ages and nationalities concerning these variables. On the other hand, there were no statistically significant differences between the respondents' educational levels with respect to hotels' website quality.
 Accordingly, the LSD (Least Significant Difference) test was calculated to determine the sources of differences. According to the variable of ease of use the LSD (Least Significant Difference) test was calculated to determine the source of differences. Table 7 showed that there were statistically significant differences between respondents were less than 18 years and from 45-54 years (Sig. = 0.043), as well as between 25-34 years and 65 years and more (Sig. = 0.001). In addition, there were statistically significant differences respondents who were between 35-44 years and 65 years and more (Sig. = 0.009), as well as between 45-54 years, less than18 years, and 65 years and more (Sig=0.4, and 0.000 respectively), also between 55-64 years and 65 years and more (Sig. = 0.009). As shown in table 8 these differences were in favor of 45-54 years (Mean= 3.70) against less than 18 years (Mean= 3.27). The differences were also in favor of 18-24 years (Mean=3.48), 25-34 years (Mean=3.53), 35-44 years (Mean=3.45), 45-54 years (Mean=3.70), 55-64 years (Mean=3.59) against 65 years and more (Mean=3.02).
According to the variable of informational content, the LSD (Least Significant Difference) test was calculated to determine the source of differences. Table 7 showed

that there were statistically significant differences between Egyptian and Russian (Sig.= 0.047). Furthermore, there were statistically significant differences between Polish and all other respondents' nationalities as Egyptian (Sig.= 0.050); German (Sig.= 0.001); Ukrainian (Sig.= 0.001); Russian (Sig.= 0.000); Bella Russian (Sig.= 0.006); English (Sig.= 0.004). As shown in table 8 these differences were in favor of Russian (Mean=3.43) against Egyptian (Mean=3.21). It meant that Russian guests in four and five-star hotels perceived that informational content of hotels' websites was better than Egyptian guests. In addition, these differences were in favor of Egyptian (Mean=3.21), German (Mean=3.42), Ukrainian (Mean=3.45), Russian (Mean=3.43), Bella Russian (Mean=3.52) and English (Mean=3.43) against Polish (Mean=2.97). It referred that the respondents from different nationalities perceived that informational content of hotels' websites was better than Polish guests.

According to the design variable, LSD (Least Significant Difference) test was calculated to determine the source of differences. Table 7 showed that there were statistically significant differences between Egyptian and English (Sig.= 0.034). Moreover, there were statistically significant differences between Polish and most other respondents' nationalities as Egyptian (Sig.= 0.005); Ukrainian (Sig.= 0.004); Russian (Sig.= 0.003); Bella Russian (Sig.= 0.019); English (Sig.= 0.000); and between English and German (Sig.= 0.005). As shown in table 8 these differences were in favor of English (Mean=3.76) against Egyptian (Mean=3.48) and German (Mean=3.36). It referred to the English guests in four and five-star hotels perceived that the website design was better than Egyptian and German guests. These differences were in favor of Egyptian (Mean=3.48), Ukrainian (Mean=3.53), Russian (Mean=3.52), Bella Russian (Mean=3.60) and English (Mean=3.76) all against Polish (Mean=3.17). It meant that all guests from different nationalities in four and five-star hotels perceived that the website design was better than Polish guests.

According to the interactivity variable LSD (Least Significant Difference) test was calculated to determine the source of differences. Table 7 showed that there were statistically significant differences between Egyptian and Russian (Sig.= 0.020). In addition, there were statistically significant differences between Polish and most of the respondents' nationalities as German (Sig.= 0.002); Ukrainian (Sig.= 0.026); Russian (Sig.= 0.000); Bella Russian (Sig.= 0.014); English (Sig.= 0.011). As shown in table 8 these differences were in favor of Russian (Mean=3.47) against Egyptian (Mean=3.23). It meant that Russian guests perceived that the hotels' website interactivity better than Egyptian hotels. and These differences were also in favor of German (Mean=3.45), Ukrainian (Mean=3.33), Russian (Mean=3.47), Bella Russian (Mean=3.51) and English (Mean=3.42) all against Polish (Mean=3.04). It referred to all guests from different nationalities perceived that hotels' website interactivity was better than polish guests.

