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The Diffusion of Standardised Quality Management in Hotel Industry in Spain

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Abstract

The implementation of quality management systems (QMSs) has become common in this tourism industry. A forerunner in this development has been the Spanish tourist sector, in which 17 specific quality-management standards have been developed over several years in various tourist sub-sectors, including hotels, rural accommodation, restaurants, spas, and travel agencies. The present study, which is exploratory in nature, analyses the diffusion of hotel standard using a model that has been well attested in the specialised literature. The study concludes that the standardisation of quality management in hotels will increase in coming years. The worldwide diffusion of international standards in many service sectors and the findings of the present study with respect to the increasing implementation of the Spanish standards provide an indication of what is likely to happen in the service sector as a whole in most countries.

Keywords: quality management; standardisation; quality diffusion; QMS; hotels.
INTRODUCTION

Since the last decade, tourism has the need for differentiation strategies and quality. These strategies were incorporated in industrial companies, such as the automobile industry and the services sector, such as banking or management consultancy, to compete in a new scene marked by profound changes in both supply and demand (Alonso Almeida et al, 2006).

Faced with this situation is created in the first half of the 90’s Tourism quality Plans, with the passage of time, evolved to become, starting in 1996, at the Spanish Tourism Quality System (STQS), whose methodology is owned of the General Secretariat of Tourism from Spain. The bet for the quality as key feature of the Spanish tourism policy embodied in the Comprehensive Plan for Quality Tourism Spanish 2000-2006 (PICTE), developed by the Spanish Tourism Administration. That plan is based on 10 programs, including one specifically refer to the quality in the business. It is currently being developed from the Administration, with the help of the industry and the social partners Tourism, the Plan Tourism 2020 with the objective to achieve the Spanish Tourist System was the most competitive and sustainable in the world (Alonso Almeida, 2008).

At the beginning of the nineties, tourist enterprises in some countries began to notice that the competitive advantages on which their businesses were run, and which had converted the tourist sector into a reference, were being considerably reduced. Price competition, as a traditional strategy of many tourist companies, was shown with time to be an impossible, unsustainable alternative, especially in the presence of a setting characterized by its great competitiveness and rivalry (both at a company and destination level), the sudden emergence of new tourist destinations, the globalization of the sector, and the important influence of political, economic, social, environmental and technological factors (Camisón, 2007; Macleod, 2004).
Moreover, in the last twenty years, consumer habits have undergone important changes (Tribe, 1999; Esteve, 2001; González and Bello, 2002). The search for free time, travel for leisure and short holiday breaks throughout the year, have become generalized, thanks to, among other factors, the popularizing of certain means of air transport and, in particular, to the proliferation of low cost companies, or to the emergence of more economical tourist destinations (Alonso et al., 2006; Talón et al., 2007). On the other hand, today’s tourist places increasingly greater value on his/her money, has greater experience, and is more demanding in the provision of an individualized, flexible, quality service (Figuerola, 2006; Trunfin et al., 2006). To all the aforementioned, it must be added that there is greater environmental awareness, and a growing concern for climatic change (Nicholls, 2004; Hall and Higham, 2005).

As a consequence, the Tourism sector has seen the need to adopt differentiation and quality strategies, already incorporated in industrial companies, such as the automotive industry, and the service sector, such as banks, or the hospital sector, in order to compete in a new setting marked by great changes, both in offer and demand. A myriad of empirical studies have appeared in the last few years, analysing quality in different tourist sub-sectors, such as, for example, in rural accommodation (Reichel et al., 2000; Albacete et al., 2007), hotels (Sharpley et al., 2003; Tsaur and Yin-Chun Lin, 2004; Briggs et al., 2007), or in tourist destinations in general (Graefe and Vaske, 1987; Wall, 1995; Go and Govers, 2000).

Nonetheless, all of them have been focused on assessing customer satisfaction, or implementing models for Total Quality Management, but none of them has focused on an innovating aspect in the sector: quality assurance by implementing standardized quality management systems to do so.

