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EMPIRICAL ARTICLE

# Internal and external drivers for quality certification in the service industry: Do they have different impacts on success?

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**Abstract** This paper presents the results of a study of hotels that are certified for quality management to identify the reasons for seeking quality certification. The authors analyse whether internal or external drivers for seeking certification have different impacts on benefits and the use of quality tools in the hotel industry. The analysis groups hotels according to the importance of their internal reasons for certification, and uses cluster analysis to identify the significant differences between groups of hotels. The findings for the 32 hotels analysed show that hotels that pursued certification for internal reasons develop better quality tools and have increased levels of benefits.

**Keywords** Quality certification · Hotel industry · Internal benefits · External benefits · Quality tools · Spain

## 1 Introduction

The adoption of quality management standards (e.g. ISO 9001) continues to be important for many companies as the number of certified organisations worldwide

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shows. For example, by the end of 2010, at least one million ISO 9001 certificates had been issued in 178 countries, which more than doubled the number of certificates at the end of 2000 (ISO 2011). The ISO 9001 standard specifies the requirements that quality management systems need in order to provide assurance about the firm's ability to satisfy quality requirements and to enhance customer satisfaction in supplier–customer relationships (ISO 2011).

A recurring topic in the literature is the benefits of quality certification but results often show that certification benefits are not achieved in practice. Some studies argue that certified firms have no better benefits than non-certified firms (Singels et al. 2001; Tsekouras et al. 2002) while others show positive benefits of quality certification (Heras et al. 2002; Chow-Chua et al. 2003; Dick et al. 2008; Singh 2008; Lee 2012). This leaves the question of what are the factors that can facilitate the achievement of benefits from certified quality systems (e.g. reasons for seeking certification).

The results from various tourist sub-sectors are similar (Augustyn and Pheby 2000; Lee et al. 2008; Mak 2011), and hotels conform to this general pattern of mixed results (Callan 1992; Walker and Salameh 1996; Nield and Kozak 1999; Alonso-Almeida et al. 2012). In overall terms, the findings for the hotel sector show that quality certification can have internal and external benefits (e.g. Nield and Kozak 1999; Nicolau and Sellers 2010; Alonso-Almeida et al. 2012).

Given the mixed results for the benefits of ISO 9001 accreditation shown in the literature, scholars' have sought to find causal factors that affect the benefits of quality certification. In particular the motives for pursuing certification are suggested as important for understanding the benefits of quality certification (e.g. Naveh and Marcus 2005).

The studies that analyse the benefits of quality certification, using motives as an intervening variable, find stronger effects of quality certification on benefits for firms that have developmental motives (Jones et al. 1997; Terziovski et al. 2003; Naveh and Marcus 2005). Overall, firms that certify for internal reasons appear to benefit more than those that certify for external reasons (Singels et al. 2001; Boiral and Roy 2007; Martínez-Costa et al. 2008; Prajogo 2011).

Manufacturing industry is the focus of most causal studies of quality certification benefits (Gustafsson et al. 2003) as there are few studies analysing causal issues in services (Boiral and Roy 2007; Martínez-Costa et al. 2008; Nair and Prajogo 2009). Our literature search found only one study (Alonso-Almeida et al. 2012) that examines causal issues in hotels, despite the hotel industry being a substantial sector of the service industries (OMT 2011). For the service sector as a whole we find few studies that examine how causal mechanisms influence the use of quality tools (Herbert et al. 2003; Tarí and Sabater 2004) and none for the hotel industry that have analysed if the use of quality tools is linked with achieving benefits from certification.

Consequently, there exists a knowledge gap concerning hotels (Viada-Stenger et al. 2010) as the literature is unclear as to how internal and external drivers for certification act differentially on benefits and the use of quality tools. This paper contributes to the literature on the role of drivers for quality certification extending the results of previous studies of ISO 9001 to a specific type of quality certification

and developing new ideas on the association between the reasons for certification and the use of quality tools.

The aim of the present study is to identify the reasons for seeking quality certification and analyse whether internal or external drivers for seeking certification have different impacts on benefits and the use of quality tools in the hotel industry. First the paper identifies why hotels decide to seek quality certification. Second, it examines whether hotels that certify for internal reasons obtain more benefits and apply more quality tools than those that certify for external reasons. The research questions addressed are:

1. Is the dominant motivation for hotels seeking quality certification internal or external?
2. Do hotels that certify for internal reasons obtain more benefit than those that certify for external reasons?
3. Do hotels that certify for internal reasons implement quality tools to a greater extent than hotels that certify for external reasons?

The next section reviews institutional theory and the resource-based view that can help explain how internal and external drivers for quality certification impact on benefits and the use of quality tools. The paper then continues with a description of the research methods, followed by the results. Finally, the 'Discussion and conclusions' section summarises the contribution of the paper, indicates its limitations and suggests directions for future research.

## 2 Literature review

### 2.1 Theoretical framework

The early literature on the benefits of quality certifications reported mixed results leading to research work exploring factors that might influence benefits. These studies analysing the influence of motives for seeking certification have provided new ideas that provide a better understanding of the relationship between quality certification and benefits. The resource-based view and institutional theory can be frameworks to understand better the impacts of motives for seeking certification. Institutional theory explains the process by which firms become motivated by external drivers and the resource-based view explains the mechanism for internal drivers becoming important (Martínez-Costa et al. 2008; Nair and Prajogo 2009; Prajogo 2011).

