

The adoption of quality management practices and their impact on business performance in small service companies: the case of Spanish travel agencies

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Abstract The main objective of this study is to examine the motivations for adopting quality practices and their impact on the performance of travel agencies. The results are based on 448 personal surveys that were administered by travel agency managers. Structural equation modelling was used to conclude that the adoption of quality practices significantly impacts the competitiveness and financial performance of travel agencies. Therefore, the results of this paper suggest that being proactive about quality issues can confer significant benefits to travel agencies. These benefits can make the difference between survival and failure in a highly competitive sector.

Keywords Quality management practices Customer satisfaction
Small service businesses

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1 Introduction

Increased competition has turned quality management into a requisite for the survival of service businesses (Singh et al. 2008), and quality management has become one of most important drivers of competitiveness worldwide (Karim et al. 2007).

Nevertheless, various studies have shown that small and medium-sized enterprises (SMEs) have encountered certain obstacles when seeking quality management practices (QMPs) and certification. Examples of significant obstacles are the relatively large investment needed to implement the quality systems required for certification (Gustafsson et al. 2001), the organisational adjustments that are involved and, often, the internal resistance of employees (Brown et al. 1998). Regardless of these barriers, a number of studies have shown that quality practices have been adopted by SMEs worldwide. The majority of studies on SMEs have been cross-sectoral analyses, including both manufacturing and service industries in the same study (Prajogo and Brown 2006). Nevertheless, not all quality practices have the same importance in all sectors. Therefore, it is necessary to conduct a sector-specific analysis with the objective of identifying key quality practices and impacts for a single sector. However, there is a lack of specific studies on the service sector, apart from a few notable exceptions, such as Dawson and Patrickson (1991) for banking, Morrison and Terziovski (2001) for the retail sector, Cruickshank (2003) for higher education, and Arasli (2002) and Lee (2012) for health organizations and Tari' et al. (2009) and Alonso-Almeida et al. (2012) for the hotel industry. This lack of studies does not mean that quality is not relevant in the service sector. On contrary, quality is crucial to the survival of service-based businesses, as shown by the considerable development that has taken place in this sector in terms of marketing. Nevertheless, Zhao et al. (2004) stated that not all practices are effective in all organisations. These authors found that certain QMP factors, such as management support, customer focus and process management, appeared to be effective in small service firms without the need for detailed processes and systems. The authors also suggested that it is therefore unnecessary for a company to adopt all quality management practices to achieve good performance. Indeed, Sousa and Aspinwall (2010, p. 478) stated that 'the adoption of TQs and techniques, and the views of senior management towards award models and the TQM philosophy are unique in each case'. This statement proves that quality management does not have a specific route sheet.

Consequently, given that quality service has emerged as one of most competitive factors (Karim et al. 2007), even in times of economic crisis (Alonso-Almeida and Bremser 2013), there is a need for more in-depth research into the role of quality management practices in small service companies. Thus, the goal of this study is twofold: first, to measure the direct impact of QMPs on operations, customers and employees; and second, to evaluate the mediated impact on competitiveness and financial performance in a specific service sector.

This study makes a number of contributions to the existing literature. First, the study focuses on a single service industry: travel agencies. This choice is appropriate for this study because no prior research has been found on this

particular industry, which is growing worldwide in both developed and developing countries (WTO 2011). Second, this study further extends awareness of the subject of quality management practices in relation to small service companies. For the purposes of this study, a business is considered ‘small’ if the company concerned has fewer than 50 employees, in accordance with the definition of ‘small businesses’ applied by the European Commission (Eurostat 2008). Third, this study sheds light on the literature on quality management practices and performance from the point of view of operations management, whereas most previous studies have concentrated on a marketing perspective. Finally, the model proposed validates the role of quality practices in terms of direct performance—in relation to customers, operations and human resources—while, simultaneously mediating their role in terms of competitiveness and financial performance through a structural equations analysis.

The remainder of this paper is structured as follows. Section 2 discusses the theoretical arguments concerning the adoption of QMPs and the relationship between their adoption and their impact. Section 3 describes the empirical research design. Section 4 presents the quantitative analysis. Section 5 presents the findings. Section 6 presents several major conclusions drawn from the research.

2 Impact of quality management practices inside a small service company

When companies adopt QMPs, the immediate impact is seen in terms of company operational management, employee performance and customer satisfaction (Magd and Curry 2003).