This research, of an exploratory nature as it is the first study of these characteristics, will analyse how the diffusion of these standards has taken place in tourist enterprises, specifically in the hotel industry, with the aim of gauging their real impact and forecasting their future importance.
SPANISH TOURISM QUALITY SYSTEMS (STQS)

Since their deployment in 1996, the STQS has had two basic objectives:

1. Equipping Spanish tourism companies of a common methodology to establish a management system and improving the quality that allows companies to maintain and improve its competitive position.

2. Supporting institutionally Quality Mark. Q is a Spanish brand recognition of quality.

The system is based on four components:

- Some quality standards for each subsector tourist specific standards that define processes and services and the quality system requirements.

- A system where an independent third party certification ensures that companies fulfil the standards.

- The quality mark Q.

- An agency manager, the Institute for Spanish Tourism Quality (ICTE), which promotes the application of the system and ensures compliance, development and dissemination.

The ICTE since its establishment in 2000 born with a mission to strengthen the STQS and the credibility and reach of the mark of quality tourism Spanish Q. At present, the ICTE has published 17 different quality standards for tourism companies, six of which have been transformed into UNE Rules, which gives greater recognition in the national territory (see Table 1).
Table 1: Tourist quality standards in Spain

<table>
<thead>
<tr>
<th>Original Standards</th>
<th>Corresponding standard (nationwide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality standard for Travel Agencies.</td>
<td>UNE 189001:2006</td>
</tr>
<tr>
<td>Quality standard for Small-sized Tourist Accommodation.</td>
<td></td>
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<tr>
<td>Quality Standard for Tourist Coach Companies.</td>
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<tr>
<td>Quality Standard for Spas.</td>
<td></td>
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<tr>
<td>Quality Standard for Camp Sites and Holiday Resorts.</td>
<td>UNE184001:2007</td>
</tr>
<tr>
<td>Quality Standard for Golf Courses.</td>
<td>UNE 188001:2008</td>
</tr>
<tr>
<td>Quality Standard for Rural Accommodation.</td>
<td>UNE183001:2006</td>
</tr>
<tr>
<td>Quality Standard for Convention Bureaux.</td>
<td></td>
</tr>
<tr>
<td>Quality Standard for Rural, Protected Spaces.</td>
<td></td>
</tr>
<tr>
<td>Quality standard for Ski and Mountain Resorts.</td>
<td>UNE 188002:2006</td>
</tr>
<tr>
<td>Quality Standard for Tourist Information.</td>
<td></td>
</tr>
<tr>
<td>Quality Standard for Supranational Tourist Information Offices.</td>
<td></td>
</tr>
<tr>
<td>Quality Standard for Convention Centres.</td>
<td></td>
</tr>
<tr>
<td>Quality Standard for Beaches.</td>
<td></td>
</tr>
<tr>
<td>Quality Standard for Restaurants.</td>
<td>UNE 167000:2006 and from UNE 167001 to UNE 67011</td>
</tr>
<tr>
<td>Quality Standard for Time Share Companies.</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Casadesus et al, 2009).

EVOLUTION OF THE Q CERTIFICATION

At end of 2007 over 2,117 companies are certified by the mark Q (see Figure 1).

As can be seen in Figure 1, the distribution of certification is dominated by travel agents (1,164), representing 55% of the total number of registered companies and hotels (445) 21% of certified companies. Then there are an amount well below the lodgings (179), catering (104) and the beaches (59). In other subsectors tourist certificates present some very low numbers. There is not any firm time-sharing, or any golf course certificated, at present.

Figure 1. Companies certified with the Q in 2007.
As can be seen in Figure 2, in 2004 there has been a considerable increase in the number of firms that have been certified with the regulations Q, thanks to the support of the administration and the campaigns both nationally and internationally, training sector and, in 2007, the creation of a directory of certified firms and an information manual on certification.

