

IMPLEMENTATION OF A QUALITY MANAGEMENT SYSTEM IN RURAL ACCOMMODATIONS: PERCEIVED BENEFITS

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ABSTRACT

The aim of the research is to analyze the impact of the perceived benefits of implementation and subsequent certification of a Quality Management System on the implementation level of the critical quality factors and results obtained. The empirical study was conducted in 100 of the 227 rural accommodations certified in Spain. The methodology consists of a descriptive analysis of the benefits perceived by the establishments and conducting a factor analysis, in order to determine the structure of the benefits and lastly, the hypotheses are contrasted and verified using a cluster analysis. The results obtained show that the benefits in this sector are grouped into two clusters; internal and external benefits, and it has been confirmed that the higher the benefit levels arising from the implementation and certification, the higher the implementation levels of the critical factors and results obtained.

Keywords: Quality Management; Q for Tourist Quality; Benefits; Critical Factors; Results; Tourist Accommodation.

1. INTRODUCTION

Rural accommodation establishments, mostly micro SMEs, as well as industrial companies or service enterprises of a larger size must provide services that meet the real needs of their customers and on the other hand, do it at the lowest possible cost. Thus, quality as a means to achieve it becomes part of a long-term business strategy, by putting emphasis on meeting customer needs, becoming an approach for continuous improvement of all the aspects of the business (Al-Khalifa and Aspinwall, 2000).

In this sense, rural accommodation managers should consider both quality prospects; the external prospect, according to Hurtado et al. (2009: 19) "*considers quality as something that creates customer value, to the extent that the product or service meets its customer's*

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expectations, as well as maintaining good management of company relationships with customers, suppliers, society and the environment (stakeholders)", and the internal prospect, which "is based on identifying a strategy that mobilizes the entire organization to achieve optimization of all the operations, cultural change and internal changes necessary to maintain or achieve a competitive position". In conclusion, the former places emphasis on efficiency and customer satisfaction and the internal prospect on efficiency.

There are many studies showing that implementing quality in a company generates positive and measurable results for the company (Casadesús and Karapetrovic, 2005; Aldowaisan and Youssef, 2006; Camisón et al., 2007; Sila, 2007; Prakash, 2008; Lee et al., 2009; Mak, 2011; Chatzoglou and Chatzoudes, 2015). In this sense, when you take into account that quality management systems involve every area of the company, we can therefore consider that the benefits derived therefrom are felt throughout the company: benefits at customer level, financial and business performance (processes, organizational) benefits, etc.

In the literature review on quality, we have found that the benefits to be gained from the implementation of a QMS have been extensively studied in the industrial sector (Buttle, 1997; Huarng et al., 1999; Gotzamani and Tsiotras, 2002; Stevenson and Barnes, 2002; Naveh and Marcus, 2007; Martínez et al., 2008, entre otros), but there are very few studies in the tourism sector (Casadesús et al., 2010; Mak, 2011; Sheehan and Presenza, 2011; Tarí and Pereira, 2012; Tarí et al., 2012) and none in the rural accommodation sector, which leads us to consider the present study.

On the other hand, we must consider that rural tourism is more relevant in today's economies due to its potential for local and regional development, in areas where there is a great socio-economic imbalance caused by the decline of the primary sector. Thus, it becomes an important driving force for development, due to its ability to generate economic benefits, boost employment, promote the settlement of the population and promote conservation of natural resources and its historical and cultural heritage. The data provided by the Rural Tourism Accommodation Occupancy Survey in December 2014 in Spain, gives us an idea of the importance of this sector: the number of rural accommodations open is 14,654 with 133,290 places and 20,178 employees. The number of travelers who stayed in these establishments was 238,191, representing 592,853 overnight stays, with an average stay of 2.49 days.

In view of the above considerations, the importance of this type of tourism and scarcity of studies in this area, the aim of this research is to identify the benefits perceived by managers of rural accommodation establishments provided by the implementation and certification of QMS and analyze the impact of these benefits on the implementation level of the critical factors and results obtained.

To be able respond to these objectives, the work is divided into several sections. In the first place, a review of the literature on the perceived benefits of implementing a QMS is performed. The methodology describes how we collect information and the statistical techniques used to conduct the empirical analysis of the data. Next, the analysis of the results is presented and discussed and finally in the last section, the main conclusions of the research are presented.

2. LITERATURE REVIEW

The literature review allows us to observe that researchers have tried to identify the benefits that implementing a quality management system bring to companies. In this sense, there are many studies that have involved measuring and analyzing them, being a very complex task, due to their diversity as to the difficulty in using objective variables to measure their impact.

Casadesús and Karapetrovic (2005), building on previous studies argues that if the ISO 9001 is adopted properly, it can have positive effects on business performance, understood as: (1) economic and financial results, (2) operational-organizational, refers to the benefits related to the processes and company's operations, (3) internal and external customer satisfaction (reduction of complaints, improved satisfaction), and some studies have found that quality certification involves improvements in working conditions of employees, occupational health, training, promotion (Sun, 2000) and job satisfaction (Dow et al., 1999; Rahman, 2001). Other authors classify them into internal and external benefits: Internal benefits are those obtained within the companies related with the quality of the product and process improvement and external benefits, which are those benefits related with company image and performance in the market (market share ...).

There are several measures used in research to quantify the impact of the implementation of a Quality Management System. Previous studies that analyzed the economic and financial benefits, have either used objective data, assessing benefits from the difference in value of companies before or after certification (Aarts and Vos, 2001), or used for such analysis the data contained in commercial databases, in order to analyze the impact of the implementation and certification on both the profitability and sales of companies (Haversjö., 2000; Wayhan et al, 2002). These studies aimed at analyzing the increase in sales, improved market share (Hendricks and Singhal, 2001a, b; Sharma, 2005) and increased company profitability (Häversjö, 2000; Benner and Veloso, 2008; Dick et al., 2008).