Previous research has found improvements in internal processes due to QMP adoption (Flynn et al. 1995; Forza and Flippini 1998; Ho et al. 2001; Kaynak 2003). These improvements can, in turn, improve service quality. Other positive effects of quality programmes have been identified, such as improved efficiency, cost reduction, improved decision-making processes and fewer quality defects (Beheshti and Lollar 2003). Thus, it appears that QMP adoption has a positive impact on performance in services. In accordance with prior research, the following hypothesis is proposed:

H1 The adoption of QMPs is likely to have a direct positive impact on operational performance.

In service companies, one of the key challenges in QMP adoption is to obtain employee support (Yong and Wilkinson 2003). Good-quality service depends heavily on how employees work with customers and other co-workers, as well as the overall organisation of a company.

Empirical evidence has also found that QMP adoption increases knowledge of an enterprise’s internal processes and makes workers more autonomous (Ho et al. 2001; Kaynak 2003; Sousa and Aspinwall 2010). Moreover, standardising work methods can reduce the learning time for new employees (Rodriguez-Anto’n and Alonso-Almeida 2011).

Following this reasoning, greater knowledge of the company's processes helps increase workplace safety and reduce accidents (Rodríguez-Anto'n and Alonso-Almeida 2011). This assumption leads to the following hypothesis:

H2 The adoption of QMPs is likely to have a direct positive impact on employee work methods.

The assumption that QMPs are a major management concern and are adopted as a long-term strategic tool could act as a signal to the market (Terlaak and King 2006) and have a direct impact on existing and potential customers (Fotopoulos and Psomas 2009), especially in terms of reducing complaints, increasing customer satisfaction, encouraging repeat purchasing and attracting new customers. Previous research has found these effects to have a wide impact on customers (e.g. Yee et al. 2010). This finding means that QMPs could produce an increase in overall customer satisfaction in addition to an improved customer experience. For this reason, the following hypothesis is proposed:

H3 The adoption of QMPs is likely to have a direct positive impact on customer satisfaction.

Given that QMP adoption contributes to improving company operations, customers may perceive a better overall service that may well have an influence on their satisfaction (Fotopoulos and Psomas 2009). In studying e-travel agencies in Taiwan, Chen and Kao (2010) found that process quality has significant direct and positive effects on satisfaction and behavioural intentions because it allows customers to feel secure about the service. The following hypothesis is therefore proposed:

H4 The adoption of QMPs is likely to have a positive impact on customer satisfaction performance mediated by operational performance.

Considering the fact that employees and customers interact directly and closely for fairly long periods of time in service industries, some studies have revealed that if employees are more satisfied with their jobs, they will be more committed to the company and more customer-oriented. Such employee behaviour may have a positive effect on the level of customer satisfaction (because customers notice the improved service) and may, therefore, affect purchasing decisions and generate a positive effect due to word-of-mouth recommendations (Yee et al. 2010). Moreover, QMP adoption gives employees the incentive to learn and improved working conditions, which allows them to upskill and become more efficient (Rodríguez-Anto'n and Alonso-Almeida 2011). Moreover, as mentioned above, employees may be more satisfied when they experience improvements in their personal skills (Rodríguez-Anto'n and Alonso-Almeida 2011) and in their working climate (Kumar et al. 2009). Furthermore, various authors have found that competitiveness is strongly influenced by customer satisfaction (Fotopoulos and Psomas 2009). Thus, the following hypothesis is proposed:

H5 QMPs are likely to have a positive customer impact mediated by the working methods of employees.

Previous research has also shown that QMP adoption can improve the competitiveness of a company in several ways. Quality procedures that explain how to perform tasks in hotels enhance in-house training for new employees, and the improvement in working operations may consequently improve customer satisfaction with the company compared with its competitors (Molina-Azorín et al. 2009), thus leading to repeat purchasing (Yee et al. 2010). Consequently, the company may be able to enhance its image in the eyes of all stakeholders and thus increase sales (Rodríguez-Antoñ et al. 2011), which may create a significant advantage in maintaining a strong market position in times of crisis (Alonso-Almeida and Bremser 2013).

A company's current competitive strengths may become obsolete; therefore, building core competitive strengths is essential for a long-term competitive advantage (Singh et al. 2008). Thanks to QMP adoption, a company can obtain relevant competitive capabilities (Demirbag et al. 2006).

In the hospitality industry (Claver-Cortes et al. 2008), found that hotels that had a stronger commitment to QMPs develop more advanced management systems and higher performance levels. Thus, they concluded that a commitment to QMPs may make hotels more competitive. Thus, the following hypothesis is proposed:

H6 QMPs are likely to have a positive impact on competitiveness that is mediated by customer satisfaction performance.