**Figure 2. Q Certification per year and cumulative.**

Source: Calculations based on data from ICTE (2007).
Although since 2004 certification of tourism enterprises with the trademark Q has increased considerably, it is still inadequate given the number of tourist establishments in Spain and the weight that the tourism sector has in the Spanish economy. The conversion of the regulations Q rule UNE brings benefits to both companies and certified as those who wish to do so, since it allows the choice of auditor; renewal of the certification is done, in line with other UNE regulations, every three years, instead of every two, expands the number of trained professionals to carry out the work necessary to obtain certification and helps make it more transparent and uniform the process of auditing and certification.

Spain has been marked as a goal to lead the international certification in the tourism sector from his experience in the field Spanish. For this part of the committee ISO / TC 228 "Tourism and related services", which is within the International Organization for Standardization (ISO), in order to develop quality standards for activities and services in the tourism sector. The Secretariat of the Committee is held by Spain through AENOR, as Spanish Agency for Standardization, his counterpart association in Tunisia. The presidency is also Spanish, and the Spanish delegation is represented by the General Secretariat of Tourism and the business sector (Rodriguez Antón et al., 2008).

THE Q STANDARD FOR HOTELS

The adaptation of the Q standard to the specifics sectors has allowed establishing guidelines in blocks that correspond to each unit service for each touristic establishment. For each block, the norm requires to establish the action and control responsibilities, the conditions and requirements that have to be fulfilled by the service, the process and system management specifications, and lately the internal control activities that have to be conducted by the responsible of service to be able to know the service level provided to the customers in each moment and to be able to introduce the pertinent improvements (Camisón et al., 2006). An example of the norm scheme for Hotels and apartments is shown in figure 3.
It is interesting to note that the requirements that the norms establish are of three types: compulsory variables to be fulfilled immediately, compulsory variables and variables in order to be fulfilled in the midterm or complementary variables. This division in these three types is something that differentiate this norm form other quality standards.

The norm establishes two mechanisms to assess the requirement fulfilment level: the self assessment and the extern audit. The self assessment works in a similar way that the model EFQM does. It consists in a questionnaire that the managers use to check the adaptation of facilities, equipments, services and management of the touristic establishment comparing to the norm. It provides a view of
the actual situation comparing to the quality variables demanded by the norm and it allows to the managers to seek for improvement areas. The external audit, by the other hand, is held by a third independent part following a regulated procedure, in the same way that is performed in other quality standards as ISO, that allows the concession of a seal of quality and to maintain it.

According to Camisón et al. (2006), the compulsory variables to be fulfilled immediately are those considered indispensable in a quality service, thus they are basic necessities for the customer. The failure to comply these variables at the external audit moment implies the impossibility to attain the certification and consequently the concession of the Q standard. On the other hand, the compulsory variables are those that give the minimum level that the company must accomplish and its failure may prevent the concession of the brand; or whether it is conceded, the company will have to attain this minimum level before the deadline proposed by the certification committee. Finally, the variables in order to be fulfilled in the midterm are those that its failure accomplishment in the audit does not prevent the company from getting the quality seal, neither it is required its accomplishment in a compulsory way in an improvement plan to attain the minimum level before a deadline. Nevertheless, it will be necessary to accomplish the minimum level for the renewal of the certification.

EMPIRICAL STUDY

The literature on the dissemination of management tools and systems is extensive (Rogers, 1995; Teece, 1980). From these studies, it is apparent that the accumulative adoption of innovations over time can, in general terms, be said to follow a sigmoid curve. This sigmoid curve reflects: (i) few organisations adopting an innovation during its early stages (and hence a relatively ‘flat’ adoption curve in the initial stages); (ii) the rate of adoption then rising (and hence a steep rise in the curve); and (iii) the adoption process reaching a saturation point (with another ‘flattening’ in the curve of the adoption rate). Such a sigmoid curve is seen in the adoption of many innovations; for example,
Stoneman (1995) claimed that this model provides a good description of the diffusion of new technologies.