With respect to operational benefits, the studies have analyzed the improvement of relationships with suppliers, cost reduction and non-compliances, on-time delivery performance, productivity, improvements in product and service quality (Ahire and O'Shaughnessy, 1998; Choi and Eboch, 1998; Dow et al., 1999; Nield and Kozak, 1999; Forza and Flippini, 1998; Samson and Terziovski, 1999; Ho et al., 2001; Kaynak, 2003; Naveh and Marcus 2005; Sharma, 2005; Terlaak and King, 2006, among others), based on subjective data. To carry out their research, the data is obtained from surveys or face to face interviews with the quality managers of companies, evaluating only the behavior and perception of the company at a particular moment in time (Brown and Van der Wiele, 1995).

Today there is still difficulty in measuring the benefits, being more evident when it comes to measuring the relationship between the quality and financial result. In this sense, Hardie (1998) states that this difficulty is derived from the difficulty of identifying and measuring the intermediate factors by which the quality operates in the results, as it has no direct effect but performs through various variables: productivity, customer satisfaction, company image, cost reduction, efficiency improvement, etc. For example, a better quality of products affects growth in sales and better sales margins which in turn affects financial performance. Claver

et al. (2006: 35) supports this approach by saying, "quality can influence performance in two complementary ways (Garvin, 1984; Rust et al, 1995; Reed et al., 1996)." through the processes carried out within the enterprise and through the market (Brown et al., 1998; Quazi and Padibjo., 1998; Singels et al, 2001; Yahya and Goh, 2001).

The study by Tarí and Pereira (2012: 55) is very interesting, which shows the different approaches in the literature, that reflect and make clear the existing debate on the benefits obtained by the certification of a QMS; "An initial approach claims that certified companies perform better than non-certified companies in aspects such as rework, efficiency, customer and employee satisfaction, service quality and market share (Lee et al., 2009; Mak, 2011), although the effects on financial results are less clear. The second approach suggests that certified companies have better financial results than non-certified companies, while improving their internal processes (Chow-Chua et al., 2003; Mokhtar and Muda, 2012). The third and most negative approach states that certification does not influence business performance (Martínez-Costa et al, 2009; Lo et al, 2011)". These contradictory results on whether quality affects or does not affect business results show the need for further research on whether quality management practices affect organizations.

In the existing literature many benefits are identified, as stated by Jones et al (1997: 652) "the list of benefits derived from certification is potentially infinite and has been well-documented (Brecka, 1994; Brown and Van der Wiele, 1995)". There have been several attempts to classify them by researchers. One of the first classifications was made by Buttle (1997), that groups them into profitability benefits, process improvement benefits, marketing benefits and other benefits. Other classifications can be found, like the one made by Jones et al. (1997), that groups them depending on whether or not they involve the development of the organization. Marín and Gimeno (2010) grouped them into quality results, operating results and financial-economic results.

Taking into account the review carried out and the above considerations, implementing a quality system has positive effects for the company. Therefore, we think that the greater the benefits achieved thanks to its implementation, the higher the quality levels implemented by the company. Therefore, we propose the following hypotheses:

H1: The higher the benefit levels derived from implementation and certification, the higher the implementation level of the critical factors of quality.

H2: The higher the benefit levels arising from implementation and certification, the higher the results obtained by the company.

3. METHODOLOGY

3.1. Universe and field of study

The target population is 227 establishments of Rural Accommodation in Spain, that have already implemented a QMS, which is supported by the Spanish certification brand "Q for Quality" (norm UNE183001: 2009 - Rural Accommodation). This standardized norm aims at searching for customer satisfaction, going from the management system to the provision

of the service, through infrastructure and equipment. This is an intermediate QMS between assurance (ISO 9001) and Total Quality Management (EFQM).

The submission was carried out by email, obtaining a sample of 100 valid questionnaires and 3 incomplete ones, representing a response rate of 44.05% for a confidence level of 95% ($Z = 1.96$ $p = q = 0.5$).

Regarding the size of rural accommodations, measured by number of employees, 95% of the sample corresponds to microenterprises (0-9 employees) and the remaining 5% are small enterprises (10-49 employees). If we measure by number of rooms, 42% of the establishments have a dimension of 1-5 rooms and 58 establishments more than 5 rooms. 67 of the accommodations of the sample have been certified in the UNE183001: 2009 standard for 3 years or less and 33 accommodations more than 3 years.

3.2. Questionnaire and measurement

The questionnaire was designed with the aim of knowing the benefits perceived by rural accommodation enterprises, derived from the implementation and certification of its QMS (the brand "Q for Tourism Quality"). A literature review of the research was carried out in this field of study (Adanur and Allen, 1995; Jones et al., 1997; Buttle, 1997; Tarí and Molina, 2002; Casadesús and Karapetrovic, 2005; Casadesús and Heras, 2005, among others), which focused on the items used to measure the perceived benefits, with the purpose of the questionnaire complying as far as possible with the requirement of internal validity, which indicates the degree to which the measurement process is free of both systematic and random error (Kinnear and Taylor, 1995). Thus, the repeated use of the items to measure the perceived benefits by the companies guarantees that validity.

The result of this process was to obtain a questionnaire in which the benefits will be measured by 12 items, using a 7-point Likert scale ranging from 1- 7- nothing important to very important. The measurement was performed by using the perceptions of quality managers of the accommodations, who were asked about the impact with which they had perceived such benefits.

3.3. Data Analysis

Firstly, a descriptive analysis of the benefits to observe the greatest improvement is carried out and the Cronbach α coefficient is analyzed, which evaluates the internal consistency of the scale through the correlation of each variable with the rest of the scale. This measure of reliability (Nunnally, 1998) refers to the extent to which a measure is free from random errors and thus provides consistent results if repeated measurements (Sánchez and Sarabia, 1999: 367) are performed. Then, in order to analyze whether the characteristics of establishments influence the perceived benefits, the Levene's test was applied for equality of variances and where it was observed that the variables did not comply with the homogeneity of variance, the nonparametric Kruskal-Wallis test was applied, which provides the Chi-square significance. For the remaining cases, Student's t(2 samples) or Anova (more than two samples) was applied. In the cases where significant differences were observed but not between pairs of variables,

as there were more than two samples, the Scheffé or Games-Howell procedure (nonparametric test) was used for cases in which the criteria of normality and homoscedasticity is not fulfilled.