Institutional theory suggests that social and environmental factors play an important role in creating an isomorphic effect, which influences the adoption of certain management practices (Meyer and Rowan 1977), such as quality standards (Nair and Prajogo 2009; Heras-Saizarbitoria 2011; Heras-Saizarbitoria and Boiral 2013). Coercive, mimetic and normative factors influence the behaviour of organisations (DiMaggio and Powell 1983). For example, coercive external pressures for having the ISO 9001 standard from society or other organisations (e.g. the regulatory environment set by government policy) (Singels et al. 2001) and/or customer demanding their suppliers to be certified (Lee 1998; Rubio-Andrada et al.

2011) push many managers to pursue certification. Normative pressures are pressures to match the norms of others in a discipline or profession (DiMaggio and Powell 1983). Thus, to achieve parity, managers may be driven to adopt ISO, to improve their corporate reputation in the market (Jones et al. 1997; Prajogo 2011). Mimetic pressures suggest that uncertainty encourages imitation (DiMaggio and Powell 1983) and this creates a tendency for firms to adopt similar practices to those implemented by other organisations. Support for this is found by Nair and Prajogo (2009), who found many companies adopt the ISO 9001 standard to imitate other organisations that have successfully gained certification for their quality management systems.

These institutional drivers lead organisations to pursue quality management certification as a way of obtaining legitimacy in their business environment. However, because the badge of quality is what they seek, this leads to a minimum degree of effort in implementing the requirements of the ISO 9001 standard (Nair and Prajogo 2009). In these circumstances organisations conform to the standard only at an administrative or surface level (Martínez-Costa et al. 2008) and thus few improvements derive from the quality system (Brown et al. 1998).

The resource-based view considers how best to apply the valuable resources of the firm to improve the firm's competitive advantage (Penrose 1959; Grant 1991). Consistent with this theory is an organisation's commitment to develop and improve knowledge and processes throughout the organisation to achieve a quality culture where reduced errors and better quality for customers are an outcome. To successfully achieve a quality culture, research shows the importance of soft quality management issues (Powell 1995; Samson and Terziovski 1999). Similarly, in the case of ISO 9001 standard, firms committed to achieving competitive advantage may consider improving quality, customer focus, cost reduction, etc. as important reason for implementing the ISO 9001 standard; using the standard as a platform for achieving a quality culture as a way of gaining competitive benefits.

When firms seek certification for internal motives, they build difficult to imitate capabilities that maintain competitive advantage (Prajogo 2011) through developing the standard's requirements to a higher level than competitors. For example, data on errors collected through quality procedures prompt detailed analysis by employees (using the training they have received in using quality tools) to identifying the true causes of non-conformance. This leads to effective improvement actions that reinforce the quality culture within the organisation. Thus, when motives for quality certification are internal, an organisation can create valuable internal resources, because the quality improvement activities, linked to the quality standard, become part of the firm's technical core (Martínez-Costa et al. 2008) and are seen as an everyday means of continually improving internal efficiency.

In summary, internal drivers help companies to continuously improve their quality management system rather than maintain it at the standard's minimum level of compliance that external drivers tend to achieve (Nair and Prajogo 2009).

## 2.2 Internal and external drivers for seeking certification and performance

A wide range of specific reasons for seeking quality certification are suggested by the literature. The most common reasons are customer demand, improving

efficiency, increasing market share, developing quality awareness, increasing competitiveness, process standardisation, improving service quality and customer satisfaction (Carlsson and Carlsson 1996; Jones et al. 1997; Brown et al. 1998; Huarng 1998; Escanciano et al. 2001; Singels et al. 2001; Gotzamani and Tsiotras 2002; Posinska et al. 2002; Terziovski et al. 2003; Singh et al. 2006; Lo and Chang 2007; Jang and Lin 2008; Magd 2008). Previous studies in manufacturing and service organisations (Jones et al. 1997; Escanciano et al. 2001; Yahya and Goh 2001; Jang and Lin 2008) and in hotels (Alonso-Almeida et al. 2012; Álvarez-García et al. 2012) group reasons as either internal or external.

Internal reasons relate to processes, procedures and people within an organisation. These reasons include improving efficiency, product/service quality, processes and procedures, developing quality awareness and reducing incidents and complaints. External reasons include competitive advantage, increasing market share, customer demand, pressure from customers and direct entry into new markets.

According to the literature, most organisations are motivated by external factors (Carlsson and Carlsson 1996; Jones et al. 1997; Lee 1998; Martínez-Costa et al. 2008). Research by Rubio-Andrada et al. (2011) also indicates external reasons are applicable motives for small hotel enterprises pursuing certification. In contrast, other scholars report that some organisations are primarily motivated by internal factors (Boiral and Roy 2007; Casadesús et al. 2010). This also seems to apply to the hotel industry, where one study indicates that internal drivers dominate the reasons for companies pursuing quality certification (Alonso-Almeida et al. 2012).

Next we come to research that shows that the reasons for certification have an influence on benefits. Several scholars use motives as the intervening variable to analyse the effects of ISO 9001 quality certification on benefits (Jones et al. 1997; Brown et al. 1998; Yahya and Goh 2001; Singels et al. 2001; Terziovski et al. 2003; Naveh and Marcus 2005; Prajogo 2011). They find that organisations seeking quality certification for internal motives achieve clear internal benefits (e.g. lower waste and/or lower costs). Similarly, some scholars report better quality (Jones et al. 1997; Brown et al. 1998; Singels et al. 2001) and mixed results are found for other benefits such as higher sales/market share (Jones et al. 1997; Brown et al. 1998; Singels et al. 2001) or profitability (Singels et al. 2001). These studies also find that there are no internal or external benefits from quality certification when internal motives are absent. This indicates that the positive effects depend of the existence of internal motives to develop quality practices (Dick 2009).

Firms seeking certification for internal reasons encounter fewer difficulties in implementing ISO 9001 (Yahya and Goh 2001) and obtain higher benefits than those that have external reasons (Jones et al. 1997; Singels et al. 2001; Yahya and Goh 2001; Terziovski and Power 2007).