Some studies of the dissemination of ISO quality standards have been reported in the academic literature. Corbett and Kirsch (2001, 2004) and Vastag (2004) proposed a regression model to explain the number of ISO 14000 certificates in a given country on the basis of: (i) its exporting capacity; (ii) its degree of commitment to the environment; and (iii) the number of ISO 9000 certificates issued in that country. The authors concluded that the number of ISO 9000 certificates in a given country is one of the factors explaining the number of ISO 14000 certificates issued in the same country; however, they did not specify how such a dissemination occurs, and nor did they present an analysis of the effect of different sectors on dissemination (which the authors acknowledged would be of interest).

In another study of the dissemination of quality standards, Franceschini et al. (2004) established that the logistic curve (or ‘S-curve’) explains the dissemination of the ISO 9000. Such a logistic curve model was first applied in the nineteenth century by the Belgian mathematician Verhulst to account for the growth of a biological species. According to this model, the growth rate of a species is at its exponential maximum in the initial stages when there are few individuals to compete for limited resources, but later slows to zero when a certain saturation of available resources is reached. As applied to the growth in ISO certificates, the model is explained by the following expression:

\[
N = \frac{N_0 K}{(K - N_0)e^{\gamma t} + N_0}
\]

in which:

N represents the number of certificates (as a function of time);

N₀ represents the number of certificates at the starting point;

K is the maximum level that can be reached (the saturation level);
\( r_0 \) is the initial growth rate; and
\( t \) is the independent variable time.

On the basis of the above work, Marimon et al. (2006) perceived that the logistic model might also be applicable to the dissemination of the ISO 14000 standard. They showed that the increase in the number of certificates for both the ISO 9000 and ISO 14000 standards was proportional to the number of existing certificates at a given time, and that the dissemination in different sectors was rather similar. These findings were in accordance with those of Corbett and Kirsch (2001, 2004) and Vastag (2004), who had already noted that the number of new ISO 14000 certificates in a certain country is related to the number of ISO 9000 certificates.

Casadeus et al. (2008) applied the logistic model to prevailing data to obtain a forecast of the ISO 14000 and ISO 9000 certificates worldwide as a percentage of their saturation. It is apparent that the data presented a near-perfect logistic curve, with a fit of better than 99% for \( r^2 \) squared in both curves. Casadeus et al. (2008) reported that the number of worldwide ISO 14000 certificates at the time of their study was at 64.6% of the predicted saturation level and that of ISO 9000 was at 84.6% of predicted saturation level. If 95% is taken as a possible saturation point, the forecast according to this model is a maximum of 160,000 ISO 14000 certificates and 870,000 ISO 9000 certificates worldwide.

Recently, Marimon et al. (2009) have conducted individual analyses of various countries, which have demonstrated that logistic curves apply to virtually all of the available empirical data for the ISO 9000 and ISO 14000 standards. In view of the good results obtained from the logistic model with respect to the ISO 9001:2000 quality standard and the ISO 14001:2004 environmental standard, the present study applied the same model to analysis of the emerging tourist quality-management standards.
RESULTS

Table 2 shows the hotels that were ‘Q’ certified by ICTE since 1998 until 2009 described.

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of certified Hotels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>13</td>
</tr>
<tr>
<td>1999</td>
<td>35</td>
</tr>
<tr>
<td>2000</td>
<td>23</td>
</tr>
<tr>
<td>2001</td>
<td>29</td>
</tr>
<tr>
<td>2002</td>
<td>39</td>
</tr>
<tr>
<td>2003</td>
<td>24</td>
</tr>
<tr>
<td>2004</td>
<td>42</td>
</tr>
<tr>
<td>2005</td>
<td>50</td>
</tr>
<tr>
<td>2006</td>
<td>111</td>
</tr>
<tr>
<td>2007</td>
<td>41</td>
</tr>
<tr>
<td>2008</td>
<td>69</td>
</tr>
<tr>
<td>TOTAL</td>
<td>476</td>
</tr>
</tbody>
</table>

As shown in table 2, in one particular year there are an abnormal number of certificates: in 2007. The mass certification in 2007 is explained by the fact that some hotel chains took a central decision for all their hotels distributed all over Spain, provoking a large number of simultaneous certifications. It has the potential to distort the model; nevertheless, we will proceed with our data. Thus we will be cautious with the analysis of the results extracted from the regression conducted.

