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**ORGANIZATIONAL IMPACTS OF QUALITY CERTIFICATION ON  
BUSINESS SERVICES. AN ANALYSIS OF THE SMEs HOTELS**

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## **ABSTRACT**

Evidence of the quality contribution to companies (for improving them) has dramatically increased the demand for the certification of quality systems in all sectors, but particularly in manufacturing. The number of certificated companies in the service sector has been traditionally lower than (the number) in other sectors. This is mainly because in the service sector, there is higher costs of certification and lack of quality professionals. However, this trend is changing in recent years, caused by the need to improve the internal company efficiency and to maintain a sustainable advantage.

Therefore, the purpose of this work is to conduct a rigorous study for a better understanding of the certification process in the service sector and concretely in the tourism businesses. By doing so, the following issues (reasons) of SMEs hotel firms are analysed: their certification in national or international standards, identification their performance and their decision making process.

**Keywords:** quality certification, quality impact, SMEs hotel.

## **INTRODUCTION**

Quality systems evolution leads some positive consequences: (1) Organizational advantages which are related to a larger and rigorous operative process management; (2) Commercial benefits expectatives which are related to an enterprise image improvement and (3) Operative benefits expectatives which in some cases have been overvalued (Casadesus et al, 2000), but most time it has been confirmed his benefits (Nair, 2006).

Since the beginning of ninety, big enterprises have incorporated quality certification management systems. It has been produced by some factors among which the most emphasized factors are legislation and the need of growing in new markets. At the same time, several studies have shown the existence of some barriers to introduce these quality certification management systems in small and medium enterprises.

The main identified barriers are: (1) the inversion which has to be carried out for introducing quality systems and its certification. This last can be high for small business (Taylor, 1995; Gustafsson et al., 2001); (2) organizational changes (Nwankwo, 2000); and (3) internal resistance which is found in the employers (Brown et al, 1998). As a results, PYMES have taken a long time for incorporations these practices in their operative process. There is a lack of empirical studies. The most of analysis have been based on the results in big enterprises of manufacturing sector, but not to having been established different contingent elements. It involves that achieved results are similar for each group of enterprises, without taking into account their peculiarities. So a big degree of example heterogeneity is founded.

The lack of studies makes necessary to advance in the knowledge about organizational impacts which are produced by quality certification in small and medium enterprises. In this line, this research focuses on measuring the impact of quality system incorporation on the Spanish hotel pymes. Section first describes previous literature which is related to organizational benefits are achieved by enterprises which have introduced a quality management certification system. The next section shows the research methodology. Section third describes the results derived of an empiric contrast. Finally, the last section includes conclusions.

## **LITERATURE REVIEW**

Some authors assert that quality management provide a competitive advantage for small enterprises (Upton et al., 2001). However, there is a lack of research focus on studing small and medium enterprises and only it is emphasized the conceptual model against empirical research (Briscoe et al, 2005).

The relationships between quality management and enterprises performance have been analysed. Hendricks and Singhall (2001) found that small enterprises achieved more

benefits than the bigger and the most specialized enterprises which got more benefits than the diversified enterprises.

Beheshti and Lollar (2003) analysed 98 small and medium enterprises in manufacturing and service sector companies. These authors identified the following 8 differences benefits of quality programs: (1) quality product improvement; (2) efficiency increase; (3) customer service improvement; (4) cost reduction; (5) decision process improvement; (6) defects reduction; (7) team work improvement and (8) productivity increase.

Danes et al. (2008) found an evidence of the small enterprises are aware of importance of quality management. Their analysis used 572 small familiar enterprises. The achieved results showed that products quality control and given services are the most extensive practice between small enterprises to get a better image for their customers. These results contradict some previous studies which supposed/assumed that small enterprises did not show an interest in doing quality management principles (Ellington et al, 1996; Ryan et al, 2001) mainly due to the barriers displayed before.

