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O desenvolvimento de redes sociais e *web* 2.0 nas cadeias hoteleiras de topo

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ABSTRACT

The purpose of this paper is to analyze the use of Web 2.0 tools and social communication media in the hotel sector, to determine whether these technologies are a real solution for increasing the hotel sector's visibility and enhancing that level of e-participation. Furthermore, it aims to examine what influences certain independent variables have in the greater use of these information and communication technologies.

The web sites of the world's 50 largest hotel chains have been classified according to an index of visibility, considering the most important Web 2.0 tools and social networks. Results indicate a low use of Web 2.0 tools by hotel chains. However, their presence in social networks is more significant. The size and the age of the hotel chain influence the increased use of Web 2.0 and social communication media.

Keywords: E-participation, hotel chains, social communication media, visibility, web 2.0.

RESUMO

O objetivo deste trabalho é analisar o uso de ferramentas da *web* 2.0 e redes sociais no setor hoteleiro, para determinar se essas tecnologias são uma solução real para aumentar a visibilidade do sector da hotelaria e melhorar esse nível de e-participação. Além disso, tem por objetivo analisar que influências certas variáveis independentes têm no maior uso das tecnologias de informação e comunicação.

Os sites das 50 maiores cadeias hoteleiras do mundo foram classificados de acordo com um índice de visibilidade, tendo em consideração as ferramentas da *web* 2.0 mais importantes e as redes sociais. Os resultados indicam uma baixa utilização das ferramentas da Web 2.0 por cadeias hoteleiras. No entanto, a sua presença nas redes sociais é mais significativa. O tamanho e a idade da cadeia hoteleira têm influência no aumento do uso de redes sociais e *web* 2.0.

Palavras-chave: E-participação, cadeias hoteleiras, redes sociais, visibilidade, *web* 2.0.

1. Introduction

In recent years, advances in information and communication technologies (ICTs) have brought about a transformation of society that has affected companies' organisation and management (Bonsón et al., 2006; Serrano et al., 2007). Thus, applications based on Web 2.0 are changing relationships between society and business. This situation means that customers are making increasing use of the internet as a tool to express their experiences with organisations, and that potential consumers make purchasing decisions, for products or services, on the basis of the information found on the internet.

In this sense, let us refer to the phenomenon of transparency, which is gaining increasing importance in society due to the constantly increasing demand for information. Numerous studies have shown that information is ever more highly valued within the community (Oyelere et al., 2003; Petersen and Plenborg, 2006; Birt et al., 2006; Lim et al., 2007). The transparency of an organization depends on the degree or extent to which it explains itself to its stakeholders, and so the two phenomena, the development of new technologies and that of transparency, are closely linked today. Let us also refer to a concept that is rising fast in public view, namely e-participation. Generically, this includes the processes that facilitate and enhance the direct involvement in decision-making and in the generation of alternatives by those affected by such decisions, through the use of participatory channels based on ICTs, such as Web 2.0 or social networks.

As an evolution of Web 1.0, O'Reilly (2005) coined the concept of Web 2.0, based on the use of new technologies such as RSS channels, podcasting, mashups (combining existing applications), folksonomies (social indexing), widgets (mini web applications) and resource-sharing environments (to store and share data online). And it is on this technological base that the social media have been developed, these being applications that offer services to online user communities, such as blogs, social bookmarking, wikis, multimedia sharing applications or social networks. All of these instruments facilitate collaboration, joint learning and the rapid exchange of information among users.

Any organisation can greatly improve its corporate website by incorporating Web 2.0 services and technologies (Jiang et al., 2009), thus creating relationships with stakeholders who, with traditional means of communication, had previously been inaccessible or invisible (Hearn et al., 2009).

In this respect, the term "Enterprise 2.0" was introduced by McAfee in 2006, referring to the use of Web 2.0 applications in a business context. Enterprise 2.0 illustrates how a correct implementation of Web 2.0 and its tools not only aids the socialisation among organizations but also improves the resolution of problems, the leveraging of experience, the generation of ideas and the knowledge of the public opinion (McAfee, 2009).