According to the results of the current study, the Polish nationality was the least responsive to the assurance of the quality of Egyptian hotels' websites especially regarding informational content, design and interactivity dimensions. This may be due to the behavior of the Polish consumer, which must be well studied, the technological background, or interests may be different. These results were concurred with the result of (Pawlowska-Legwand, 2019) who asserted that despite a relatively high public interest in using Information and Communication Technology (ICT) on the tourism market, the Polish tourists still prefer to use traditional tools.

Table (7): Analysis the source of differences of hotel website dimensions regarding age and nationality factors using least significant differences test (LSD)

Age			Nationality								
Ease of Use (LSD)			Informational Content (LSD)			Design (LSD)			Interactivity (LSD)		
(I) Nationality	(J) Nationality	Sig.	(I) Nationality	(J) Nationality	Sig.	(I) Nationality	(J) Nationality	Sig.	(I) Nationality	(J) Nationality	Sig.
less than 18 years	18 - 24 years	.292	Egyptian	Polish	.050	Egyptian	Polish	.005	Egyptian	Polish	.096
	25 - 34 years	.168		German	.079		German	.278		German	.060
	35 – 44 years	.347		Ukrainian	.056		Ukrainian	.631		Ukrainian	.391
	45 – 54 years	.043		Russian	.047		Russian	.696		Russian	.020
	55- 64 years	.190		Bella Russia	.103		Bella Russia	.474		Bella Russia	.123
	65 and more	.263		English	.131		English	.034		English	.170
18 - 24 years	less than 18 years	.292	Polish	Egyptian	.050	Polish	Egyptian	.005	Polish	Egyptian	.096
	25 - 34 years	.672		German	.001		German	.127		German	.002
	35 – 44 years	.823		Ukrainian	.001		Ukrainian	.004		Ukrainian	.026
	45 – 54 years	.144		Russian	.000		Russian	.003		Russian	.000
	55- 64 years	.575		Bella Russia	.006		Bella Russia	.019		Bella Russia	.014
	65 and more	.007		English	.004		English	.000		English	.011
25 - 34 years	less than 18 years	.168	German	Egyptian	.079	German	Egyptian	.278	German	Egyptian	.060
	18 - 24 years	.672		Polish	.001		Polish	.127		Polish	.002
	35 – 44 years	.459		Ukrainian	.852		Ukrainian	.168		Ukrainian	.381
	45 – 54 years	.189		Russian	.950		Russian	.166		Russian	.814
	55- 64 years	.734		Bella Russia	.616		Bella Russia	.182		Bella Russia	.736
	65 and more	.001		English	.962		English	.005		English	.856
35 – 44 years	less than 18 years	.347	Ukrainian	Egyptian	.056	Ukrainian	Egyptian	.631	Ukrainian	Egyptian	.391
	18 - 24 years	.823		Polish	.001		Polish	.004		Polish	.026
	25 - 34 years	.459		German	.852		German	.168		German	.381
	45 – 54 years	.085		Russian	.890		Russian	.897		Russian	.245
	55- 64 years	.466		Bella Russia	.713		Bella Russia	.703		Bella Russia	.353
	65 and more	.009		English	.908		English	.120		English	.563

Age											
45 – 54 years	less than 18 years 18 - 24 years 25 - 34 years 35 – 44 years 55- 64 years 65 and more	.043 .144 .189 .085 .574 .000	Russian	Egyptian Polish German Ukrainian Bella Russia English	.047 .000 .950 .890 .634 .998	Russian	Egyptian Polish German Ukrainian Bella Russia English	.696 .003 .166 .897 .629 .075	Russian	Egyptian Polish German Ukrainian Bella Russia English	.020 .000 .814 .245 .844 .698
55- 64 years	less than 18 years 18 - 24 years 25 - 34 years 35 – 44 years 45 – 54 years 65 and more	.190 .575 .734 .466 .574 .009	Bella Russia	Egyptian Polish German Ukrainian Russian English	.103 .006 .616 .713 .634 .667	Bella Russia	Egyptian Polish German Ukrainian Russian English	.474 .019 .182 .703 .629 .426	Bella Russia	Egyptian Polish German Ukrainian Russian English	.123 .014 .736 .353 .844 .657
65 and more	less than 18 years 18 - 24 years 25 - 34 years 35 – 44 years 45 – 54 years 55- 64 years	.263 .007 .001 .009 .000 .009	English	Egyptian Polish German Ukrainian Russian Bella Russia	.131 .004 .962 .908 .998 .667	English	Egyptian Polish German Ukrainian Russian Bella Russia	.034 .000 .005 .120 .075 .426	English	Egyptian Polish German Ukrainian Russian Bella Russia	.170 .011 .856 .563 .698 .657