In tourism enterprises (Augustyn and Pheby 2000) and in research in service organisations (Psomas et al. 2010) findings show that the most critical factors for the effective adoption of quality certification are internal motivation factors such as commitment and support of senior management, efficiency improvement and continuous improvement of process and product. For example, in the hotel industry quality certification may have positive effects on internal benefits such as people and operational benefits (Callan 1992; Walker and Salameh 1996; Nield and Kozak 1999),

and on external benefits such as customer satisfaction (Walker and Salameh 1996; Birdir and Pearson 1998; Nield and Kozak 1999; Rubio-Andrada et al. 2011). Similarly, internal and external motives may have positive effects on both operational and financial benefits (Alonso-Almeida et al. 2012; Álvarez-García et al. 2012).

Based on this literature review we can conclude that managers committed to internal drivers adopt quality certification with a proactive approach and this explains the differences in benefits that are found depending on whether the drivers are internal or external.

Similarly, as firms that certify for internal reasons experience less difficulty in satisfying the elements of quality certification than those that certify for external reasons (Yahya and Goh 2001), they possess a more fully developed quality management system and quality culture than firms that certify for external reasons (Jones et al. 1997). Therefore, firms that are more committed to internal reasons are likely to have a higher degree of implementation of quality management practices and tools (Ahire et al. 1996; Rao et al. 1999; Rahman 2001).

Our review indicates that when firms implement quality certification for the reasons suggested by institutional theory, implementation is superficial (Nair and Prajogo 2009), and in practice this implies more costs than benefits for the firm. In contrast the resource-based view of the firm implies that when an organisation becomes certified for internal reasons, the implementation of quality certification requirements is deeper, involving internalising the spirit of the standard by developing resources through using quality practices and tools to improve performance. As a result, those certified firms that score high on internal drivers will have higher levels of benefits (Boiral and Roy 2007; Martínez-Costa et al. 2008) and usage of quality tools than those with lower internal motivation.

Despite quality issues being key in the hotel industry (Kimes 2001; Min et al. 2002; Ruiz-Molina et al. 2011) and the size of the hotel sector in the service industry worldwide and in Spain (OMT 2011), the research we have explored above does little to inform us of the role of motives for hotels seeking certification, or the link to benefits achieved or the usage of quality tools. Therefore, based on the review, we propose three research questions (RQ):

RQ1: Is the dominant motivation for hotels seeking quality certification internal or external?

RQ2: Do hotels that certify for internal reasons obtain more benefit than those that certify for external reasons?

RQ3: Do hotels that certify for internal reasons implement quality tools to a greater extent than hotels that certify for external reasons?

In the next section we elaborate on the methods used before moving on to our findings that will address the research questions.

### 3 Method

The study population includes all hotels in the Alicante (Spain) region with two to five star ratings that have been certified under the Spanish ‘Q for Tourist’ Quality

Mark certification of the Spanish Tourism Quality Institute (ICTE) (from now on referred to as ‘Q Certificate’). The basic document of this certification in the case of hotels is the UNE 182001 standard for tourist hotels and apartments issued by AENOR, the Spanish Association for Standardisation and Certification. Many hotels in Spain are currently certified according to the Q Certificate or the, ISO 9001 standard and some even have both of them.

Q Certification aims to achieve minimum quality standards, depending on the administrative category, type of service and type of establishment, although individual organisations are free to establish higher standards (Casadesús et al. 2010). Although the Q Standard is based on ISO 9001 and is similar to ISO 9001, there are some differences:

- The ISO system does not set service criteria or standards. The Q Standard includes all the service quality specifications within the standard itself.
- The ISO system applies to any industry or organisation, whereas the Q System applies only to the tourism industry.

The ICTE maintains a register of certified hotels which the authors used. The register includes a total of 33 certified hotels in Alicante, Spain.

Of the 33 hotels, 1 (3 %) is a two-star hotel, 11 (33 %) are three-star hotels, 19 (58 %) are four-star establishments and 2 (6 %) are five-star hotels.

The study used a structured questionnaire with groups of closed questions to answer each of the three research questions (see ‘[Appendix](#)’ section). Thanks to the support of the person responsible for the ICTE in Alicante, who had good contacts with the hotels in the population, we obtained a good response to the questionnaire. In a meeting between the ICTE and all the quality managers from Q-Certified hotels in the region of Alicante, the person responsible for quality at the ICTE distributed the questionnaire and encouraged the hotel managers to complete it as a priority. At this stage, only 7 hotels returned completed responses (21.2 %). After that, the researchers sent the questionnaire by e-mail, accompanied by an introductory letter, to the managers of the 33 hotels. This was followed up by another copy of the questionnaire to the hotels that had not answered, and finally, the researchers telephoned all the hotels that had not answered. In this way, 32 hotels responded, a response rate of 97 %. The hotel which did not answer was a three-star establishment.

### 3.1 Measures

An expert panel was used to pre-test the questionnaire. The panel consisted of one researcher who specialised in quality and hospitality management, two quality experts from the hotel industry and one quality expert from the ICTE.

#### 3.1.1 *Reasons for seeking Q Certification*

The questionnaire included the eight most frequently cited items from the literature, covering both internal and external drivers (see the ‘[Appendix](#)’ section for details of the items).

### 3.1.2 Benefits from Q Certification

The questionnaire uses eight items (see ‘[Appendix](#)’ section) that are consistent with the literature review and include both internal and external benefits.

### 3.1.3 Tools used for Q Certification

The authors initially identified common quality techniques and tools from the literature, but after the pre-test the experts suggested some additional tools that are used in the hotel industry and indicated others that should be deleted as they are not in common use in hotels. The finalised list of items measuring the 11 quality tools, on a 5-point scale, can be found in the ‘[Appendix](#)’ section.