Along the same line, Mackeviciute and Iacubiţchi (2010) suggest that Enterprise has a direct impact to key aspects such as communication, collaboration, cooperation and innovation activities. Likewise, diverse authors argue for the benefits of Web 2.0 in all types of business (Benkler, 2006; Bonsón et al., 2008; Constanzo, 2009; Hwang, Altman, and Kim, 2009; IDC, 2008; Kupp and Anderson, 2007). Due to the enormous use of the Web 2.0 tools, the formulation of metrics to determine the impact of such tools and level of use has been initiated (Herget and Mader, 2009).

As a result of these changes, the internet is no longer just another channel of communication, but has become a key factor for companies that pursue a higher degree of transparency and accountability; it enables information of all kinds to be offered as soon as the user requests it (Larrán and Giner, 2002), and at the same time facilitates interaction via different mechanisms of participation. However, although social technologies have generated a high degree of interconnectivity among users, allowing them to exchange all kinds of opinions and experiences (Vazquez et al., 2009) many organizations continue to rely on communication and positioning strategies that ignore the advantages provided by participation in the blogosphere, by Wikipedia, by the publication of podcasts or videos, through Twitter

conversations or by creating profiles on social networks like Facebook, MySpace or Xing.

We are thus faced with social change, in which a firm's positioning and its digital reputation on the internet will play a key role in the knowledge society of the 21st century. Accordingly, the organisations that are most active and innovative in their communication policies will be most likely to triumph. However, we must take into account that the concept of business dialogue and the use of Web 2.0 to promote e-participation are still at an early stage (Bonsón et al., 2011).

Regarding the sectors which benefit from the use of Web 2.0 features, Perrigot et al., (2011) point out that Web 2.0 is a competitive tool for service sector organizations. Particularly, the authors argue that this tool facilitates the identification of customer needs, the level of customer satisfaction and the creation of a community of followers. Likewise, it is considered a key element in enhancing the loyalty and attracting new customers. Moreover, given that tourist profiles and expectations are increasingly diverse Buhalis and Deimezi, (2004) posit that interactive mechanisms improve the promotion of tourist services such as travel, hotels and restaurants. In light of the above, Buhalis and Deimezi (2004) suggest that the use of Web 2.0 has revolutionized the traditional business model of the tourism industry.

In addition to the influence of information in customers' decision making processes Paroutis and Al Saleh (2009) point out that it is necessary to know the factors which motivate businesses to make greater use of the Web 2.0. However, studies which focus on this subject are scarce (Lee et al., 2010).

Based on the foregoing, this article sets out two objectives. First, an analysis of the use of Web 2.0 tools and social communication media by hotels. Second, the study of the determining factors, such as organizational age, organizational size, sales volume, level of internet penetration in the country and level of social network penetration on greater use of Web 2.0 tools. As a study sample, we examined the largest 50 hotels rated by HOTELS magazine, The Magazine of the Worldwide Hotel Industry.

This article is organized as follows: the second section outlines the tools available in Web 2.0 and social communication media. In this section, relevant academic literature focus on hotels is also reviewed. In the third section, the study per se is presented, describing the methodology used, the scope of the study and the analysis of the results analysis. In the final section, the conclusions are presented.

2. Social technologies in hotel sector

In general, media coverage of Web 2.0 focuses on commonly-used applications and services, such as blogs, video sharing, social networks and podcasting; in short, a more socially connected Web in which people can both contribute and consume (Anderson, 2007). However, a clear distinction should be made between the tools of Web 2.0 and those of social communication media, which are the result of applying Web 2.0 technology in an online social environment.

For Elia et al., (2009) the paradigm of the evolution of Web 2.0, together with the rise of social networks and virtual communities, provides an opportunity to create "spaces" where people learn together and share their experiences.