Table (8): Means of website quality dimensions according to respondents' age and nationalities

Age	Ease		Nationality	Informational content		Design		Interactivity	
	Mean	Rank		Mean	Rank	Mean	Rank	Mean	Rank
less than 18 years	3.2778	6	Egyptian	3.2135	6	3.4813	5	3.2353	6
18 - 24 years	3.4862	4	Polish	2.9788	7	3.1760	7	3.0454	7
25 - 34 years	3.5321	3	German	3.4247	5	3.3622	6	3.4516	3
35 – 44 years	3.4588	5	Ukrainian	3.4504	2	3.5357	3	3.3367	5
45 – 54 years	3.7024	1	Russian	3.4325	3	3.5206	4	3.4796	2
55- 64 years	3.5905	2	Bella Russian	3.5247	1	3.6061	2	3.5159	1
65 and more	3.0231	7	English	3.4321	4	3.7626	1	3.4246	4

Hence, the previous results achieved the fourth objective and answer the fourth question of the current research.

5. Conclusion and Recommendations
5.1 Conclusion
This research categorized the hotel website quality dimensions and presented the relationship between website quality dimensions. A number of 421 questionnaires distributed in Hurghada to four and five-star hotels' customers were collected, coded, entered and analyzed. The findings of this research revealed that most of the

respondents reacted neutral regarding quality dimensions of hotels' websites, there were a strong relationship between informational content, website design, ease of use, interactivity and marketing image. The results of current research also revealed that there were no statistically significant differences between males and females or between four and five-star hotels regarding to hotels' websites quality There were statistically significant differences between respondents regarding age and nationalities factors with respect to ease of use, informational content, design and interactivity.

5.2 Recommendations

The current research suggested a set of recommendations that would improve the hotels' websites quality. Hotel IT managers should exert more efforts to improve the quality of their websites. According to the current results, some facilities and services should be provided in the hotels' websites such as the price range of hotel rooms and presenting the hotels' websites in multi-languages for the expected different nationalities. Hotels' websites should facilitate the experience of virtual tours through the phone in addition to promotions and special offers. The availability of the past customers' testimonials/reviews and online room cancellation should be founded and activated. Hotels should create a feedback survey to know the degree of customer satisfaction with the experience of using the hotel's website and analyze it to develop the website. According to the results of the current research, the stakeholders shall study the behavior of the Polish customers and investigate the Polish market to know their requirements to provide electronic services and facilities through the website to maximize their needs to buy through hotels' websites.

5.3 Limitations and Further Research

Similar to other studies, this research had its own set of limitations. The first limitation was that this research was confined to four and five-star hotels in Hurghada city in Red Sea Governorate only. Furthermore, the current research was applied from September to November 2021. Future research can compare the expectations and perceptions of customers regarding hotels' websites quality to catch the gap between customers' perceptions and expectations. They shall also compare the website quality of hotel chains versus independent hotels. Future studies shall expand by using quantitative-qualitative approaches to get a deeper evaluation. Interviews with hotels' IT and marketing managers shall be applied to evaluate their websites from different perspectives.

References

- Abdinnour-Helm, S. and Chaparro, B. S. (2007). A balanced usability checklist approach to evaluate Palestinian hotel websites. *The Electronic Journal of Information Systems in Developing Countries*, *31*(1): 1-12.
- Abdul Aziz, A., Mohd Radzi, S., Zahari, M., Salehuddin, M., and Ahmad, N. A. (2011). Hotel website dimension: Analyzing customers' preferences. *Journal of Tourism, Hospitality and Culinary Arts (JTHCA)*, *3*(3): 85-108.
- Abdullah, D., Jayaraman, K., Kamal, S. B. M. (2016). A Conceptual Model of Interactive Hotel Website: The Role of Perceived Website Interactivity and

Customer Perceived Value Toward Website Revisit Intention. *Procedia Economics and Finance 37*(16): 170-175.