Finally, the cluster analysis was applied to corroborate the hypotheses. As a preliminary step, an Exploratory Factor Analysis (EFA) was carried out, of principal components on the data with the aim of grouping the 12 benefits analyzed into other variables, to replace these with as little information loss as possible. Based on the literature review on the topic, the analysis was performed according to the "A Priori" criterion, considering only two factors, internal and external benefits (Tsiotras and Gotzamani, 1996 and Vloeberghs and Bellens, 1996). In the cluster analysis, the factor scores of the variables were used and hierarchical analysis was applied (Ward method to minimize the differences within clusters and Euclidean squared distance), with the aim of identifying the appropriate number of groups or clusters.

4. RESULTS

The descriptive analysis allows us to observe that the most important improvements perceived by Rural Accommodations are: a clear definition of processes and responsibilities within the organization, increase in quality awareness together with an improved competitive position, followed by quality services, better understanding of customer expectations and therefore improved customer satisfaction. While they perceived to a lesser extent an improvement of aspects such as: cost reduction, reduction of complaints and increase in sales. We stress that there were only minor improvements in cost reduction (Table 1), which got an average rating of less than 4.00. The Cronbach α is 0.955 exceeding the minimum recommended value of 0.8 (Esteban and Fernández, 2000).

Table 1: Benefits perceived by rural accommodations

| Benefits (Cronbach $\alpha = 0.955$) | Mean (from 1 to 7) | Standard deviation | Little Importance (score between 1-3) % companies | Very important (score between 5-7) % companies |
|--|--------------------------|-----------------------|---|---|
| (BF2) Clear definition of processes / responsibilities | 5.4500 | 1.52670 | 7.00 | 73.00 |
| (BF5) Increased quality awareness | 5.3400 | 1.57775 | 8.00 | 76.00 |
| (BF12) Increased competitive position | 5.3000 | 1.71447 | 9.00 | 67.00 |
| (BF9) Quality services | 5.2900 | 1.73668 | 11.00 | 71.00 |
| (BF4) Better knowledge of customer expectations | 5.1100 | 1.78034 | 13.00 | 68.00 |
| (BF1) Improved customer satisfaction | 5.1000 | 1.63608 | 9.00 | 66.00 |
| (BF6) Productivity / better use of time and resources | 5.0800 | 1.67983 | 10.00 | 61.00 |
| (BF11) Increased market share | 4.4900 | 1.61117 | 14.00 | 50.00 |
| (BF3) Improved work environment | 4.4800 | 1.68463 | 13.00 | 42.00 |
| (BF10) Increased sales | 4.4200 | 1.68283 | 19.00 | 49.00 |
| (BF7) Reduction of complaints | 4.4200 | 1.75913 | 15.00 | 37.00 |
| (BF8) Cost reduction | 3.7700 | 1.84147 | 34.00 | 29.00 |

Source: Personal compilation

Continuing with the analysis, we have gone into depth on whether the characteristics of establishments, such as the size and length of time with "Q" certification, influence perceived benefits. The results show that the size of the establishment does not affect the benefits perceived by managers, but there are significant differences when we consider the age of certification (≤ 3 years > 3 years) in two items; (BF7) Reduction of complaints ($t, -2.765$; Sig. 0.007) and (BF11) Increased sales ($t, 4.676$; Sig. 0.031). Generally, establishments which have "Q" certification for more than three years perceive to a greater extent that the implementation of a QMS allows for improvements in the reduction of complaints and increased market share (Average: BF7- ≤ 3 years, 4.0896 and > 3 years, 5.0909; BF11- ≤ 3 years, 4.2687 and > 3 years, 4.9394).

In the EFA, we examined the correlation matrix, Bartlett's sphericity test shows that the approximate Chi-square is very high and with a significance level less than 0.05 maximum allowed, the measure of sampling adequacy Kaiser-Meyer Oklin (KMO) exceeding 0.809 and 0.788 higher than the 0.05 minimum allowed. All the parameters analyzed indicated that it was feasible to continue with the factor analysis. The matrix was rotated with varimax method to facilitate its interpretation, eliminating those factor loadings with a value less than 0.4 minimum considered (Table 2). The variance is 73.579% for internal benefits and 71.310% for external benefits, which exceeds the minimum requirement of 50%. Cronbach's alpha that measures the reliability of the scale is greater than 0.8 recommended minimum.

Table 2: Indicators of the degree of association between internal and external benefits variables Rotated matrix of benefits

| Benefits | Type* | Factor 1 Benf. Internal | Factor 2 Benf. External | Indicator Scale |
|--|----------|-------------------------------|-------------------------------|--|
| (BF6) Productivity / better use of time and resources | | 0.915 | | - Correlated variables - Correlation matrix |
| (BF3) Improved work environment | | 0.878 | | determinant: 0.027 |
| (BF2) Clear definition of processes / responsibilities | Internal | 0.873 | | - Bartlett's sphericity test: 347.500 sig. 0.000 |
| (BF8) Cost reduction | | 0.811 | | - Adequacy measure of the sample: (0.846- 0.776) |
| (BF5) Increased quality awareness | | 0.807 | | - KMO index: 0.809 |
| (BF11) Increased market share | | 0.875 | | |
| (BF10) Increased sales | | 0.873 | | - Correlated variables |
| (BF1) Improved customer satisfaction | | 0.872 | | - Determining correlation matrix: 0.001 |
| (BF9) Quality services | | 0.831 | | |
| (BF4) Better knowledge of customer expectations | External | 0.827 | | - Bartlett's sphericity test: 673.195 sig. 0.000 |
| (BF12) Increased competitive position | | 0.819 | | - Measure adequacy of the sample: (0.916- 0.787) |
| (BF7) Reduction of complaints | | 0.812 | | |
| Own value | | 3.679 | 4.992 | - KMO index: 0.788 |
| % of the variance explained by factor | | 73.579 | 71.310% | |
| Standardized Cronbach's alpha | | 0.909 | 0.933 | |

Source: Personal compilation

The EFA has allowed us to identify two factors, which we call "Internal benefits" consisting of improved productivity and use of time and resources, improved work environment, clearly defined processes and responsibilities, reduced costs and increased quality awareness and "External Benefits", consisting of increased market share, sales and improved customer satisfaction by providing quality services and understanding customer expectations better, increasing the competitive position and reduction of complaints. Furthermore, we found that the implementation of the QMS has virtually the same impact on the external benefits with an average of 4.8757 as on the internal benefits (4.8240).