Although in technological terms there has been no great breakthrough in the development of Web 2.0 services, since they are mainly based on technologies and open standards that have been in use since Web 1.0, the latter have been improved, and this progress has led to the creation of Web 2.0 (Anderson, 2007). Briefly, these are the most important Web 2.0 tools:

- RSS (Really Simple Syndication): Used to transmit frequent updates to users who have subscribed to the content source. The format makes it possible to distribute content without a browser, using software designed to read these RSS feeds.
- Podcasting: The distribution of audio files, usually in mp3 format, via a system of RSS syndication by which users can download the podcast content for subsequent listening.
- Vodcasting: The concept is similar to that of podcasting, but instead of having only audio it also includes video.
- Widgets: Small applications or programs, usually presented in small files or folders, which are executed by a widget engine. Intended basically to provide easy access to frequently used functions and to provide visual information. However, widgets are limited only by the designer's imagination, and can interact with all types of information services distributed on the internet.
- Facilities to share, tag and classify information: Applications that allow a user to share information in a website with other users. Similarly, social bookmarking is used to store, sort and share content through social networks.
- Mashup: An application that uses and combines data from one or more sources to create new services. The best known examples of mashup applications are those based on the use of Google maps.
- Data embedding systems: The inclusion of content on a website created by a third party in order to form a composite content, for example, YouTube videos. Often confused with mashups
- Webcast: A live internet transmission, similar to that offered by a television or radio station. Initially, webcasts were not interactive, and so the customer only watched the action without being able to change anything, but there are now webcasts that allow users to interact by sending in comments.

The Web 2.0 tools mentioned above are present in almost all social communication media, among which the following are the best known:

- Blogs: Regularly updated websites that chronologically compile texts or articles by one or more authors. Typically, in each blog item, readers can add comments and the author can answer them, and so a dialogue may be established.
- Wiki: A website whose pages can be edited by multiple users, through the web browser. Users can create, modify or delete a shared text. The most significant and best known application to date is that of collective encyclopaedias, chief among which is Wikipedia.
- Media sharing platforms: Based on Web 2.0 applications to share, tag and classify information, these platforms not only enable users to share presentations (Slideshare), photos (Flickr), documents (Docstoc) and videos (YouTube), but also allow them to be rated, ordered and discussed with other users.
- Social networks: Web sites that offer services and communication features enabling users of the network to keep in touch. These networks are based on special software that incorporates many individual features: blogs, wikis, forums, chat, messaging, etc., within a single interface, and which provides connectivity between all the users of the network. Regarding types of social network, they

include those for general use or for social purposes, such as Facebook or MySpace, and others for professional use, like LinkedIn or XING, and yet others that are more specific, for example Delicious.

- Twitter: A microblogging platform based on 140-character messages; this is not considered a social network, but as a communication tool. Twitter allows users to send small-sized, plain text messages called tweets, which are shown in the user's home page. Users can subscribe to the tweets of other users (known as following) and subscribers are called "followers".

Paton and McLaughlin, (2008) emphasize the fundamental importance of interactive tools in order to achieve excellence in the hotel sector. In this sense, Tiedemann et al., (2009) add that the growth of a hotel chain is not always linked with an increasing customer satisfaction. This is due to the fact that many hotel managers exclusively focus on cleanliness and the comfort of rooms and quality of food without taking into account that both internal and external information sharing are crucial to ascertaining customer needs and feedback in order to offer a higher quality service. Furthermore, Ganesan and Zhai (2012) point out that one of the main mechanisms to solicit guest opinions are through Web 2.0 tools.

With respect to social media communication platforms Lim (2010) points out that, they are a very useful for interacting with consumers before, during, and after the vacation experience. In addition, social media platforms give customers the opportunity of being constantly informed and favours a higher loyalty to the organization. Likewise, thanks to social media communications, hotel reputation, customer services and sales of the sector, are increased. As a result, social media are considered to be competitive strategic tools that offer numerous advantages at a low cost and which maintain a direct relation with the costumer (Hailey, 2010).