- Abou-Shouk, M. A. and Khalifa, G. S., (2014). Investigating the success factors of hotel websites: The case of egyptian hotels. *Asia-Pacific Journal of Innovation in Hospitality and Tourism (APJIHT)*, *3*(2): 1-21.

- Abou-Shouk, M. A., and Khalifa, G. S. (2017). The influence of website quality dimensions on e-purchasing behaviour and e-loyalty: a comparative study of Egyptian travel agents and hotels. *Journal of Travel and Tourism Marketing*, *34*(5): 608-623.

- Abou-Shouk, M. and Lim, W. M. (2010). Egyptian travel agents and e-commerce. In U. Gretzel, R. Law, and M. Fuchs (Ed.), Information and communication technologies in tourism 2010. Switzerland: Springer-Verlag. 357-368.

- Akincilar, A., and Dagdeviren, M. (2014). A hybrid multi-criteria decision making model to evaluate hotel websites. *International Journal of Hospitality Management*, 36, 263-271.

- Ali, F. (2016). Hotel website quality, perceived flow, customer satisfaction and purchase intention. *Journal of Hospitality and Tourism Technology*. 7(2): 213-228.

- Antona, M., and Stephanidis, C. (Eds.). (2016). Universal Access in Human-Computer Interaction. Methods, Techniques, and Best Practices: Conference proceeding of 10th International Conference, UAHCI 2016, Held as Part of HCI International 2016, conducted by springer, held in: Toronto, ON, Canada, 17-22.

- Ayob, F. (2016). Evaluating Websites of Small-and-Medium-Sized-Hotels (SMHs): A Stages Model of E-Commerce Websites Adoption for Malaysian Hotels. *Journal of Hoteland Business Management*, 5(2): 2-6.

- Baki, R. (2020). Evaluating hotel websites through the use of fuzzy AHP and fuzzy TOPSIS. *International Journal of Contemporary Hospitality Management*, *32*(12): 3747-3765.

- Baloglu, S., and Pekcan, Y. A. (2006). The website design and Internet site marketing practices of upscale and luxury hotels in Turkey. *Tourism management*, *27*(1): 171-176.

- Bartlett, J. E., Kotrlik, J. W, and Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information technology, learning, and performance Journal, 19* (1): 43-50.

- Bellary, V. (2010). A case study on the effect of information technology related interfaces issues on overall guest experience in Hyatt place hotels in the US. University of Nevada, Las Vegas, 1-27. Retrieved from http://digitalscholarship.unlv.edu/thesesdissertations?utm_source=digitalscholar ship.unlv.edu%2Fthesesdissertations%2F429&utm_medium=PDF&utm_campa ign=PDFCoverPages

- Bilgihan, A., and Bujisic, M. (2014). The effect of website features in online relationship marketing: A case of online hotel booking. *Electronic commerce research and applications*, *14*(4): 222-232.