## 3.2 Analytic procedures

The analysis started with a factor analysis of the items used to identify the reasons for seeking Q Certification (Research Question 1). Based on the factors identified (reasons for seeking certification), cluster analysis was then used to classify the hotels into three groups according to their reasons for seeking certification. Following this the three groups were analysed using Kruskal–Wallis tests to indicate differences between the groups in relation to their levels of benefits (Research Question 2) and their use of quality tools (Research Question 3).

## 4 Results

### 4.1 Research question 1: reasons for certification

The initial analysis used a principal component factor analysis with varimax rotation of the answers given to the eight items related to reasons for seeking certification. The analysis excluded factors with loads lower than 0.40, which is usually taken as the cut-off for factor loading in empirical research (Huang et al. 1999). The analysis (Table 1) revealed three factors, which explained 80 % of the total variance. We tested the sampling adequacy and this was adequate according to the Kaiser–Meyer–Olkin measure of 0.58 and the Bartlett’s sphericity test of 139.031 ( $gl = 28, p = 0.000$ ).

Factors 1 (formed by process standardisation, customer satisfaction and service quality items) and 3 (formed by the improved efficiency and creating quality awareness and culture items) clearly refer to internal reasons, whereas Factor 2 relates to external reasons. Because both Factor 1 and Factor 3 included items that the literature calls internal drivers, the researchers decided to restrict the analysis to a two factor solution that is presented in Table 2.

The result shows that 66 % of the variance is explained, which is a lower percentage than in the previous analysis. However, the two factors detailed in Table 2 clearly discriminate between the internal and external reasons identified in the literature. Comparing Table 1 to Table 2 we can see that Table 2 now incorporates the internal items of Factors 1 and 3 from the previous analysis as



**Table 1** Rotated factor matrix of the reasons (3 factors)

Items	F1: internal reasons I	F2: external reasons	F3: internal reasons II
Customer demand		0.787	
Increased efficiency			0.836
Developing quality awareness and culture			0.960
Increasing market share		0.853	
Increasing competitiveness	0.406	0.706	
Process standardisation	0.771		
Improving customer satisfaction	0.944		
Improved service quality	0.855		
Eigenvalue	2.672	1.957	1.809
Percentage variance explained by factor	33.406	24.462	22.613
Percentage total variance explained	33.406	57.868	80.480

**Table 2** Rotated factor matrix of the reasons (2 factors)

Items	Factors	
	Internal reasons	External reasons
Customer demand		0.791
Increased efficiency	0.774	
Developing quality awareness and culture	0.589	
Increasing market share		0.853
Increasing competitiveness	0.425	0.683
Process standardisation	0.817	
Improving customer satisfaction	0.869	
Improved service quality	0.844	
Eigenvalue	3.358	1.958
Percentage variance explained by factor	41.970	24.471
Percentage total variance explained	41.970	66.441
Alpha	0.85	0.69

Factor 1, while Factor 2 remains unchanged from the previous analysis showing only external items.

The two factor structure now groups the data into a theoretically sound and intuitively correct structure, showing two kinds of reasons for certification that we can summarise as internal and external reasons.

#### 4.1.1 Internal reasons

These reflect the desire on the part of the hotel to use Q Certification as a means to improve efficiency and customer satisfaction; through process standardisation,

improved quality awareness among employees and better customer service. In this context, although customer satisfaction is an external benefit, the factor analysis classifies ‘improving customer satisfaction’ as an internal reason. This can be due to the fact that managers think that a commitment to quality is a way of satisfying customers.

Analysis of the means for the reasons indicates that internal reasons occupy all the higher ranks with ‘developing quality awareness’ as the most important (mean = 4.25; SD = 0.67), followed by ‘process standardisation’ (mean = 4.06; SD = 0.61) and ‘improving customer satisfaction’ (mean = 4.03; deviation = 0.69). The overall standardised mean for the internal reasons factor is 4.04 (SD = 0.55).

#### 4.1.2 External reasons

These indicate the importance of customer demand, market demand and improved competitiveness as the drivers for seeking certification.

Analysis of the means for external reason shows that these occupy the three lowest ranks with ‘improving competitiveness’ (mean = 3.34; SD = 0.82) third from bottom. At second from bottom is ‘customer demand’ (mean = 2.84; SD = 1.11) and bottom ranking is ‘increasing market share’ (mean = 2.78; SD = 0.87). The standardised mean for the external reasons factor is 2.99 (SD = 0.74).

These results show that by far the most important reasons for seeking Q Certification are internal and that amongst these reason hotel managers consider that customer satisfaction is very important. However, there appears to be a contradiction as the survey shows that, only 19 % of the respondents consider that having Q Certification is an important reason for a customer to choose their hotel. The explanation may be that, unlike industry, hotels cater for a much larger number of customers and only a few will use the Q Award as a criterion for selecting a hotel compared to the majority, who will use another criterion, such as hotel literature or customer reviews (e.g. Tripadvisor).

## 4.2 Research question 2: impacts of internal and external drivers on benefits

To identify groups of hotels according to their reasons for seeking certification a two-stage analysis was conducted using both hierarchical and non-hierarchical cluster procedures. In the hierarchical analysis we used Ward’s method and the square of the Euclidean distance to minimise the differences within the cluster, analysing the dendrogram and the change in the agglomeration coefficient.

The application of different methods makes it possible to establish the final number of groups. Thus, when the analysis is conducted with two groups, performing a *k*-means analysis and validating it through the variance analysis of one factor, the second factor proved not to be statistically significant at the 0.05 level. When the analysis is repeated with three groups, both factors are statistically significant. Therefore, the paper adopted an analysis based on three hotel groups, and this solution was validated by the existence of significant differences between the hotel groups on the factors (see Table 3).