Besides the diverse advantages of Web 2.0, identifying determinant factors that have an influence on a greater usage of web 2.0 is necessary (Paroutis and Al Saleh, 2009). According to Ardichvili et al., (2006); Cabrera et al., (2006); Riege (2007); McDermott and O'Dell (2001); Barson et al., (2000) this area of research can be divided into the following three categories: technological factors, organizational factors, and individual factors. Within technological factors, the level of internet penetration in the country and the level of social network penetration in the country are found (Bonsón and Flores, 2011). Amongst the most common organizational factors are organizational age (Paroutis and Al Saleh, 2009), organizational size (Claver et al., 2006; Balim and Dogerlioglu, 2011) and volume of sales (Balım and Dogerlioglu, 2011). Finally, some of the main individual factors are expectations of business performance and confidence in management (Paroutis and Al Saleh, 2009).

3. Visibility of the hotel sector: empirical study

3.1 Methodology

Our analysis of the visibility of hotel sector is divided into two phases. Initially, we conducted a descriptive study of the use of Web 2.0 tools and social media by the hotel chains in question. Then, in the second phase, we analysed the factors underlying the greater or lesser development of these technologies in the sector.

For the analysis of hotel chains' use of Web 2.0 applications, following the methodology used by Elia et al., (2009) and Bonsón and Flores (2011), we examined the official website of each hotel chain, in search of the following items: 1. Blogs, 2. Podcasts 3. Vodcasts, 4. RSS 5. Widgets, 6. Mashups, 7. Webcasts, 8. Link to the official YouTube channel, 9. Link to the official Twitter account, 10. Link to the official Facebook page. Items are rated on a dichotomous scale: if the item is available, it is scored with a 1, otherwise, with a 0.

In our study of social media, each one was measured in terms of specific different items, such as the number of groups, the number of followers or the number of visits. The communication media analysed were Twitter, Facebook, YouTube and Google blogs (we also reviewed LinkedIn and Flickr, but these are not included in the results because no such use was found). For Twitter, the following items were examined: 1. Existence of an official Twitter account; 2. Number of followers; 3. Number of tweets; 4. Number of followings. In Facebook, we examined: 1. Existence of an official Facebook page; 2. Number of pages-groups of which the hotel chain is a follower; 3. Number of followers; 4. Number of visits; 5. Number of people talking about the hotel chain; 6. The success of a page be measured by the "n People are talking about this" divided by the number of followers. In YouTube, we examined the following: 1. Existence of an official channel on YouTube; 2. Number of subscribers; 3. Number of video views. Finally, in Google Blogs, following the methodology used by Bonsón et al. (2011), we examined the number of blogs indexed when a search was made for the official name of the hotel chain in Google blogs.

The second stage of the analysis is that of explanation. In order to analyse the influence of independent factors on the development of these technologies at hotel chains, we need first to quantify the level of use of these applications. For this purpose, each hotel chain was classified according to an index of visibility (IV) consisting of the 10 items used previously in analysing the official website. The IV of each hotel chain was calculated as the ratio of the sum of the items available (scored with a 1) and the total number of items (10). This web analysis included items related to the presence of the hotel chain on YouTube, Twitter and Facebook, and so the IV is based on both the analysis of the official website and on the presence of each hotel chain in the most important social communication media.

Having defined the dependent variable (IV), taking into account prior research on transparency, visibility, websites and social networks (Bertot et al., 2010; Bonsón et al., 2002; Bonsón and Flores, 2011; Celaya et al., 2009; Ettredge et al., 2001 and 2002; Oyelere et al., 2003), we selected the factors that may promote the development of Web 2.0 tools and social communication media at hotel sector. These were tested using a multiple regression model. The explanatory factors considered are summarised in Table 1, showing the units of measurement used and the expected relationships with the IV.