- Boushra, M. (2008). The influence of web site feature-based interactivity on user's attitude and online behaviors. Doctoral thesis, Pennsylvania State University, 1-178. Retrived from: https://www.semanticscholar.org/paper/The-influence-of-web-site-feature-based-on-users%27-Boushra/cc3dd2ab6305327f324bdfd154be4aaa0ec424ad. Retrieved on 7 December 2021.
- Cantoni, L., Faré, M., Inversini, A., and Passini, V. (2011). Hotel websites and booking engines: A challenging relationship. In *Information and Communication Technologies in Tourism,* 241-252. Springer, Vienna.
- ÇETİNSÖZ, B. C. (2016). The Impact of E-Satisfaction and Confidence Aspects on Web Site Loyalty in Terms of Online Shopping in Tourism: A Study on Domestic Tourists in Turkey. *European Journal of Business and Management, 8*(17): 36-48.
- Chang, R. H., and Su, Y. Y. (2011). Usability analysis of website with unconventional layout. Conference proceeding of International Conference on Human-Computer Interaction. Conducted by Springer. Held in Berlin, Heidelberg, 113-117.
- Chaudhuri, A., and Dutta, T. (2018). Determining the size of a sample to take from a finite population. *Statistics and Applications*, *16*(1): 37-44.
- Corigliano, M. A., and Baggio, R. (2006). On the significance of tourism website evaluations. Conference proceeding of 13th International Conference on Information Technology and Travel and Tourism January 18th – 20th, 2006. Held in Lausanne, Switzerland, 320-331.
- Cunliffe, D. (2000). Developing usable Web sites–a review and model. *Internet Research*. *10*(4): 295-307.
- Demangeot, C., and Broderick, A. J. (2010). Consumer perceptions of online shopping environments: A gestalt approach. *Psychology and Marketing*, *27* (2): 117-140.
- Denscombe, M. (2010). The Good Research Guide for small-scale social research projects Fourth Edition (Fourth). *New York: Open University Press.*
- Devece, C., Lapiedra, R., and Palacios, D. (2014). Website effectiveness for tourism accommodation companies. In Strategies in E-Business. Springer, Boston, MA, 55-65.
- Dianat, I., Adeli, P., Jafarabadi, M. A., and Karimi, M. A. (2019). User-centered web design, usability and user satisfaction: The case of online banking websites in Iran. *Applied ergonomics, 81*, 2-8.
- Diaz, E., and Koutra, C. (2013). Evaluation of the persuasive features of hotel chains websites: A latent class segmentation analysis. *International Journal of hospitality management*, *34*, 338-347.
- Ding, W. (2011, July). Challenges and opportunities of hotel online booking in China. Proceeding of *International Conference of Design, User Experience, and Usability*. Conducted by Springer,Held in Berlin, Heidelberg. , 3-12
- Escobar-Rodríguez, T., and Carvajal-Trujillo, E. (2013). An evaluation of Spanish hotel websites: Informational vs. relational strategies. *International Journal of Hospitality Management*, 33, 228-239.

- Ezzaouia, I.and Bulchand-Gidumal, J. (2020). Factors influencing the adoption of information technology in the hotel industry. An analysis in a developing country. *Journal of Tourism Management Perspectives, 34,* 1-10.
- Fang, X., and Holsapple, C. W. (2011). Impacts of navigation structure, task complexity, and users' domain knowledge on Web site usability—an empirical study. *Information System Frontiers, 13*(4): 453-469.
- Fogg, B. J., Soohoo, C., Danielson, D. R., Marable, L., Stanford, J., and Tauber, E. R. (2003). How do users evaluate the credibility of Web sites? A study with over 2,500 participants. In Proceedings of the 2003 conference on Designing for user experiences, 1-15.
- Gupta, D. D. (2014). Assessing the website effectiveness of top ten tourist attracting nations. *Information Technology and Tourism*, *14*(2), 151-175.
- Han, Y., Zhang, T., and Wang, M. (2020). Holiday travel behavior analysis and empirical study with Integrated Travel Reservation Information usage. *Transportation Research Part A: Policy and Practice*, *134*, 130-151.
- HazarinaHashim, N., and Abbaspour, B. (2015). The influence of website quality dimensions on customer satisfaction in travel website. *International Journal of Science Commerce and Humanities*, *3*(5): 6-17.
- Herrero, Á., San Martín, H., and Hernández, J. M. (2015). How online search behavior is influenced by user-generated content on review websites and hotel interactive websites. *International Journal of Contemporary Hospitality Management*, 27(7): 1573-1597.
- Hsu, C. L., Chang, K.C. and Chen, M.C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information system and e-business management*, *10*(4): 549-570.
- Hu, X., Huang, Q., Zhong, X., Davison, R. M., and Zhao, D. (2016). The influence of peer characteristics and technical features of a social shopping website on a consumer's purchase intention. *International Journal of Information Management*, *36*(6): 1218-1230.
- Huang, D., Li, Z., Mou, J., and Liu, X. (2017). Effects of flow on young Chinese consumers' purchase intention: a study of e-service scape in hotel booking context. *Information Technology and Tourism*, *17*(2): 203-228.
- Iliachenko, E. (2006). Electronic Service Quality (E-SQ) in tourism: Development of a Scale for the Assessment of E-SQ of Tourism Website. Doctoral dissertation, Luleå University of Technology, Luleå, Sweden. Retrived from: https://www.semanticscholar.org/paper/Electronic-service-quality-(e-SQ)-in-tourism-%3A-of-a-Iliachenko/8b17723bc3ec96b9642b32774ace7afbae3171ff.
- In, J. (2017). Introduction of a pilot study. *Korean journal of anesthesiology, 70*(6): 601.
- Ip, C., Law, R., and Lee, H. A. (2011). A review of website evaluation studies in the tourism and hospitality fields from 1996 to 2009. *International Journal of Tourism Research*, *13*(3): 234-265.