Group 1 consists of only three hotels, that state that their reasons for certification are both internal and external, and the two types of reasons are highly and equally valued.

**Table 3** Factor averages and statistical tests verifying the differences

Factors	Mean			Kruskal–Wallis	
	Cluster 1 <i>n</i> = 3	Cluster 2 <i>n</i> = 19	Cluster 3 <i>n</i> = 10	Chi square	Sign.
Internal reasons	4.53	4.21	3.58	7.352	0.003
External reasons	4.55	3.05	2.40	17.814	0.000
Benefits	3.58	3.54	2.86	9.439	0.001
Internal benefits	3.67	3.59	2.86	10.901	0.001
Increased motivation	4.33	4.00	3.10	6.986	0.002
Increased productivity	4.00	3.42	2.50	10.284	0.003
Reduction in non-conformity costs	2.67	3.47	3.00	7.240	0.037
Favours innovation in tourist product	3.00	3.37	2.50	4.222	0.077
Favours process optimisation	4.33	3.68	3.20	5.322	0.084
External benefits	3.44	3.46	2.87	3.896	0.011
Improved customer satisfaction	4.00	4.11	3.20	7.487	0.001
Improved external image	4.00	3.79	3.30	0.995	0.161
Increased sales	2.33	2.47	2.10	0.832	0.328
Quality tools					
Quantification of non-conformity costs	2.00	3.37	2.40	0.9411	0.005
Mystery guest	2.00	3.00	2.20	1.995	0.132
Internal audits	4.00	4.26	3.50	6.781	0.015
Customer satisfaction surveys	4.33	4.42	4.10	0.103	0.513
Flow charts	4.00	3.05	2.50	5.900	0.128
Quality and procedures manual	4.33	4.05	3.50	4.406	0.044
Complaints register	4.33	4.16	3.40	4.860	0.040
Data statistics	4.00	4.26	3.60	2.927	0.024
Minutes from meetings	3.67	3.58	3.30	3.054	0.347
Incident register—internal communication	3.00	4.05	3.40	3.402	0.088
Internal training	4.00	4.26	3.30	7.164	0.012

Hotels in Group 2 have less concern for internal reasons than hotels in Group 1, although it is still high, and much less concern for external reasons.

Hotels in Group 3 have little concern for internal issues and hardly any concern for external issues, indicating that they are the least motivated towards Q Certification of all the groups.

Table 3 shows the results of comparing these groups, answering Research Questions 2 and 3, using the variables for internal and external benefits and the variables for quality tools.

Quality benefits in two complementary ways. Firstly internal benefits are benefited by processes, and secondly external benefits derive from the market (Brown et al. 1998; Lee 1998; Singels et al. 2001; Yahya and Goh 2001; Claver et al. 2006). Internal benefits relate to the changes within the organisation (e.g. increase in productivity, improvement in motivation, reduction in costs and waste)

while external benefits are linked to the effects of quality on customer satisfaction (e.g. sustaining tourism relationships, achieving higher tourist satisfaction levels).

Table 3 highlights significant differences between the three groups. First, the results show that the three groups do not perceive the same level of benefits from certification. Indeed, the results show an increase in benefits associated with the level of motivation. The first and second groups are more concerned with internal reasons and seem to have more positive benefits, while the third group note significantly fewer benefits. Therefore, it seems that motivation is significantly associated with the benefits of certification. When Q Certification is implemented for internal motives, internal benefits, such as employee motivation, productivity, costs ( $p < 0.05$ ), innovation and optimisation ( $p < 0.10$ ), are higher. When internal motives are low, internal benefits are also low. This indicates that hotels seeking certification for internal reasons achieve benefits due to improved efficiency and greater quality awareness that are also reflected in the greater satisfaction for customers of these hotels. This is why there are significant differences between internal benefits ( $p = 0.004$ ) and external benefits ( $p = 0.011$ ), related to improved customer satisfaction. Table 3 also shows that there are no significant differences for external image or increased sales (external benefits). This result may be due to the majority of customers being unaware of the Q Standard, so they do not consider quality certification a particularly relevant factor for selecting a hotel.

#### 4.2.1 Research question 3: impacts of internal and external drivers on quality tools

Table 3 shows that the hotels that rated internal reasons highest for pursuing certification also had significantly higher scores for the seven quality tools: non-conformity costs, audits, quality manual and procedures, complaints register, data statistics, internal training (all  $p < 0.05$ ) and incident register ( $p < 0.10$ ). So we conclude that hotels seeking certification for internal reasons use these seven tools more frequently. In contrast, there are no significant differences between the groups of hotels in the use of mystery guests, customer surveys, flow charts or minutes of meetings. This may be due to these four quality tools being normal practice in many hotels prior to certification and thus little changed by reasons for pursuing certification.

We conclude that a greater concern for internal drivers can facilitate an increase in usage of a wider range of quality tools. In turn, a greater use of these tools can contribute to an increase in benefits, for example, in employee motivation (e.g. internal training), improved efficiency (e.g. error cause removal through use of internal audits, quantification of non-conformity costs and data statistics) and customer satisfaction (e.g. improved service recovery for customer complaints).

## 5 Discussion and conclusions

First, our findings show that internal drivers ranked top for reasons for seeking certification while the opposite was true for the external drivers that featured in the last three places in the ranking of reasons. The findings show that in contrast to the

ISO 9001 studies where, as a rule, firms seek certification mainly for external reasons (Jones et al. 1997; Martínez-Costa et al. 2008) the most important reasons for hotels are internal in origin, a finding similar to another hotel industry research study (Alonso-Almeida et al. 2012) that showed the importance of internal drivers.