Table 1: Explanatory factors

Factor	Measurement parameter	Expected relation
Size (S/ROOM)	No. of rooms in 2010 (Natural Logarithm)	Positive
Size (S/HOTEL)	No. of hotels in 2010 (Natural Logarithm)	Positive
Sales (S/T.OVER)	Turnover in Euros, in 2010 (Natural Logarithm)	Positive
Age (AGE)	No. of years' functioning	Positive
Internet penetration (INT/P)	Level of internet penetration in the country where the hotel chain is located (www.internetworldstats.com)	Positive
Social network penetration (SNT/P)	Level of social network penetration in the country where the hotel chain is located (http://globalwebindex.net/)	Positive

Source: personal compilation

3.2 Scope of the study

The study sample comprised the 50 hotel chains rated largest in the world, according to number of rooms, in the 2010 HOTELS´ 325 Ranking. The data used for our empirical analysis are drawn from the annual report for 2010 on the corporate website of each hotel chain.

For more than 45 years HOTELS magazine, The Magazine of the Worldwide Hotel Industry, has been the leading source of news and analysis for the global hotel industry and, accordingly, HOTELS´ 325 Ranking has been used in relevant research (Cirer-Costa, 2012; Jimenez, 2008; Alonso, 2008; Zafiropoulos et al., 2006). Reaching over 90,000 hotel professionals in more than 160 countries through print and online communications, HOTELS provides critical information on all aspects of the worldwide hotel industry including design, food & beverage, finance, development marketing and technology.

With respect to the geographical regions of the hotel chains examined, we note that they are more or less evenly distributed between America, Europe and Asia (Table 2).

Table 2: Geographical and age distribution

Continent	%	Age			
		Years	%	Years	%
America	44%	0 - 10	14%	51 - 60	10%
Europe	34%	11 - 20	12%	61 - 70	4%
Asia	22%	21 - 30	10%	71 - 80	6%
Oceania	0%	31 - 40	12%	81 - 90	10%
Africa	0%	41 - 50	10%	91 - 100	0%
				+ 100	12%

Source: personal compilation

Regarding the age of these hotel chains (see Table 2), on average they have been operating for 57.18 years since their inauguration. However, the data contain a standard deviation of 56.92 years. This high dispersion is due to newly established hotel chains, which come from recent hotel mergers and acquisitions.

3.3 Analysis of the results

3.3.1 Descriptive analysis of results

Table 3 summarizes the results of the analysis regarding the use of Web 2.0 tools and social media communication platforms. In general terms, in both cases there is scarce use, although the utilization of the social media communication platforms is more common.

According to the availability of the Web 2.0 tools, the RSS channel is the most used, representing 30% of the sample. On the contrary, mashups (4%) following by podcasts and webcasts (6%) are the least used. Blogs and vodcast occupy an intermediary position, with a mean of 4 points, respectively.

Regarding social media communication platforms, Facebook is the most visible, with Twitter (40%) following six points behind. Just 20 % of the hotels analyzed have an official channel of Youtube. As stated in the methodology section, we also searched for other platforms such as LinkedIn, Flickr and any other that might have a link on the hotel's website, but given their inexistent visibility they were not included in this study.

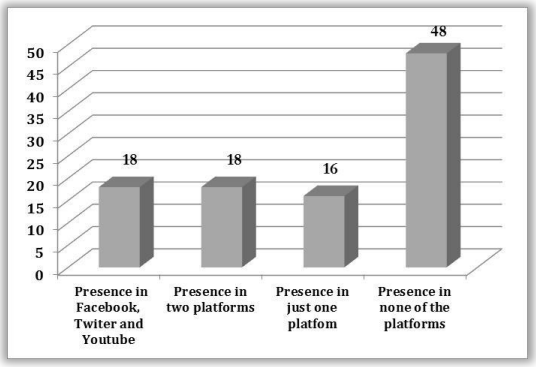
Table 3: Utilisation of Web 2.0 and social communication media

	Hotel chains	
	N	%
Blogs	4	8%
Podcasts	3	6%
Vodcasts	4	8%
RSS channels	15	30%
Widgets	3	6%
Mashups	2	4%
Webcasts	3	6%
Link to the official YouTube channel	10	20%
Link to the official Twitter account	20	40%
Link to the official Facebook page	23	46%

Source: personal compilation

In keeping with social media communication platforms identified, almost half of the hotel sample does not have a social communication platform. Only 18% of the hotels utilize the three platforms: Facebook, Twitter and Youtube. Likewise, other 18% of the hotels utilize two of platforms and, just 16% use one platform (see Graphic 1).