Finally, companies are grouped by cluster analysis. To do this, we observe the dendrogram and the coefficient of agglomeration, noting that the ideal number of groups is three. We then proceed to perform the k-means analysis, using the number of clusters obtained and taking as initial centers the hierarchical analysis results (mean factor scores of the four groups). Finally, the results are validated by the analysis of variance of a factor (La Fuente, Salas and Pérez, 1985) and we found that the two factors are significant; internal benefits ($F=173.884$; sig 0.000) and external benefits ($F=177.362$; sig 0.000). The next step is the interpretation of the three groups created and determining whether there are differences between them. Table 3 shows the mean scores of the original variables included in each factor for each group (instead of the factor scores) to determine the mean profiles.

Table 3: Means by factor and statistical tests to compare differences

| Factors | Mean | | | Kruskal-Wallis | |
|------------------------|-----------------|-----------------|----------------|----------------|-------|
| | Group 1 n=40 | Group 2 n=53 | Group 3 n=7 | Chi-cuadrado | Sig. |
| Internal Benefits | 4.0350 | 5.8528 | 1.5429 | 71.787 | 0.000 |
| External Benefits | 4.1071 | 5.9057 | 1.4694 | 74.419 | 0.000 |
| Critical factors | 4.9353 | 5.7170 | 3.5510 | 15.191 | 0.001 |
| Results on the clients | 5.9500 | 6.2453 | 5.1429 | 8.099 | 0.017 |
| Results on employees | 4.9071 | 5.2830 | 3.3878 | 4.863 | 0.088 |
| Results in society | 5.1531 | 5.6061 | 3.8571 | 5.866 | 0.053 |
| Key Results | 4.6972 | 5.2809 | 3.2540 | 24.620 | 0.000 |

Source: Personal compilation

The first group consists of 40 Rural Accommodations that perceive both average internal and external benefits. The second group, which is the largest, consists of 53 accommodations with high rated internal and external benefits, and group 3 which is the smallest in number (7 establishments), is made up of Rural Accommodations with a low perception of benefits. As a final conclusion, we can say that over 50% of the accommodations obtained a high perception of the benefits analyzed, 40% average and only 7% lower of both internal and external benefits with perceptions very close between them.

To the cluster analysis carried out, ie to the profile of establishments, additional variables (critical factors and results) are added, which will allow us to test the hypotheses (Table 3). The data of the additional variables are part of another section of our research, in which as well

as analyzing the benefits, we also analyze the critical quality factors and results. We regard as critical factors: quality policy (7 items), leadership (8), alliances & resources (7), learning (9), employee management (11), process management (15) and as results: customer satisfaction (7), employee satisfaction (9), social impact results (8), key results (12). The factor analysis performed on the critical factors allowed us to consider them in an aggregate manner.

In group 1, we note that the analyzed benefits generated by the implementation and subsequent certification have an average rating, influenced by the implementation level of the critical factors, showing a medium-high level but lower than group 2 (the largest) with a higher rating of perceived benefits and also with a higher implementation level of the critical factors. Similarly, in group 3 where the perceived benefits are low and so is the implementation level of the critical factors. This allows us to corroborate hypothesis H1. In the same way, in group two we observe that when the external benefits are high, this has an effect on a higher level of implementation of the critical factors. With respect to hypothesis H2, it is confirmed because in group 2 the perceived benefits are higher, as well as the results obtained.

5. DISCUSSION AND CONCLUSIONS

In this study, the benefits perceived by managers of rural accommodation establishments, obtained by implementing a QMS are identified, with the intention that the experience of some of them provide guidance and encourage the rest of the establishments that have not yet decided to implement a QMS.

In this sense, the most important perceived improvements after implementation demonstrate the ability of the QMS to promote efficiency through increased knowledge of the processes and setting responsibilities within the organization, ie internal processes are improved (Carlsson and Carlsson, 1996; Casadesús and Heras, 2001; Corbett et al., 2003; Casadesús and Karapetrovic, 2005; Camisón et al., 2007; Sila, 2007; Lee et al, 2009; Mak, 2011), so they control the service provided, which provides greater security in what is done, which in turn affects quality service (Jones et al., 1997) and the benefits derived therefrom. Similarly, the results show that companies have increased quality awareness of employees and have a better understanding of customer expectations, ie the desires of consumers, which form the basis for providing quality service and thus achieving customer satisfaction and therefore, organizational performance.

These results are corroborated in studies by Dissanayaka et al. (2001), and Ragotthaman and Korte (1999), Van der Wiele et al. (2000), Yahya and Goh (2001), Tang and Kam (1999), Escanciano et al. (2001), Stevenson and Barnes (2001), Dick et al. (2001), McAdam and Fulton (2002), Magd and Curry (2003), among others; all performed in the industrial sector in different cities. All of them suggested that the most important benefits were: the improvement of the efficiency of the quality system, improvement of the product / service quality, improvement of the company image, further development of quality management, etc. In this regard, Brown and Van der Wiele (1995) and Vloeberghs and Bellens (1996) concluded that an improvement of the efficiency of the quality system is the most important benefit, which is consistent with the present study. Although studies in the tourism sector are scarce, we also find research performed by Álvarez et al. (2012, 2013a) on spa establishments and hotel accommodation,

suggesting that quality managers claim that the perceived benefits of the implementation of quality are: a clear definition of processes and responsibilities, better knowledge of customer expectations and improvement of customer satisfaction.

Therefore, the main advantages and benefits of certification, according to standard ISO 9001, are quite consistent from one country to another and from one activity sector to another (Vloeberghs and Bellens, 1996; Anderson et al., 1999; Buttle and Jayne, 1999; Van Der Wiele and Brown, 1998; Krasachol et al., 1998; Corbett et al., 2003).