- Jamaludin, A., Hashim, R. A., and Ahmad, F. (2015). The Influence of Website Trust and Website Quality on Intention to Purchase Online. *OUM International Journal of Business and Management*, *1*(2): 1-10.
- Jeon, M. M. (2009). Impact of perceived website service quality on customer e-loyalty on a lodging website. Iowa State University.p.13.
- Jiang, B. and Wang, Y (2018). Research on Interactive Design of Interface Layout of Idle Resource Transactional Websites. Proceeding of *International Conferences on human computer interaction,* Conducted by Springer, cham. 266-272.
- Jonker, J. and Pennink, B. (2010). Quantitative Research: Observing Through the Eyes of the Researcher Using a Closed Research Question, in the essence of research methodology: A concise guide for master and PhD students in management science. *Springer Science and Business Media.*
- Karahanna, E., Seligman, L., Polites, G. L. and Williams, C. K. (2009, January). Consumer e-satisfaction and site stickiness: an empirical investigation in the context of online hotel reservations. Conference proceeding of 2009 42nd Hawaii International Conference on System Sciences, conducted by IEEE. held in Hawaii. 1-10.
- Kassim, N. M., and Abdullah, N. A. (2008). Customer loyalty in e-commerce settings: an empirical study. *Electronic Markets*, *18*(3), 275-290.
- Kim, S. Y., Kim, J. U., and Park, S. C. (2017). The effects of perceived value, website trust and hotel trust on online hotel booking intention. *Sustainability Journal, 9*(12): 1-14.
- Koronios, K., Dimitropoulos, P., and Kriemadis, A. (2018). The Impact of Website Persuasiveness on Luxury Hotels Financial Performance. In *Innovative Approaches to Tourism and Leisure*, 193-203. Springer, Cham.
- Ladhari, R., and Michaud, M. (2015). eWOM effects on hotel booking intentions, attitudes, trust, and website perceptions. *International Journal of Hospitality Management*, *46*, 36-45.
- Le, V. H., Nguyen, H. T. T., Nguyen, N., and Pervan, S. (2020). Development and validation of a scale measuring hotel website service quality (HWebSQ). *Tourism Management Perspectives*, *35*, 2-10.
- Lee, J.K. and Morrison, A.M. (2010). A comparative study of web site performance. *Journal of Hospitality and Tourism Technology 1* (1): 50–67.
- Li, L., Peng, M., Jiang, N., and Law, R. (2017). An empirical study on the influence of economy hotel website quality on online booking intentions. *International Journal of Hospitality Management*, *63*, 1-10.
- Lin, Y. S. (2009, December). Website evaluation of international tourist hotels in Taiwan. Conference proceeding of *International Conference on U-and E-Service, Science and Technology*, conducted by Springer, Held in Berlin, Heidelberg. 98-103.
- Lukanova, G., and Ilieva, G. (2019). Robots, artificial intelligence, and service automation in hotels. In Robots, artificial intelligence, and service automation in travel, tourism and hospitality. Emerald Publishing Limited. 157-183.