Figure 1 shows the results of the analysis using all the data. As can be seen in the figure, the proposed model applies to the evolution of Q certifications in Spain: the coefficient of determination was near to one, and the parameters indicating growth (r_0) and saturation level (K) were both statistically significant at a 0.05 level. However, due to the fact that the available time series is very short (only eleven years), it has been observed that the 95% trust interval for these parameters is quite wide. Bearing it in mind, 95% of the saturation level will be reached in 2015.

On the other hand, it can be appreciated that the growing rhythm is quite low, provoking a slow slope, and quite regular and smooth along the time. The Q seal is increasing its acception in the
market in a steady way, but without punctual booms (with the mentioned and explained exception of the 2007 year).

Also the third parameter ($N_0$) is at .05 significance level, although it does not provide important information. It only confirms that the initial level is low (34 certifications), that actually is the real level at the second year.

Figure 4. Forecast of the $Q$ certificates for Hotels in Spain

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>Sum Sq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>694,690.44</td>
</tr>
<tr>
<td>Residual</td>
<td>8</td>
<td>1,944.56</td>
</tr>
<tr>
<td>Uncorrected Total</td>
<td>11</td>
<td>696,635.00</td>
</tr>
<tr>
<td>(Corrected total)</td>
<td>10</td>
<td>239,266.91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$N_0$</td>
<td>34.020</td>
<td>20.184</td>
</tr>
<tr>
<td>$K$</td>
<td>781.469</td>
<td>433.614</td>
</tr>
<tr>
<td>$r_0$</td>
<td>.354</td>
<td>.259</td>
</tr>
</tbody>
</table>

LL: Lower limit of the 95% confidence interval
UL: Upper limit of the 95% confidence interval
CONCLUSION

Ground-breaking tourist quality schemes were developed in Spain in the 1990s, before being incorporated into a comprehensive system—known as STQS (‘Spanish Tourist Quality System’) from 1996 onwards. This system has four components:

- quality standards for each specific tourist sub-sector, which define process and service standards, and quality service requirements;
- a certification system whereby an independent third party guarantees that the enterprises enforce standards;
- the ‘Q’ quality trademark; and
- a managing body, known as ICTE (‘Institute for Spanish Tourist Quality’)—which promotes the system and is responsible for its enforcement, integrity, and diffusion.

This quality-management system, which is customised for each tourist sub-sector, is unique in the world.

The present study has focused on the impact of these standards in the Spanish hotel sector. Utilising a model verified in the literature (Marimon et al., 2006; Casadeus et al., 2008), an analysis of this standardised management system has enabled a reliable forecast to be made of the future diffusion of these standardised management systems in the tourist sector. Although the data are specific to Spain, the results do indicate future developments in other countries in which similar standards are being developed or in which the emerging ISO tourist standards are applied.

It is apparent that standardisation of quality management will increase in tourism in coming years. The worldwide diffusion of ISO 9001 and ISO 14001 in many service sectors (Marimon et al., 2006 and 2009) and the findings of the present study with respect to the Spanish standards provide an indication of what is likely to happen in the service sector as a whole in most countries.
It is interesting to speculate how the diffusion of national standards of the type examined in this study will be affected by the creation of similar ISO international standards. Although this question has not yet been analysed in the academic literature, it seems likely that the impact of the two might be complementary. The transposition of a sectoral standard to a national standard, as occurred with some of the standards analysed in this study, appears to have strengthened the impact, even with little essential change to the standard.

REFERENCES