Even though hotel managers are interested in the image of the firm and in improving customer satisfaction, their main motivation for seeking Q Certification is internal. The most likely explanation for the lower emphasis on external drivers as reasons for seeking quality certification is that hotels deal with a large number of guests most of whom do not consider quality accreditation in their purchasing decision process. Therefore, unlike business to business purchasing, where buyers prefer suppliers who have quality accreditation, there is no such pressure from customers in the hotel industry.

Second, hotels that certify for internal reasons obtain more benefits than those that certify for external reasons. In our classification of hotels into three clusters, the first cluster considered that the Q Certification meets a strong internal as well as external need, and these hotels are the most convinced of the relevance of the Q Certification. This group corresponds to the group of 'quality enthusiasts' described by Boiral and Roy (2007) in their study of the ISO 9001 standard. The second cluster includes those hotels which adopt the standard mainly for internal reasons (which would correspond to the 'ISO integrators' described by Boiral and Roy 2007). The third cluster corresponds to Boiral and Roy's (2007) 'dissident group', because it includes hotels with relatively weak internal and external motivation, which are the most inclined to contest the standard's legitimacy. Based on this classification, the results show that hotels seeking certification with a greater concern for internal reasons attain better internal benefits and customer satisfaction than those showing less concern for internal reasons. This result for Q Certification is similar to the findings from previous studies of the ISO 9001 standard (Singels, et al. 2001; Boiral and Roy 2007; Terziovski and Power 2007; Prajogo 2011).

Third, hotels that certify for internal reasons implement quality tools to a greater extent than hotels that certify for external reasons. The findings show that hotels with greater concern for internal drivers develop a wider range of quality tools and make greater use of them. This result supports the findings of studies that show that firms that use ISO certification for internal reasons may develop the quality management components more widely (Ahire et al. 1996; Rahman 2001) and supplements recent studies on quality certification in the hotel industry (Alonso-Almeida et al. 2012; Álvarez-García et al. 2012), by extending these results to the Q Certification standard in the hotel industry.

Based on these three ideas, part of the benefit that hotels derive may be due to a greater interest in improving their quality systems as a motive for gaining the Q Certificate. Those hotels seeking certification for internal drivers will see the requirements of the Q Certification as a template for improvement, and therefore will make more frequent use of quality improvement tools. This may lead them to gain more from the process of Q Certification, by achieving clearer internal benefits and improved customer satisfaction.

The main contribution of this paper to the literature is that it extends the results of previous studies of quality certification to a specific type of certification, namely Q Certification, and shows that the importance of internal and external drivers as reasons for seeking Q Certification in the hotel industry are the polar opposite of those in other industries for ISO 9001. The findings show that benefits increase for those seeking Q Certification for internal reasons and this result supports the findings of previous studies of quality certification to ISO 9001 among manufacturing organisations. In addition, this paper complements the work of Boiral and Roy (2007), extending the results of their study of ISO 9001 to the Q Certificate in the hotel industry, and the recent works of Alonso-Almeida et al. (2012) and Álvarez-García et al. (2012), by including new ideas on the impact of internal drivers on customer results and the association between motivations and the usage of quality tools.

For hotels, the implication is that managers should understand that although external drivers may lead to some benefits from the adoption of Q Certification, it is internal drivers that are critical to achieving greater overall benefits through the evolution of their quality management systems and the application of quality improvement tools. In other words, management commitment to internal drivers facilitates the correct application of Q Certification, to produce a robust quality management system that incorporates the use of quality improvement tools that generate greater internal benefits and customer satisfaction. Consequently, managers should consider that internal drivers are the key to Q Certification success.

As ISO 9001 and Q Certification seem to lead to similar outcomes we suggest that it is reasonable to conclude that the ISO Organisation should consider the Q Certification model as the basis for a new ISO 9001 variant designed specifically for the tourist industry. Such a new standard would allow tourist organisations to obtain benefits similar to those related to the ISO 9001 standard, so long as the firm's concern for the quality award is more internal than external.

Finally, several limitations of the present study should be noted. The present study is based on cross-sectional data based on 32 hotels. The study is an exploratory study that was undertaken to comprehend better the nature of the problem, since very few studies have considered quality certification in the hotel industry. Consequently, future research with a larger sample of hotels is needed to extend our research so as to indicate the direct and indirect effects between motives, certification and the use of quality tools using techniques such as structural equation modelling. We also suggest research using in-depth interviews to better understand why the motives for certification in hotels are so different from those in other industries.

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## Appendix

Measures	Source	
<b>Reasons for seeking Q Certification</b>		
Please rate the reasons which led your establishment to seek Q Certification, on a scale from 1 (not important at all) to 5 (extremely important)	Carlsson and Carlsson (1996), Jones et al. (1997), Brown et al. (1998), Bryde and Sloccock (1998), Singels et al. (2001), Claver et al. (2006)	
1. Customer demands and requirements		
2. Increasing the efficiency of your services and staff		
3. Developing quality awareness and culture in the hotel		
4. Increasing market share		
5. Increasing competitiveness		
6. Process standardisation		
7. Improving customer satisfaction		
8. Improved service quality		
<b>Benefits from Q Certification</b>		
Please rate the benefits which your hotel has experienced through Q Certification, on a scale from 1 (not important at all) to 5 (extremely important)	Powell (1995), Jones et al. (1997), Brown et al. (1998), Samson and Terziowski (1999), Singels et al. (2001), Kaynak (2003), Claver et al. (2006)	
External benefits		
1. Improved customer satisfaction		
2. Improved external image of the hotel		
3. Increased sales		
Internal benefits		
1. Increased employee motivation		
2. Increased productivity		
3. Reduction in non-conformity costs		
4. Favours innovation in tourist product		
5. Favours process optimisation		
<b>Tools used for Q Certification</b>		
Please rate the usage of the following quality tools within your hotel, on a scale from 1 (not important at all) to 5 (extremely important)	Tarí and Sabater (2004)	
1. Quantification of non-conformity costs		
2. Mystery guest		
3. Facilities and/or corporate internal audits		
4. Customer satisfaction surveys		
5. Flow charts		
6. Quality and procedures manual		
7. Complaints register		
8. Data statistics—indicators comparisons—continuous improvement		
9. Minutes from meetings		
10. Incident register—internal communication		
11. Internal training		