Regarding the structure of perceived benefits by companies in the rural accommodation sector, we have concluded that they are grouped into two clusters: internal benefits and external benefits. The grouping of companies depending on them, has allowed us to verify that 7% of rural accommodations perceived low benefits from implementation and 53% perceived high benefit levels. This quantitative study allowed us to detect the need to do a qualitative study in depth, by interviewing those responsible for quality establishments, on the causes of low perceived benefits by 7 establishments, and why 40% of the establishments are indifferent when assessing benefits. Several studies have found similar results, grouping benefits into internal and external ones (Tsiotras and Gotzamani, 1996; Vloegeberhgs and Bellen, 1999).

Finally, we confirmed the hypotheses posed, that allows us to state that the higher the benefit levels derived from the implementation and higher certification, the higher the implementation level of the critical factors and the higher the level of benefits arising from the implementation and certification, the higher the results obtained by the establishments. In this sense, Tarí and Pereira (2012) studied the influence of quality practices on profitability in hotel chains and claim that quality can have positive effects on employees (Nield and Kozak, 1999; Rubio-Andrade et al., 2011), reduce waste (Callan, 1992), improve the image of the hotel (Birdir and Pearson, 1998), improve financial results (Nicolau and Sellers, 2010; Rubio-Andrade et al., 2011; Alonso-Almeida et al., 2012). In relation to works that study the positive effect on business performance, we see a long list of them in Claver et al., 2006. These authors reached the conclusion that "in general, quality management can positively influence business performance... ". A later study by Ul Hassan et al. (2012), also examined the effect of TQM practices on quality, business and organizational results. His works includes a variety of works whose impact on business results is positive; Solis et al., (1998), Samson and Terziovski (1999), Gadenne and Sharma (2002) and Lagrosen (2003) and Chong and Rundus (2004), Prajogo (2005), Joiner (2007), Malik et al. (2008), Karani and Bichanga (2012), Zehir et al. (2012).

In general, based on the results, we can state that all benefits analyzed were highly rated by the accommodations, confirming that rural accommodation considered equally important internal and external benefits, which leads us to consider that there are many and very important benefits derived from the implementation of a Quality Management System, because it affects the internal aspects and involves significant improvements in performance or level of satisfaction and integration of workers. In this regard, in the literature there are different opinions about the importance of internal and external benefits. Some authors, like Vloegeberhgs and Bellen (1999) believe that most of the benefits of certification are internal, even when they say, like

Brown et al. (1998), that companies are certified for external reasons, in particular SMEs, for whom the improvements obtained with the certification are mostly internal: improvements in quality awareness, improvements in the awareness of their problems and improvements in product quality. On the other hand, for Quazi and Padilbo (1998), the most important benefits are external, where the first three are: increase in customer satisfaction, improvement of quality image and market competitiveness, and compliance with the client's requirements.

The originality of this study is that it is performed in the tourism sector and more specifically in the field of Rural Accommodation because there are few studies on it. In this regard, there is highly relevant research on the implementation of quality and its impact on performance, results and operating performance in hotels (Tarí et al., 2009; Tarí et al., 2010; Cortés et al., 2012; Pereira et al., 2012; Tarí and Pereira, 2012; Álvarez et al., 2013b; Pertusa et al., 2013). Furthermore, the greatest contribution of this research is that it identifies the benefits associated with the implementation of quality in this sector, and there is empirical evidence of high levels of benefits associated with high levels in the implementation of the critical factors and results obtained. The practical implications for managers of establishments have already been mentioned; awareness of the benefits of the process of implementing a QMS can boost the start of implementation in establishments that are reluctant.

The implementation, precisely in the rural accommodation sector implies a limitation to the generalization of its results to other sectors. Another limitation is related to the cross section thereof. It was carried out at a moment in time.

REFERENCES

- Aarts, F., & Vos, E. (2001). The impact of ISO registration on New Zealand firms performance: A financial perspective. *The TQM Magazine*, 13(3), 180-191.
- Adanur, S., & Allen, B. (1995). First results on the effects of ISO 9000 in the US textile industry. *Benchmarking for Quality Management & Technology*, 2(3), 41-52.
- Ahire, S. L., & O'Shaughnessy, K. C. (1998). The role of top management commitment in quality management: An empirical analysis of the auto parts industry. *International Journal of Quality Science*, 3(1), 5-37.
- Aldowaisan, T. A., & Youssef, A. S. (2006). An ISO 9001: 2000-based framework for realizing quality in small businesses. *Omega*, 34(3), 231-235.
- Al-Khalifa, K. N., & Aspinwall, E. M. (2000). Using the Competing Values Framework to Identify the Ideal Culture Profile for TQM : A UK Perspective. *International Journal of Technology and Management*, 2(1-7), 1024 –1040.
- Alonso-Almeida, M. M., Rodríguez-Antón, J. M., & Rubio-Andrade, L. (2012). Reasons for implementing certified quality systems and impact on performance: an analyses of the hotel industry. *The Service Industries Journal*, 32(6), 919-936.