Previous research has produced mixed results concerning the direct relation between QMP adoption and financial performance. In his meta-analysis, Nair (2006) found that QMPs have an effect on financial performance that is mediated by other variables or constructs, especially if the data are studied at a business unit level rather than at a corporate level.

Thus, it appears that financial performance indirectly benefits from improved customer experience (Das et al. 2000; Kaynak 2003; Nair 2006) and competitiveness (Fotopoulos and Psomas 2009). Alonso-Almeida et al. (2012) also found that quality of the hospitality industry has a positive impact on financial performance through its impact on employees, operations and services.

Consequently, the following hypothesis is proposed:

H7 QMPs have a positive impact on the financial performance mediated by customer management performance and competitiveness.

The proposed model, based on these hypotheses, is summarised in Fig. 1.

3 Methodology

3.1 Sample design and data collection

The data used in the empirical section of the paper were obtained from October to December 2010 through personal surveys from managers representing 448 travel agencies with less than 50 employees. These agencies were located in the region of Madrid (Spain), where, according to the ADV database (ADV 2012), there are 1,224



Fig. 1 Proposed model based on research hypotheses

travel agencies. Therefore, the sample error is 3.5 % for a confidence level of 95 % and $p = q = 0.5$.

The survey was restricted to travel agencies for various reasons. First, travel agencies are usually small, but inter-agency competition is fierce. For this reason, travel agencies are constantly seeking ways to attract and retain customers. Second, travel agencies have suffered from drastic and rapid technological changes, which have led to changes in consumer behaviour and to the adoption of new management practices.

The questionnaire was organised into three main sections: quality practices, quality impact and a supplementary section requesting descriptive information about the company's profile.

Retailers represented more than 70 % of the sample. By typology, most of the firms were subsidiaries of groups. In terms of company history, nearly half the firms had been established for less than 5 years (see Table 1).

3.2 Measures

Based on the above literature review and in light of the proposed hypotheses, six constructs were explored in this study.

The first factor was QMPs. The variables used to measure quality commitment were 'management commitment', 'customer needs', 'delivery processes' and 'compliance with objectives'. The second factor, Operational Performance, was measured in terms of three dimensions: 'operational costs', quality of service' and 'maintenance costs'. The third factor, Employees' Working Methods, was also measured by three variables: 'accidents', 'learning processes' and 'autonomy'. The fourth dimension, Customer Satisfaction Performance, was comprised of three variables: 'claims reduction', 'repurchase frequency' and 'attraction'. The fifth dimension, Competitiveness, was measured in terms of 'establishment image', 'customer satisfaction', 'employee satisfaction', 'market stability' and 'sales

Table 1 Characteristics of the response sample

Classification	Number	%
Retailer	318	70.98
Wholesaler	8	1.79
Retailer–wholesaler	108	24.11
Tour operator	4	0.89
Other	10	2.23
Total	448	100.00
Typology		
Independent firm	116	25.89
Subsidiary company	332	74.11
Total	448	100.00
Age of firm		
\5 years	189	42.19
5–10 years	148	33.04
[10 years	111	24.78
Total	448	100.00

growth'. Finally, the Performance dimension was measured in terms of 'sales', 'profits' and 'market share'. The definitions of the variables used to measure the factors, the variable codes and the references on which they were based are detailed in Table 2.

4 Results

To validate the proposed model, a strictly controlled process was implemented in two stages: first, an exploratory factor analysis and, second, a confirmatory factor analysis. In both stages, the proposed model was assessed on the basis of statistical criteria. The results are summarised in Table 3.

The exploratory factor analysis (EFA) was performed for each factor to identify the latent dimensions that were derived from the data and used in the study. The scales were analysed in accordance with the recommendations of John and Reve (1982), Hair et al. (1998) and Ladhari (2010). Ladhari follows the criteria proposed by Wolfinbarger and Gilly (2003) to retain items that (i) load at 0.50 or greater on a factor, (ii) do not load at greater than 0.50 in two factors and (iii) have an item to total correlation of more than 0.40. In fact, we were even more rigorous, raising the threshold of the load to 0.70 for the first criterion.

The correlation matrix was subjected to two tests: Bartlett's test of sphericity and the Kaiser–Meyer–Olkin (KMO) index. The Bartlett statistical confirmation of the existence of linear dependence between the variables in all cases justified continuation of the procedure. The KMO also confirmed that factor analysis was likely to generate satisfactory results (Visauta 1998).