- Luo, J., Ba, S., and Zhang, H. (2012). The effectiveness of online shopping characteristics and well-designed websites on satisfaction. *Mis Quarterly*, 36(4): 1131-1144.
- Martínez-Sala, A. M., Monserrat-Gauchi, J., and Alemany-Martínez, D. (2020). User Usable Experience: A three-dimensional approach on usability in tourism websites and a model for its evaluation. *Tourism Management Perspectives*, *33*, 100579.
- Neuman, W. L. (2014). Social Research Methods: Qualitative and Quantitative Approaches Seventh Edition (Seventh). Pearson Education Limited.
- Niazi, M. G., Kamran, M. K. A., and Ghaebi, A. (2020). Presenting a proposed framework for evaluating university websites. *The Electronic Library*. 881-904.
- Noor, A. (2011). E-service quality of Low Cost Airlines website. Proceeding of International (spring) Conference on Asia Pacific Business Innovation and Technology Management.1-5.
- Nunnally, J. C. (1978) Psychometric Theory. New York. McGraw-Hill, USA.
- Ongsakul, V., Ali, F., Wu, C., Duan, Y., Cobanoglu, C. and Ryu, K. (2020). Hotel website quality, performance, telepresence and behavioral intentions. Tourism Review.
- Ostovare, M., and Shahraki, M. R. (2019). Evaluation of hotel websites using the multi criteria analysis of PROMETHEE and GAIA: Evidence from the five-star hotels of Mashhad. *Tourism Management Perspectives*, *30*, 107-116.
- Papetti, C., Christofle, S., and Guerrier-Buisine, V. (2018). Digital tools: their value and use for marketing purposes. In The Emerald Handbook of Entrepreneurship in Tourism, Travel and Hospitality. Emerald Publishing Limited. 280- 291.
- Pawlowska-Legwand, A. (2019). Use of information and communication technology to access tourist information and services: The results of research conducted among Polish tourists in Małopolska Voivodeship. *Turyzm*, *29*(2): 105-112.
- Petelin, M. and Krizaj, D. (2021). Utilization Analysis of Slovenian Hotel Websites. *Academica Turistica-tourism and innovation journal, 13*(2): 193-200.
- Pilielienė, L., and Grigaliūnaitė, V. (2016). A model of website quality-based e-commerce satisfaction index. *Analele stiintifice ale Universitatii "Al. I. Cuza" din Iasi. Stiinte economice/Scientific Annals of the" Al. I. Cuza".*
- Qi, S. (2016). Hotel website quality versus star level: The case of Macau hotel websites. In *Information and Communication Technologies in Tourism 2016*, 325-338. Springer, Cham.
- Qi, S., Law, R. and Buhalis, D. (2009). A study of Chinese and international online user perceptions of hotel websites' usefulness. In *Information and Communication Technologies in Tourism*, 285-296.
- Qu, Q. X., Guo, F., and Duffy, V. G. (2017). Effective use of human physiological metrics to evaluate website usability: An empirical investigation from China. *Aslib Journal of Information Management*. 371-388.
- Rahayu, R., and Day, J. (2015). Determinant factors of e-commerce adoption by SMEs in developing country: Evidence from Indonesia. *Procedia - Social and Behavioral Sciences, 195*, 142–150.

- Raju, G., Roy, S., and Mandal, S. (2018). Determinants of Website Usability: Empirical Evidence from Tourism Sector in India. *Global Business Review*, *19*(6): 1640-1662.
- Salavati, S., and Hashim, N. H. (2015). Website adoption and performance by Iranian hotels. *Journal of Tourism Management, 46,* 367-374.
- Salem, I. E. and Cavlek, N. (2016). Evaluation of hotel website contents: existence-importance analysis. Journal of Hospitality and Tourism Technology, 7(4): 366-389.
- Saunders, M., Lewis, P. and Thornhill, A. (2012). Formulating the research design in: Research Methods for Business Students sixth edition (sixth). England: Pearson.
- Saunders, M., Lewis, P. and Thornhill, A. (2016). Research methods for business students seventh edition (seventh). Nueva York: Pearson Education.
- Sekaran, U. and Bougie, R. (2019). Research methods for business: A skill building approach. john wiley and sons.
- Semerádová, T., and Weinlich, P. (2020). *Website Quality and Shopping Behavior: Quantitative and Qualitative Evidence*. Springer Nature. 1-129.
- Sharma, S., Singh, S., Kujur, F., and Das, G. (2021). Social Media Activities and its Influence on Customer-Brand Relationship: An Empirical Study of Apparel Retailers' Activity in India. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(4): 602-617.
- Singh, K. (2007). Quantitative social research methods. Sage.
- Suarez, L. M. C. (2016). Investigating website appearance and usability effects on student satisfaction with the website: a descriptive analysis in three countries. *International review on public and nonprofit marketing,* 13(3): 223-238.
- Sun, H., Samad, S., Rehman, S. U., and Usman, M. (2022). Clean and green: the relevance of hotels' website quality and environmental management initiatives for green customer loyalty. *British Food Journal*.
- Sun, S., Fong, D. K. C., Law, R., and He, S. (2017). An updated comprehensive review of website evaluation studies in hospitality and tourism. *International Journal of Contemporary Hospitality Management, 29*(1): 355-373.
- Taherdoost, H. (2017). Determining sample size; how to calculate survey sample size. *International Journal of Economics and Management Systems*, *2*, 236-239.
- Tandon, U., Kiran, R., and Sah, A. N. (2018). The influence of website functionality, drivers and perceived risk on customer satisfaction in online shopping: an emerging economy case. *Information Systems and e-Business Management*, *16*(1): 57-91.
- Tavakol M. and Dennick R. (2011) Making sense of Cronbach's alpha, *International Journal of Medical Education*, (2): 53-55.
- Ting, P. H., Wang, S. T., Bau, D. Y., and Chiang, M. L. (2013). Website evaluation of the top 100 hotels using advanced content analysis and eMICA model. *Cornell Hospitality Quarterly*, *54*(3): 284-293.
- Vladimirov, Z. (2012). Customer satisfaction with the Bulgarian tour operators and tour agencies' websites. *Tourism Management Perspectives, 4*, 176–184.