- Álvarez García, J., Fraiz Brea, J. A., & Del Río Rama, M. C. (2012). Balnearios españoles, beneficios percibidos de certificarse en la "Q de Calidad Turística": Análisis empírico. *Estudios Turísticos*, (192), 89-112.
- Álvarez García, J., Fraiz Brea, J. A., & Del Río Rama, M. C. (2013a). Implantación de un sistema de gestión de la calidad: beneficios percibidos. *Revista Venezolana de Gerencia*, 18(63), Julio-septiembre, 379-407.
- Álvarez García, J., Fraiz Brea, J. A., & Del Río Rama, M. C. (2013b). Análisis de las relaciones de dependencia entre los factores críticos de la calidad y los resultados. Sector de alojamiento turístico en España. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 19(2), 74-89.
- Anderson, S. W., Daly, J. D., & Johnson, M. F. (1999). Why firms seek ISO 9000 certification: regulatory compliance or competitive advantage? *Production and operations management*, 8(1), 28-43.
- Benner, M., & Veloso, F. M. (2008). ISO 9000 Practices and Financial Performance: A Technology Coherence Perspective. *Journal of Operations Management*, 26(5), 611-629.
- Birdir, K., & Pearson, T. E. (1998). Hospitality certification: experiences in North America – international implications. *International Journal of Contemporary Hospitality Management*, 10(3), 116-121.
- Brecka, J. (1994). Study finds gains with ISO 9000 registration increase over time. *Quality Progress*, May, 18-20.
- Brown, A., & Van der Wiele, A. (1995). Survey on Australian self-assessment. *The Quality Magazine*, 5(3), 18-24.
- Brown, A., Van Der Wiele, T., & Loughton, K. (1998). Smaller enterprises experiences with ISO 9000. *International Journal of Quality and Reliability Management*, 15(3), 273-285.
- Buttle, F. (1997). ISO 9000: marketing motivations and benefits. *International Journal of Quality & Reliability Management*, 14(9), 936-947.
- Buttle, F. A., & Jayne, M. R. (1999). ISO 900: is the real estate sector any different? *Property Management*, 17(2), 125.
- Callan, R. J. (1992). Quality control at Avant Hotels: the debut of BS 5750. *The Service Industries Journal*, 12(1), 17-33.
- Camisón, C., Cruz, S., & González, T. (2007). *Gestión de la calidad: conceptos, enfoques y sistemas*. Madrid: Pearson – Prentice Hall. Madrid.
- Carlsson, M., Carlsson, D. (1996). Experiences of implementing ISO 9000 in Swedish industry. *International Journal of Quality and Reliability Management*, 13(7), 36-47.
- Casadesús, M., & Heras, I. (2001). La norma ISO 9000: beneficios de su introducción en las empresas españolas. Un estudio empírico. *Revista Europea de Dirección y Economía de la Empresa*, 10(1), 55-67.

- Casadesús, M., & Heras, I. (2005). El Boom de la calidad en las empresas españolas. *Universia business review*, 7(tercer trimestre), 90-101.
- Casadesús, M., & Karapetrovic, S. (2005). An empirical study of the benefits: a temporal study. *International Journal of Quality and Reliability Management*, 16(1), 105-120.
- Casadesús, M., Marimon, F., & Alonso, M. (2010). The future of standardised quality management in tourism: evidence from the Spanish tourist sector. *The Service Industries Journal*, 30(14), 2457-2474.
- Chatzoglou, P., Chatzoudes, D., & Kipraios, N. (2015). The impact of ISO 9000 certification on firms' financial performance. *International Journal of Operations & Production Management*, 35(1), 145-174.
- Choi, T. Y., & Eboch, K. (1998). The TQM paradox: Relations among TQM practices, plant performance and customer satisfaction. *Journal of Operations Management*, 17(1), 59–75.
- Chong, V. K., & Rundus, M. J. (2004). Total Quality Management, Market competition and Organizational Performance. *The British Accounting Review*, 36(2), 155-172
- Chow-Chua, C., Goh, M., & Wan, T. B. (2003). Does ISO 9000 certification improve business performance? *International Journal of Quality & Reliability Management*, 20(8), 936-953.
- Claver, E., Tarí, J. J., & Pereira, J. (2006). Does quality impact on hotel performance? *International Journal of Contemporary Hospitality Management*, 18(4), 350-358.
- Corbett, C. J., Luca, A., & Pan, J. (2003). Global perspectives on global standards. *ISO Management Systems*, 1(January/February), 31-40.
- Cortés, E. C., Moliner, J. P., Guilló, J. J. T., & Azorín, J. F. M. (2012). La relación entre la gestión de la calidad y el rendimiento empresarial en el sector hotelero. *Papers de Turisme*, 40, 31-47.
- Dick, G. P. M., Heras, I., & Casadesús, M. (2008). Shedding light on causation between ISO 9001 and improved business performance. *International Journal of Operations & Production Management*, 28(7), 687-708.
- Dick, G., Gallimore, K., & Brown, C.J. (2001). ISO 9000 and quality emphasis: an empirical study of front-room versus back-room dominant service industries. *International Journal of Service Industry Management*, 12(2), 114-36
- Dissanayaka, S. M., Kumaraswamy, M. M., Karim, K. E., & Marosszék, M. (2001). Evaluating outcomes from ISO 9000 -; certified quality systems of Hong Kong constructors. *Total Quality Management*, 12(1), 29-40
- Dow, D., Samson, D., & Ford, S. (1999). Exploding the myth: Do all quality management practices contribute to superior quality performance? *Production and Operations Management*, 8(1), 1-27.

- Escanciano, C., Fernández, E., & Vázquez, C. (2001). ISO 9000 certification and quality management in Spain: Results of a national survey. *The TQM Magazine*, 13(3), 192-200.
- Esteban, I. G., & Fernández, E. A. (2000). *Fundamentos y Técnicas de Investigación Comercial*. 5^a edición. Madrid: ESIC Editorial.
- Forza, C., & Flippini, R. (1998). TQM impact on quality conformance and customer satisfaction: A causal model. *International Journal of Production Economics*, 55(1), 1-20.
- Gadenne, D., & Sharma, B. (2002). An Inter-Industry Comparison of Quality Management Practices and performance. *Managing Service Quality*, 12(6), 394-404.
- Garvin, D. A. (1984). What does Product Quality Really Mean? *Sloan Management Review*, 26(1), 25-43.
- Gotzamani, K. D., & Tsiotras, G. D. (2002). The true motivations behind ISO 9000 certification: Their effect on the overall certification benefits and long term contribution towards TQM. *International Journal of Quality*, 19(2), 151-169.
- Hardie, N. (1998). The effects of quality on business performance. *Quality Management Journal*, 5(3), 65-83.
- Häversjö, T. (2000). The financial effects of ISO 9000 registration for Danish companies. *Managerial Auditing Journal*, 15(1), 47-52.
- Hendricks, K. B., & Singhal, V. R. (2001a). Firm Characteristic, Total Quality Management, and Financial Performance. *Journal of Operations Management*, 19(3), 269-285.
- Hendricks, K. B., & Singhal, V. R. (2001b). The Long-Run Stock Price Performance of Firms with Effective TQM Programs. *Management Science*, 47(3), 359-368.
- Ho, D. C. K., Duffy, V. G., & Shih, H. M. (2001). Total quality management: An empirical test for mediation effect. *International Journal of Production Research*, 39(3), 529-548.
- Huarng, F., Horng, C., & Chen, C. (1999). A study of ISO 9000 process, motivation and performance. *Total Quality Management*, 10(7), 1009-1025.
- Hurtado, R., Rodríguez, W., Fuentes, H., & Galleguillos, C. (2009). Impacto en los beneficios de la implementación de las normas de calidad ISO 9001 en las empresas. *Revista de la Facultad de Ingeniería*, 23, 17-26.
- Joiner, T. A. (2007). Total quality management and performance: The role of organization support and co-worker support. *International Journal of Quality & Reliability Management*, 24(6), 617-627.
- Jones, R., Arndt, G., & Kustin, R. (1997). ISO 9000 amongst Australian companies: impact of time and reasons for seeking certification on perceptions of benefits received. *International Journal of Quality and Reliability Management*, 14(7), 650-660.