## References

- Ahire SL, Waller MA, Golhar DY (1996) Quality management in TQM versus non-TQM firms, an empirical investigation. *Int J Qual Reliab Manag* 13:8–27
- Alonso-Almeida MM, Rodríguez-Antón JM, Rubio-Andrada L (2012) Reasons for implementing certified quality systems and impacts on performance: an analysis of the hotel industry. *Serv Ind J* 32:919–936
- Álvarez-García J, Fraiz-Brea JA, Del Río-Rama MC (2012) Análisis de las motivaciones para certificar la marca “Q de calidad turística”. Sector alojamiento. *Investigaciones Europeas de Dirección y Economía de la Empresa* 18(1):101–121
- Augustyn MM, Pheby JD (2000) ISO 9000 and performance of small tourism enterprises: a focus on Westons Cider company. *Manag Serv Qual* 10:374–388
- Birdir K, Pearson TE (1998) Hospitality certification: experiences in North America—international implications. *Int J Contemp Hosp Manag* 10:116–121
- Boiral O, Roy MJ (2007) ISO 9000: integration rationales and organizational impacts. *Int J Oper Prod Manag* 27:226–247
- Brown A, Van der Wiele T, Loughton K (1998) Smaller enterprises’ experiences with ISO 9000. *Int J Qual Reliab Manag* 15:273–285
- Bryde D, Slocock B (1998) Quality management systems certification: a survey. *Int J Qual Reliab Manag* 15:467–480
- Callan RJ (1992) Quality control at Avant Hotels: the debut of BS 5750. *Serv Ind J* 12:17–33
- Carlsson M, Carlsson D (1996) Experiences of implementing ISO 9000 in Swedish industry. *Int J Qual Reliab Manag* 13:36–47
- Casadesús M, Marimon F, Alonso M (2010) The future of standardised quality management in tourism: evidence from the Spanish tourist sector. *Serv Ind J* 30:2457–2474
- Chow-Chua C, Goh M, Wan TB (2003) Does ISO 9000 certification improve business performance? *Int J Qual Reliab Manag* 20:936–953
- Claver E, Tarí JJ, Pereira J (2006) Does quality impact on hotel performance? *Int J Contemp Hosp Manag* 18:350–358
- Dick GPM (2009) Exploring performance attribution. The case of quality management standards adoption and business performance. *Int J Prod Perform Manag* 58:311–328
- Dick GPM, Heras I, Casadesús M (2008) Shedding light on causation between ISO 9001 and improved business performance. *Int J Oper Prod Manag* 7:687–708
- DiMaggio PJ, Powell W (1983) The iron cage revisited institutional isomorphism and collective rationality in organizational fields. *Am Sociol Rev* 48:147–160
- Escanciano C, Fernández E, Vázquez C (2001) Influence of ISO 9000 certification on the progress of Spanish industry towards TQM. *Int J Qual Reliab Manag* 18:481–494
- Gotzamani KD, Tsiotras GD (2002) The true motives behind ISO 9000 certification. Their effect on the overall certification benefits and long term contribution towards TQM. *Int J Qual Reliab Manag* 19:151–169
- Grant RM (1991) The resource-based theory of competitive advantage: implications for strategy formulation. *Calif Manag Rev* 33:114–135
- Gustafsson A, Nilsson L, Johnson MD (2003) The role of quality practices in service organizations. *Int J Serv Ind Manag* 14:232–244
- Heras I, Dick GPM, Casadesús M (2002) ISO 9000 registration’s impact on sales and profitability: a longitudinal analysis of performance before and after accreditation. *Int J Qual Reliab Manag* 19:774–791
- Heras-Saizarbitoria I (2011) Internalization of ISO 9000: an exploratory study. *Ind Manag Data Syst* 8:1214–1237
- Heras-Saizarbitoria I, Boiral O (2013) ISO 9001 and ISO 14001: towards a research agenda on management system standards. *Int J Manag Rev* 15:47–65
- Herbert D, Curry A, Angel L (2003) Use of quality tools and techniques in services. *Serv Ind J* 23:61–80
- Huang F (1998) Integrating ISO 9000 with TQM spirits: a survey. *Ind Manag Data Syst* 98:373–379
- Huang F, Horng C, Chen C (1999) A study of ISO 9000 process, motivation and performance. *Total Qual Manag* 10:1009–1025
- ISO (2011) The ISO survey of certification 2010. ISO, Geneva