Graphic 1: Availability of social media communication platform (%): Facebook, Twitter and Youtube



Source: personal compilation

Table 4 shows the presence of the hotels in the main social media communication platforms. In this sense, Facebook indicates the highest average number of subscribers with 524,623 followers, and secondly Twitter, with 32,962 followers. However, the platform with the highest number of visits is Youtube with an average of 5,179,818. Other important items reflecting the significance of the hotel sector in social media is the average number of blogs indexed obtained by searching for the official name of the hotel in Google Blogs (279,581).

Furthermore, the level of interaction through Facebook and, concretely, by "n People Are Talking About This," have an average of 12,957 people. This indicates that have generated diverse interactions with that page. This shows that many viewers are very interested in Facebook and also that there is a high level of people connected with this community. According to Bonsón and Florez (2011), above 5% of page success, as referenced in table 4 below and as explained in the methodology, is considered an adequate success. In the sample considered here, 2.04% was achieved thus indicating a moderate success rate.

Table 4: Use of social communication media

	Social communication media	Media
Twitter	Official account in Twitter	(40%) 20
	Number of followers	32,962
	Number of tweets	2,914
	Number of followings	2,601
Facebook	Official page in Facebook	(46%) 23
	Number of page-groups followed by the hotel chain	42
	Number of followers	524,673
	Number of visits	332,326
	Number of people talking about the hotel chain	12,957
	Success of a page	(2.4%)
YouTube	Official channel in YouTube	(20%) 10
	Number of subscribers	6,667
	Number of video views	5,179,818
Google Blogs	Number of blogs indexed in Google Blogs	279,581

Source: personal compilation

3.3.2 Exploratory analysis of results

In order to fulfil the second objective of this paper, the results of the determining factors in the greater use of Web 2.0 are shown. To do this, we applied a multiple regression analysis; assuming that the variables under study presented a linear relationship, the statistical technique selected was that of Multiple Linear Regression.

Before the regression analysis, the compliance of all the assumptions of the model was confirmed. Thus, the hypothesis of homoscedasticity was accepted through White test. The normality assumption was tested using Shapiro-Wilks test,

which revealed that all variables were normal. Regarding the hypothesis of independence, an acceptable value was showed by Durbin-Watson test. The linearity of regression is corroborated by the Fisher F (4.634**).

As can be seen, the Pearson correlation matrix (Table 5) shows moderate correlations between the two variables that measures organizational size. Beside this, there is a low correlation amongst the variable size, measured by the total number of rooms, and the variables volume of sales, and the age. Therefore, the absence of significant, strong correlations between the dependent variable and the independent ones gives us an idea of the regression results, which presumably will have a medium-low fit and few significant variables.

Table 5: Pearson's Correlation Matrix

	IV	S/ROOM	S/HOTEL	S/T.OVER	AGE	INT/P	SNT/P
IV	1						
S/ROOM	0.059	1					
S/HOTEL	-0.208	0.685**	1				
S/T.OVER	0.218	0.490**	0.253	1			
AGE	0.277	0.339**	0.284*	0.227	1		
INT/P	0.169	0.132	0.083	0.205	0.088	1	
SNT/P	0.156	0.224	0.202	0.207	0.034	-0.092	1

* The correlation is significant at the level of 0.05 (bilateral). **The correlation is significant at the level of 0.01 (bilateral).

Source: personal compilation

According to our analysis (see Table 6), the explanatory power of the resulting model, as measured by the adjusted R-squared value, is 30.4% and so the fit is moderate. As for the significance of the variables, only 3 of the 6 independent factors are significant.

In line with the work of Paroutis and Al Saleh (2009), there is a positive and direct relation between the organizational age, measured by the number of rooms and number of hotels, and the greater use of Web 2.0 tools. Therefore, the oldest hotels are the ones more interested in the use of interactive mechanisms. In addition, the organizational size influence in the use of web 2.0 is significant, in agreement with Bonsón and Flores (2011) whose paper confirms that larger financial entities are the ones who use more Web 2.0. Likewise, this study is consistent with the results of Claver et al. (2006) which show that larger hotels carry out more growth strategies.