Big enterprises studies have shown quality certification systems provide/supply commercial organizational benefits which are reflected in an satisfaction increase and an customers fidelity (Anderson et al., 1995; Adam et al., 1997; Choi and Eboch, 1998; Forza and Flippini, 1998; Rungtusanatham et al., 1998; Wilson and Collier, 2000; Das et al., 2000). Thereby, it is proposed the following hypothesis:

H1: Quality certificates have a positive commercial impact on the small and medium hotels enterprises customers.

Likewise, empirical evidence on big enterprises shows quality system certification may provide organizational benefits in terms of productivity improvement, mistake reduction, innovation and operations fidelity increase (Flynn et al., 1995; Choi and

Eboch, 1998; Ahire and O'Shaughnessy, 1998; Forza and Flippini, 1998; Dow et al., 1999; Samson and Terziovski, 1999; Ho et al., 2001; Prajogo y Sohal, 2003; Kaynak, 2003; Sharma, 2005; Naveh y Marcus, 2005).

Consistent with Danes et al. (2008), we support that a change of trend is producing in the small enterprises quality and certification importance. A quality certification system implantation has being used by this kind of enterprises for getting the best practices. Therefore, we propose the following hypothesis:

H2: Quality certification has an operative impact on the small and medium hotels enterprises.

Brand image certification is other organizational impact of a quality system certification (Casadesus y Heras, 2005; Arana Landín et al., 2006). The enterprises used to showing the certificate and use it as a publicity tool. Therefore, it is proposed the following hypothesis:

H3: Quality certificates have a positive impact related to improvement of small and medium hotel enterprises.

## **RESEARCH DESIGN**

This research is focused on the analysis of Spanish hotel enterprises with less of 100 employers. This kind of enterprises is certificated with an international quality generic standard, as ISO 9000 standard, or specific standard of hotel quality, as UNE 18001 standard. This research is focused on the whole population which is composed by 281 hotel enterprises in total.

A questionnaire with 4 blocks was designed. A pre-test have been send to researchers and quality experts. Later, the results have been tested in three hotel enterprises with

different sizes. The first block is dedicated to study the quality certification, antiquity and quality commitment of these enterprises. The second block explains the reasons why enterprises want to get a certification. The third block measure organizational impacts achieved that are related to quality certification. The fourth and the last block contained questions about control and classification of enterprises. The used measure scale in the second and third block was a Likert scale of five points where 1 is any impact and 5 is a total impact.

The necessary information for the analysis was collected by telephone surveys. Small and medium Spanish hotel enterprises were collected from October to November 2008. 101 hotels answered correctly which represents a response rate of 35, 94 per cent. This response rate is good, because is higher than Spanish hotel enterprises, of 25 % (Martínez-Costa y Martínez-Lorente, 2006) and higher than minimum suggested by Malhotra y Grover (1998).

## **RESULTS**

Consistent with the information collected through surveys, there has been done a analysis of variance over the number of employers of analyzed hotel enterprises to test if there are significant differences between them. The sample was segmented in enterprises with less than 50 employees –small hotel enterprises – and enterprises with more than 50. It is remarkable that 60 per cent of surveyed hotels have no more than 50 employees and 40 per cent of them have more. The variance analysis was done to test if there are significant differences between both hotel enterprises sizes. The two categories just mentioned were considered as independent variables as well as and the 37 items of the blocks 2 and 3 on the questionnaire. The results are presented on the table 1 after testing the verification of assumptions as normality, homoskedasticity and independence. So, 18 items refused the null hypothesis of equal averages among the 37

items which formed the survey related to the organizational and commercial impacts and quality certifications. This means that there are significant differences in the given answers by hotels managers according to their size in the 48.6 per cent of the items. Therefore, it is clear that the small, medium and bigger enterprises answer in a different way. This reason proves the convenience of a separated study in line with 2 groups of entities.

Table1. Organizational impact differences in the medium and small hotels.