- Vrontis, D., Ktoridou, D., and Melanthiou, Y. (2008). Website design and development as an effective and efficient promotional tool: A case study in the hotel industry in Cyprus. *Journal of Website Promotion*, *2*(3-4): 125-139.
- Wang, L., Law, R., Guillet, B. D., Hung, K., and Fong, D. K. C. (2015). Impact of hotel website quality on online booking intentions: e Trust as a mediator. *International Journal of Hospitality Management*, *47*(1): 108-115.
- Wang, Y., and Qualls, W. (2007). Towards a theoretical model of technology adoption in hospitality organizations. *International Journal of Hospitality Management*, *26*(3): 560-573.
- Zhou, R., Wang, X., Shi,Y. Zhang,R., Zhang, L., andGuo, H. (2019). Measuring e-service quality and its importance to customer satisfaction and loyalty: an empirical study in a telecom setting. *Electronic commerce research*, 19(3): 477-499.
- Zikmund, W. G., Carr, J. C., and Griffin, M. (2013). *Business Research Methods (Book Only)*. Cengage Learning.

تقييم جودة المواقع الإلكترونية لفنادق الأربع والخمس نجوم في مصر

ملخص البحث

تهدف هذة الدراسة إلي إستكشاف جودة المواقع الإلكترونية لفنادق الأربع والخمس نجوم بمدينة الغردقة الإهتمام بجودة الموقع الإلكتروني للفندق نقطة هامة لتحقيق أكبر عدد من الحجوزات وزيادة المبيعات، علي العكس تماماً التجارب الإلكترونية السيئة ينتج عنها انخفاض في عدد المبيعات وبالتالي التأثير السلبي علي حجم المبيعات وإيرادات الفندق، تم إستخدام الطرق الكمية لجمع البيانات، تمثلت عينة الدراسة في عملاء فنادق الأربع والخمس نجوم بمدينة الغردقة بمصر، كما تم إعتماد العينة العشوائية البسيطة في جمع بيانات الدراسة، وتمثلت أداة جمع بيانات الدراسة في الاستبيان تم توزيع 600 إستمارة إستقصاء الصالح منها والقابل للتحليل 420 إستمارة إستقصاء، تم تحليل البيانات بواسطة البرنامج الإحصائي spss النسخة 25، تضمنت التحاليل الإحصائية T-test، ANOVA و correlation. أكدت نتائج هذة الدراسة أن إجابات المستجيبين فيما يتعلق بجودة المواقع الإلكترونية للفنادق تراوحت ما بين محايد إلى موافق. كما أثبتت الدراسة أن هناك علاقة قوية بين المحتوى المعلوماتي وتصميم المواقع الإلكترونية وسهولة الاستخدام والتفاعل والصورة التسويقية. أظهرت نتائج البحث الحالي عدم وجود فروق ذات دلالة إحصائية بين الذكور والإناث فيما يتعلق بجودة المواقع الإلكترونية للفنادق. وفقاً لنتائج الدراسة أوصي الباحثون بعدة توصيات من ضمنها دعم الأنشطة التسويقية للموقع الإلكتروني للفندق من خلال العروض الخاصة والعروض الترويجية.

الكلمات المفتاحية: جودة المواقع الإلكترونية، الفنادق المصرية، تقييم المواقع الإلكترونية