- Karani, S. R., & Bichanga, W. O. (2012). Effects of Total Quality Management implementation on business performance in service institutions: A case of Kenya Wildlife Services. *International Journal of Research Studies in management*, 1(1), 59-76.
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. *Journal of Operations Management*, 21(4), 405-435.
- Kinnear, T.C., & Taylor, J.R. (1995). *Investigación de Mercados* (4th Edition). Un enfoque aplicado. Colombia: McGraw-Hill.
- Krasachol, L., Willey, P. C. T., & Tannock, J. D. T. (1998). The progress of quality management in Thailand. *The TQM Magazine*, 10(1), 40-44.
- La Fuente, A., Salas, V., & Pérez, R (1985). Tipos de empresario y empresa. El caso de las nuevas empresas españolas. *Economía Industrial*, noviembre-diciembre, 139-151.
- Lagrosen, S., & Lagrosen, Y. (2003). Management of service quality –differences in values, practices and outcomes. *Managing Service Quality*, 13(5), 370-381.
- Lee, P. K. C., To, W. M., & Yu, B. T. W. (2009). The implementation and performance outcomes of ISO 9000 in service organizations: an empirical taxonomy. *International Journal of Quality & Reliability Management*, 26(7), 646-662.
- Lo, C. K. Y., Yeung, A. C. L., & Cheng, T. C. E. (2011). Meta-standards, financial performance and senior executive compensation in China: an institutional perspective. *International Journal of Production Economics*, 129(1), 119-126.
- Magd, H., & Curry, A. (2003). An empirical analysis of management attitudes towards ISO 9001: 2000 in Egypt. *The TQM Magazine*, 15(6), 381-390.
- Mak, B. L. M. (2011). ISO certification in the tour operator sector. *International Journal of Contemporary Hospitality Management*, 23(1), 115-130.
- Malik, S. A., Iqbal, M. Z., Shaukat, R., & Yong, J. (2008). TQM Practices & Organizational Performance: Evidence From Pakistani SMEs. *International Journal of Engineering & Technology IJET-IJENS*, 10(4), 26-31.
- Marín Vinuesa, L. M., & Gimeno, J. (2010). La certificación iso 9000 en el sector industrial del Mueble: evidencias sobre la cultura de calidad Total y las ventajas que la caracterizan. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 16(1), 77-101.
- Martínez-Costa, M., Choi, T.Y., Martínez, J. A., & Martínez-Lorente, A. R. (2009). ISO 9000/1994, ISO 9001/2000 and TQM: the performance debate revisited. *Journal of Operations Management*, 27(6), 495-511.
- Martínez-Costa, M., Martínez-Lorente, A. R., & Choi, T. Y. (2008). Simultaneous consideration of TQM and ISO 9000 on performance and motivation: an empirical study of Spanish companies. *International Journal of Production Economics*, 113(1), 23-39.
- McAdam, R., & Fulton F. (2002). The impact of the ISO 9000:2000 quality standards in small software firms. *Managing Service Quality*, 12(5), 336-345

- Mokhtar, M. Z., & Muda, M. S. (2012). Comparative study on performance measure and attributes between ISO and non-ISO certification companies. *International Journal of Business and Management*, 7(3), 185-193.
- Naveh, E., & Marcus, A. (2007). Financial performance, ISO 9000 standard and safe driving practices effects on accident rate in the US motor carrier industry. *Accident Analysis & Prevention*, 39(4), 731-742.
- Naveh, E., & Marcus, A. A. (2005). Achieving competitive advantage through implementing a replicable management standard: Installing and using ISO 9000. *Journal of Operational Research*, 24(1), 1-26.
- Nicolau, J. L., & Sellers, R. (2010). The quality of quality awards: diminishing information asymmetries in a hotel chain. *Journal of Business Research*, 63(8), 832-839.
- Nield, K., & Kozak, M. (1999). Quality certification in the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, 40(2), 40-52.
- Nunnally, J. (1998). *Psychometric Theory*. McGraw-Hill, New York.
- Pereira-Moliner, J., Claver-Cortés, E., Molina-Azorín, J. F., & Tarí, J. (2012). Quality management, environmental management and firm performance: direct and mediating effects in the hotel industry. *Journal of Cleaner Production*, 37(December), 82-92.
- Pertusa Ortega, E. M., Tarí Guilló, J. J., Pereira Moliner, J., Molina Azorín, J. F., & López Gamero, M. D. (2013). Certificación en calidad, resultados empresariales y estructura organizativa en el sector hotelero español. *Intangible Capital*, 9(1), 199-224.
- Prajogo, D. I. (2005). The Comparative Analysis of TQM Practices and Quality Performance between Manufacturing and Service Firms. *International Journal of Service Industry Management*, 16(3), 217-228.
- Prakash, J. (2008). Empirical assessment of ISO 9000 related management practices and performance relationships. *International Journal of Production Economics*, 113(1), 40-59.
- Quazi, H. A., & Padibjo, S. R. (1998). A journey toward total quality management through ISO 9000 certification – a study on small- and medium-sized enterprises in Singapore. *International Journal of Quality & Reliability Management*, 15(5), 489-508.
- Ragothaman, S., & Korte, L. (1999). The ISO 9000 international quality registration: an empirical analysis of implications for business firms. *International Journal of Applied Quality Management*, 2(1), 59-73.
- Rahman, S. (2001). Total quality Management practices and business outcome: evidence from a small and medium enterprises in Western Australia. *Total Quality Management*, 12(2), 35-49.
- Reed, R., Lemak, D. J., & Montgomery, J. C. (1996). Beyond process: TQM content and firm performance. *Academy of Management Review*, 21(1), 173-202.