<b>Studied Items</b>	<b>Sum of squares</b>	<b>F</b>	<b>Sig.</b>
Error reduction	2.527	3.332	0.071
Improvement of operation reliability	2.070	2.550	0.114
Facilitation of organizacional learning	2.608	2.506	0.117
New technology introduction	8.474	7.536	0.007
Increase in hotel income	8.276	6.933	0.010
Operative cost reduction	5.748	3.792	0.054
Operative benefit improvement	5.535	4.249	0.042
Improvement of financial ratios	6.272	5.095	0.026
Improvement of employee labour conditions	0.844	0.545	0.462
High employee involvement	2.058	2.036	0.157
High labour motivation	0.649	0.643	0.425
High labour security and health	3.723	3.807	0.054
Complaint reduction	6.228	5.847	0.017
Increase customer satisfaction	2.443	2.631	0.108
High customer reliability	5.017	5.380	0.022
High personal attention to the customers	6.525	6.143	0.015
High solutions to the customer problems	4.794	5.236	0.024
High supplier commitment	4.961	4.003	0.048

High supplier satisfaction	2.134	1.569	0.213
High supplier process	5.151	3.740	0.056
High hotel information transparency	6.963	4.764	0.032
High confidence to the hotel	9.607	6.240	0.014
Participation increase in social projects	13.805	10.816	0.001
Image and social prestige improvement	1.180	1.170	0.282
Preference situation in the customer mind	1.368	1.252	0.266
General improvement in the offered services in the hotel	7.502	7.014	0.009
Less global effort in the hotel maintenance	1.101	0.950	0.332

After significant differences were detected in the answers according to the size of hotel enterprises, the following steps were taken: (1) four internal consistent tests to prove the onedimensionality for each scale; (2) a test for each group of size, enterprises having up to 50 employees and more than 50. In line to hotels with more than 50 employees, el Cronbach's alpha coefficient was of 0.958 for the headland of 28 items that were in accordance with the results. In relation to hotels with more than 50 employees, the coefficients were of 0.961. So, the oneidimensionality can be accepted just for each scale.

Then, it was realized a factorial analysis using the Maximun likelihood method. The objective was to link the items, maintaining the before mentioned four groups ( $\leq 50$  employees and results;  $> 50$  employees and results). KMO test and Bartlett test of sphericity were the best according to the table 2:

Table 2. . KMO test and Bartlett test of sphericitytest for the B items group

	<b>Less than 50 employees</b>	<b>More than 50 employees</b>
KMO	0.834	0.726
Bartlett test of sphericity test	1.256.302	1.010.624

Chi-square	378	378
gl	0.000	0.000
Sig.		

After the extraction the communalities that were acceptable for all the items, the convergence was reached in several interactions. For the items group, it was required 25 for small hotel enterprises and 16 for medium hotel enterprises.

The factors which were extracted in the items group of organizational impacts appear in the table 3. Only the auto values  $\geq 1$ , 3 were considered and selected for the hotels of  $\leq 50$  employees and 3 for the hotels of  $> 50$  employees, explaining the 64'012% and the 68'701% of the total variance, respectively. So, a varimax rotation with Kaiser normalization was carried out. Its results are summarized in the table 3. In this table only appear factorial loads bigger than 0.5 are considered.

Table 3. Organizational impacts rotated matrix.

Hotels with more than 50 employees			
Items	Factor 1 Commercial impacts	Factor 2 Operative impacts	Factor 2 Image impacts
Improvement of operation reliability	0.659		
Facilitation of organizacional learning	0.725		
New technology introduction	0.596		
High employee involvement	0.693		
High labour motivation	0.572		
High labour security and health	0.527		
Complaint reduction	0.857		
Increase customer satisfaction	0.901		
High customer reliability	0.758		