- Jang W-Y, Lin CI (2008) An integrated framework for ISO 9000 motivation, depth of ISO 9000 implementation and firm performance. The case of Taiwan. *J Manuf Technol Manag* 19:194–216
- Jones R, Arndt G, Kustin R (1997) ISO 9000 among Australian companies: impact of time and reasons for seeking certification on perceptions of benefits received. *Int J Qual Reliab Manag* 14:650–660
- Kaynak H (2003) The relationship between total quality management practices and their effects on firm performance. *J Oper Manag* 21:405–435
- Kimes SE (2001) How product quality drives profitability. *Cornell Hotel Restaur Adm Q* 42:25–28
- Lee TY (1998) The development of ISO 9000 certification and the future of quality management: a survey of certification firms in Hong Kong. *Int J Qual Reliab Manag* 15:162–177
- Lee D (2012) Implementation of quality programs in health care organizations. *Serv Bus* 6(3):387–404
- Lee CK, Lee HL, Kang M (2008) Successful implementation of ERP systems in small business: a case study in Korea. *Serv Bus* 2:275–286
- Lo LK, Chang DS (2007) The difference in the perceived benefits between firms that maintain ISO certification and those that do not. *Int J Prod Res* 48:1881–1897
- Magd HAE (2008) ISO 9001:2000 in the Egyptian manufacturing sector: perceptions and perspectives. *Int J Qual Reliab Manag* 25:173–200
- Mak BLM (2011) ISO certification in the tour operator sector. *Int J Contemp Hosp Manag* 23:115–130
- Martínez-Costa M, Martínez-Lorente A, Choi TY (2008) Simultaneous consideration of TQM and ISO 9000 on performance and motivation: an empirical study of Spanish companies. *Int J Prod Econ* 113:23–39
- Meyer JW, Rowan B (1977) Institutional organizations: formal structure as myth and ceremony. *Am J Sociol* 83:340–363
- Min H, Min H, Chung K (2002) Dynamic benchmarking of hotel service quality. *J Serv Mark* 16:302–322
- Nair A, Prajogo D (2009) Internalisation of ISO 9000 standards: the antecedent role of functionalist and institutionalist drivers and performance implications. *Int J Prod Res* 47:4545–4568
- Naveh E, Marcus A (2005) Achieving competitive advantage through implementing a replicable management standard: installing and using ISO 9000. *J Oper Manag* 24:1–26
- Nicolau JL, Sellers R (2010) The quality of quality awards: diminishing information asymmetries in a hotel chain. *J Bus Res* 63:832–839
- Nield K, Kozak M (1999) Quality certification in the hospitality industry: analyzing the benefits of ISO 9000. *Cornell Hotel Restaur Adm Q* 40:40–45
- OMT (Organización Mundial del Turismo) (2011) Panorama OMT del turismo internacional. Edition 2011. [http://mkt.unwto.org/sites/all/files/docpdf/unwtohighlights11sphr\\_2.pdf](http://mkt.unwto.org/sites/all/files/docpdf/unwtohighlights11sphr_2.pdf). Accessed 14 Feb 2012
- Penrose ET (1959) The theory of the firm. Wiley, New York
- Posinska B, Dahlgaard JJ, Antoni M (2002) The state of ISO 9000 certification: a study of Swedish organizations. *TQM Mag* 14:297–306
- Powell TC (1995) Total quality management as competitive advantage: a review and empirical study. *Strateg Manag J* 16:15–37
- Prajogo DI (2011) The roles of firms' motives in affecting the outcomes of ISO 9000 adoption. *Int J Oper Prod Manag* 31:78–100
- Psomas EL, Fotopoulos CV, Kafetzopoulos DP (2010) Critical factors for effective implementation of ISO 9001 in SME service companies. *Manag Serv Qual* 20:440–457
- Rahman S (2001) A comparative study of TQM practice and organizational performance of SMEs with and without ISO 9000 certification. *Int J Qual Reliab Manag* 18:35–49
- Rao SS, Raghunathan TS, Solis LE (1999) The best commonly followed practices in the human resource dimension of quality management in new industrializing countries. The case of China, India and Mexico. *Int J Qual Reliab Manag* 16:215–225
- Rubio-Andrada L, Alonso-Almeida MM, Rodríguez-Antón JM (2011) Motivations and impacts in the firm and stakeholders of quality certification: evidence from small-and medium-sized service enterprises. *Total Qual Manag Bus Excell* 22(8):833–852
- Ruiz-Molina ME, Gil-Saura I, Moliner-Velázquez B (2011) Does technology make a difference? Evidence from Spanish hotels. *Serv Bus* 5:1–12
- Samson D, Terziovski M (1999) The relationship between total quality management practices and operational performance. *J Oper Manag* 17:393–409
- Singels J, Ruël G, van de Water H (2001) ISO 9000 series certification and performance. *Int J Qual Reliab Manag* 18:62–75
- Singh PJ (2008) Empirical assessment of ISO 9000 related management practices and performance relationships. *Int J Prod Econ* 113:40–59

- Singh PJ, Feng M, Smith A (2006) ISO 9000 series of standards: comparison of manufacturing and service organisations. *Int J Qual Reliab Manag* 13:122–142
- Tarí JJ, Sabater V (2004) Quality tools and techniques: are they necessary for quality management. *Int J Prod Econ* 92(3):267–280
- Terziovski M, Power D (2007) Increasing ISO 9000 certification benefits: a continuous improvement approach. *Int J Qual Reliab Manag* 24:141–163
- Terziovski M, Power D, Sohal A (2003) The longitudinal effects of the ISO 9000 certification process on business performance. *Eur J Oper Res* 146:580–595
- Tsekouras K, Dimara E, Skuras D (2002) Adoption of a quality assurance scheme and its effect on firm performance: a study of Greek firms implementing ISO 9000. *Total Qual Manag* 13:827–841
- Viada-Stenger MC, Balbastre-Benavent F, Redondo-Cano AM (2010) The implementation of a quality management system based on the Q tourist quality standard. The case of hotel sector. *Serv Bus* 4:177–196
- Walker JR, Salameh TT (1996) The Q.A. payoff. *Cornell Hotel Restaur Adm Q* 37:57–59
- Yahya S, Goh WK (2001) The implementation of an ISO 9000 quality system. *Int J Qual Reliab Manag* 18:941–966