The relation amongst the variables volume of sales and use of Web 2.0 is neutral. Therefore this result is not similar to Claver et al., (2006) who show that those hotels with a high level of sales are the ones which carry out more growth strategies. Likewise, there is no evidence to confirm that both the level of internet penetration in the country and the level of penetration of social networks in the country affect in a greater use of web 2.0, in line with other papers which focus on financial entities (Bonsón and Flores, 2011).

Table 6: Results of regression analysis

Model	Non-standardised coefficients		Standardised coefficients	T
	B	Standard error	Beta	
(Constant)	-0.496	0.383		-1.298
S/ROOM S/HOTEL S/T.OVER	0.147	0.051	0.832	2.886**
AGE	0.128	0.032	1.046	4.047**
INT/P	-0.006	0.016	-0.063	-0.410
SNT/P	0.001	0.000	0.286	2.243*
	0.100	0.081	0.152	1.230
	0.121	0.076	0.198	1.585

R	R squared	Adjusted R squared	Standard error of the estimate
0.624	0.389	0.304	0.152
Fisher	**White**	**RESET**	**Durbin-Watson**
4.634**	0.677	2.673	2.025

* The correlation is significant at the level of 0.05 (bilateral). **The correlation is significant at the level of 0.01 (bilateral).

Source: personal compilation

4. Conclusions

Increasingly, hotel chains are benefiting from new information and communication technologies. In this sense, Web 2.0 tools which market goods and services, receive reservations, and evaluate customer complaints/suggestions are beginning used. Given the growth of social networks, hotel chains are also taking advantage of social media opportunities to increase visibility and to build trust and credibility.

However, this process is still in an early stage. According to the results of our study, the use of Web 2.0 tools by hotel sector is low. However, the presence in social network communities is more widespread.

Good visibility for a website indicates that it is perceived as an important tool for users. Providing an advantage over competitors and ensuring a significant and sustained flow of new visitors. However, the hotel sector does not seem to be, in general, aware of these benefits. Therefore, more efforts in the use of Web 2.0 need to be done.

Moreover, due to the impact of the global crisis in tourism, the use Web 2.0 applications in hotels as a means of providing information and services to the general public and to increase the number of reservations is needed. Therefore, those hotel chains that have explored Web 2.0 services and technologies since their beginnings have a clear competitive advantage.

Regarding social communication media, and taking into account the popularity of social networking such as online forums and blogs, many companies have rushed to create a Facebook page and open a Twitter account. However, this is not sufficient. A well managed social media strategy to make the hotel chain visible in the desired environment or in order to be promoted to potential clients is necessary. According to our descriptive analysis, hotel chains have begun to recognize the benefits of social platforms. In this sense, 52% of hotel chains now have an official account with one or more of the three media selected.

Hotel chains that do not have presence in social networks are less aware of the opinions of their users and thus are missing out on an important source of information. Even in cases where the hotel has no official page on a social network, people do express opinions about the hotels. In this sense, opportunities to participate in conversations about themselves are being lost. Therefore, digital communication and interaction with customers as a part of the hotel´s strategy should be included, generating contents with more quality, promotions, contests and special offers.

Finally, regarding the factors that influence the use of social communication media and Web 2.0 tools in the hotel sector, our analysis shows that oldest hotel chains are more interested in using these tools. In keeping with this, the duration of an organization is an indicator of reputation so it could be possible that oldest hotels are using these technologies as a mechanism to maintain their image. Beside this, largest hotels are also more aware of the utility on social technologies. In this sense it could be possible that the ones with a larger infrastructure using Web 2.0 as a mechanism to promote their expansion.

Evidence about the effects of the variables "level of internet penetration" and "social network penetration in the country" in a greater use of web 2.0 are not found. These results could be due to the fact that the users of these tools are not confined to the inhabitants located in the same country as the hotel.

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