High personal attention to the customers	0.826		
High solutions to the customer problems	0.693		
Image and social prestige improvement	0.770		
Preference situation in the customer mind	0.612		
General improvement in the offered services in the hotel	0.620		
Less global effort in the hotel maintenance	0.590		
Increase in hotel income		0.831	
Operative cost reduction		0.811	
Operative benefit improvement		0.865	
Improvement of financial ratios		0.811	
Improvement of employee labour conditions		0.511	
High supplier commitment			0.768
High supplier satisfaction			0.571
High supplier process			0.904
High hotel information transparency			0.544
High confidence to the hotel			0.563
Participation increase in social projects			0.548
Own value.....	14.231	3.220	1.786
Explained variance .....	50.825	11.499	6.377
Accumulated variance.....	50.825	62.324	68.701
Hotels having to 50 employees or less than 50			
Improvement of operation reliability	0.629		
Facilitation of organizacional learning	0.514		
New Technology introduction	0.501		
Complaint reduction	0.860		
Increase customer satisfaction	0.818		
High customer reliability	0.684		

High personal attention to the customers	0.799		
High solutions to the customer problems	0.768		
Image and social prestige improvement	0.770		
Preference situation in the customer mind	0.525		
General improvement in the offered services in the hotel	0.730		
Less global effort in the hotel maintenance	0.666		
Increase in hotel income		0.740	
Operative benefit improvement		0.655	
Improvement of financial ratios		0.581	
Increase customer satisfaction			0.758
High supplier process			0.682
Own value .....	13.584	2.331	2.009
Explained variance .....	48.513	8.325	7.174
Explained variance .....	48.513	56.838	64.012

The first factor, which is practically equal in both enterprises groups, is much related to the offered services improvement to the customers and image enterprise improvement. Thereby, it has been denominated commercial impacts for the hotel. This factor leads to the offered services direct improvement which is perceived by the customers. It is measured by a complaints reduction, a customers stays repetition, a best answer and a best attention in general.

These improvements are especially produced because the processes are standardized. Therefore, the reliability is increased. For this reason, employees will know how to react in each contingency. The hotel image is increased and it will be in the customer mind for following stays because the customer perceives a general improvement in the services offered by the hotel.

The employee's involvement is the only observed different element. It is detected that a major involvement is reached in the medium hotel enterprises. It can be because these enterprises can dedicate more resources to implant a quality culture and so, they can get better employees commitment.

A second factor, which is practically equal in both cases, is called operative impacts. This factor collects the improvement of the financial results of the hotel which are produced by: (1) an internal reduction of errors and (2) the commercial benefits which produce global financial results in the enterprise. The main difference is produced in both segments. Hotels with more than 50 employees improve the earning conditions and the employees work. It explains the major employee's involvement in the medium enterprises.

The third factor, which is denominated image impacts, is where the major differences are produced. While quality certification in hotels with less than 50 employees produces only effects in the suppliers when it is normalized and standardized, the way in which these hotels work with them, the hotels with more than 50 employees show direct effects in the suppliers and in the social agents who are interested in the enterprise running too. The reason for this interest is that the enterprise participates more in social projects. These are more transparent and so, they provide more confidence.

## **CONCLUSIONS**

Naveh and Marcus (2004) pointed out that the impact of quality certification on the enterprises depends on 2 factors. First, the assimilation degree of quality practices and second, the degree to which organization goes beyond the minimum requirements of the standards and it introduces the standard inside its organizational culture. The certificate does not provide results by itself. Applying quality rules correctly and giving the

employees the opportunity to participate in this process as a part of their work is one solution that can lead at enterprise to improve its results (Tari and Sabater, 2006).

In this paper, significant differences are showed: (1) Medium valuation of motivation to introduce a quality system shown by the managers of hotels with fewer certification and (2) The results obtained according to the introduction of quality systems in their hotels. So, the mentioned factors are formed by different items related to the size of hotel enterprises.

According to our prior hypothesis and to the hotel manager answers we can verify our hypothesis, because results confirm the existence of commercial impact (H1), operative impact (H2) and image impact (H3) for small and medium hotel enterprises. However, these impacts present differences. And, furthermore, differences in these impacts are showed. Both hotels, small and medium, consider operative improvements such as customer perceptions of service offers and financial results. But, medium enterprises direction and employees show a bigger implication in their quality commitment than in small enterprises. This implication drives to economic and non economic recognition for the enterprises and employees are more aware of the value of the enterprises.

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