- Rubio-Andrade, L., Alonso-Almeida, M. M., & Rodríguez-Antón J. (2011). Motivations and impacts in the firm and stakeholders of quality certification: evidence from small- and medium-sized service enterprises. *Total Quality Management & Business Excellence*, 22(8), 833-852.
- Rust, R., Zahorik, A., & Keiningham, T. (1995). Return on quality (ROQ): Making service quality financially accountable. *Journal of Marketing*, 59(2), 58-70.
- Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management*, 17(4), 393–409.
- Sánchez Pérez, M., & Sarabia Sánchez, F.J. (1999). Validez y fiabilidad de escalas. In F. J. Sarabia (Eds.), *Metodología para la Investigación en Marketing y Administración de Empresas* (pp. 363-393). Pirámide, Madrid.
- Sharma, D. S. (2005). The association between ISO 9000 certification and financial performance. *International Journal of Accounting*, 40(2), 151-172.
- Sheehan, L., & Presenza, A. (2011). The organizational impacts of quality management in tourism firms: An empirical investigation of the Molise Region, Italy. *Tourism*, 59(4), 427-446.
- Sila, I. (2007). Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: An empirical study. *Journal of Operations Management*, 25(1), 83-109.
- Singels, J., Ruël, G., & Van De Water, H. (2001). ISO 9000 series certification and performance. *International Journal of Quality & Reliability Management*, 18(1), 62-75.
- Solis, L. E., Rao, S. S., Raghu-Nathan, T. S., Chen, C-Y., & Pan, S-C. (1998). Quality management practices and quality results: a comparison of manufacturing and service sectors in Taiwan. *Managing Service Quality*, 8(1), 46-54.
- Stevenson, H. T., & Barnes, C. F. (2001). Fourteen years of ISO 9000: impact, criticisms, costs, and benefits. *Business Horizons*, 44(3), 45-51.
- Stevenson, T. H., & Barnes, F. C. (2002). What industrial marketers need to know now about ISO 9000 certification: A review, update, and integration with marketing? *Industrial Marketing Management*, 31(8), 695-703.
- Sun, H. (2000). Total quality management, ISO 9000 certification and performance improvement. *International Journal of Quality & Reliability Management*, 17(2), 168-179.
- Tang, S. L., & Kam, C. W. (1999). A survey of ISO 9001 implementation in engineering consultancies in Hong Kong. *International Journal of Quality & Reliability Management*, 16(6), 562-74

- Tarí, J. J., & Molina, F. J. (2002). Quality Management Results in ISO 9000 Implementation Practices. *International Journal of Quality & Reliability Management*, 12(7), 10-27.
- Tarí, J. J., & Pereira, J. (2012). Calidad y rentabilidad. Análisis del certificado Q en las cadenas hoteleras. *Universia Business Review*, 34, 52-67.
- Tarí, J. J., Claver-Cortés, E., Pereira-Moliner, J., & Molina-Azorín, J. F. (2010). Levels of quality and environmental management in the hotel industry: Their joint influence on firm performance. *International Journal of Hospitality Management*, 29(3), 500-510.
- Tarí, J. J., Heras-Saizarbitoria, I., & Dick, G. (2014). Internal and external drivers for quality certification in the service industry: Do they have different impacts on success?. *Service Business*, 8(2), 337-354.
- Tarí, J., Claver-Cortes, E., Pereira-Moliner, J., & Molina, J. (2009). Is it worthwhile to be a quality certified hotel? Evidence from Spain. *International Journal of Quality & Reliability Management*, 26(9), 850-864.
- Terlaak, A., & King, A. A. (2006). The effect of certification with the ISO 9000 Quality Management Standard: A signalling approach. *Journal of Economics Behavior & Organization*, 60(4), 579-602.
- Tsiotras, G., & Gotzamani, K. (1996). ISO 9000 as an Entry Key to TQM: The Case of Greek Industry. *International Journal of Quality & Reliability Management*, 13(4), 64-76.
- ul Hassan, M., Mukhtar, A., Qureshi, S. U., & Sharif, S. (2012). Impact of TQM Practices on Firm's Performance of Pakistan's Manufacturing Organizations. *International Journal of Academic Research in Business and Social Sciences*, 2(10), 232-259.
- Van Der Wiele, A., Williams, R., & Dale, B. G. (2000). TQM: is a fad, fashion, or fit?. *Quality Management Journal*, 7(2), 65-67
- Van der Wiele, T., & Brown, A. (1998). Venturing Down the TOM Path for SME's. *International Small Business Journal*, 16(2), 50-68.
- Vloeberghs, D., & Bellens, J. (1996). Implementing the ISO 9000 standards in Belgium. *Quality Progress*, 29(6), 43-48.
- Wayhan, V. B., Kirche, E. T., & Khumawala, B. M. (2002). ISO 9000 certification: The financial performance implications. *Total Quality Management*, 13(2), 217-231.
- Yahya, S., & Goh, W. K. (2001). The implementation of an ISO 9000 quality system. *International Journal of Quality & Reliability Management*, 18(9), 941-66.
- Zehir, C., Ertosunb, Ö. G., Zehir, S., & Müceldilli, B. (2012). Total Quality Management Practices' Effects on Quality Performance and Innovative Performance Procedia. *Social and Behavioral Sciences*, 41, 273–280.