Finally, discriminant validity was verified by comparing the square root of the average variance extracted (AVE) for each construct to its correlation with the other

Table 2 Variables and references from which they were adapted

Variable code	Definition
Quality management practice adoption—QMP adoption	
Saraph et al. (1989), Flynn et al. (1994), Conca et al. (2004), Naor et al. (2008), Molina-Azori'n et al. (2009)	
QC1	Management commitment The management is committed to product and service quality
QC2	Customer focus The current and future needs of customers are known
QC3	Process management Improvements in service delivery processes are identified
QC4	Continuous improvement Compliance with the objectives is monitored, and deviations are corrected
Operational performance	
Samson and Terziovski (1999), Kaynak (2003), Nair (2006), Rodriguez-Anto'n et al. (2011), Alonso-Almeida et al. (2012)	
OP1	Operational costs have been reduced
OP2	Overall quality of service has been improved
OP3	Maintenance costs have been reduced
Employees' working methods	
Ahire et al. (1996), Poksinska and Dahlgaard (2003), Susskind et al. (2007), Rubio-Andrada et al. (2011)	
EMP1	Safety in the workplace has been improved
EMP2	Increase in organisational learning among employees
EMP3	Employees are more autonomous in their work
Customer satisfaction performance	
Das et al. (2000), Nair (2006), Rodriguez-Anto'n et al. (2011), Yee et al. (2010), Rubio-Andrada et al. (2011)	
CUS1	Customers are more satisfied with the service because complaints and claims have both been reduced
CUS2	Customers repurchase more frequently than before
CUS3	Word-of-mouth regarding the service quality has attracted new customers
Competitiveness	
Zhao et al. (2008), Molina-Azori'n et al. (2009), Rodriguez-Anto'n et al. (2011), Alonso-Almeida et al. (2012)	
COM1	The image of the establishment has been improved
COM2	The customer satisfaction level is higher compared with competitors
COM3	The employee satisfaction level is higher compared with competitors
COM4	The ability to remain in the market in times of crisis is greater
COM5	The sales growth is increased compared with competitors

Table 2 continued

Variable code	Definition
Financial performance	
Arawati (2005), Rubio-Andrada et al. (2011)	
PER1	Sales have increased over the last 2 years
PER2	Profits have increased over the last 2 years
PER3	Market shares have increased over the last 2 years

constructs. The comparison between the square root of the AVE and the correlation between constructs can also be used to find the discriminant validity for the constructs. Table 4 shows that for the indicators used in the present study, each construct was, on average, more closely related to its own dimensions than those of the other constructs.

Confirmatory factor analysis (CFA) was applied to the sample data to verify the factor structure that emerged from the EFA. The reliability of the resulting factors was assessed using Cronbach's alpha. All the constructs had an alpha value of over 0.6, which exceeded Malhotra's (2004) and Nunnally's (1978) minimum internal consistency criterion. Moreover, internal consistency was tested with the composite reliability indicator. In all cases, the results confirmed the adequacy of the constructs because all items exceeded the minimum criterion of 0.6 for the composed reliability coefficient (Tseng et al. 2006).

Next, within the CFA, structural equation modelling (SEM) was performed to test the model using the maximum likelihood method and EQS software.

The Chi square test indicates the degree of difference between the expected and observed covariance matrices. A Chi square value close to zero indicates little difference between the expected and observed covariance matrices. Chi square/DF C 3 indicates an unacceptable model fit, although this index is strongly influenced by sample size (Carmines and McIver 1981).

The model's goodness-of-fit index (GFI) and the adjusted goodness-of-fit (AGFI) are measures of the relative number of variables and covariances jointly accounted for by the model. An acceptable model fit is indicated by a GFI and an AGFI greater than 0.8 (Byrne 1994, Hu and Bentler 1999).

The root mean square error of approximation (RMSEA) is related to the residual error in the model. RMSEA values range from 0 to 1, and a smaller RMSEA value indicates a better model fit. An acceptable model fit is indicated by an RMSEA value of 0.06 or less (Hu and Bentler 1999).

The comparative fit index (CFI) is equal to the discrepancy function adjusted for sample size. The CFI ranges from 0 to 1, and a higher value indicates a better fit with the model. An acceptable fit with the model is indicated by a CFI value of 0.90 or greater (Hu and Bentler 1999).

An overall conclusion regarding the fit of each model can be obtained by considering these indices simultaneously, as recommended by Schermelleh-Engel et al. (2003), and by obtaining at least three fit statistics indicating an acceptable fit.

Table 3 Measurement model (reliability and validity of scales)

Construct	Variable code	Exploratory factor analysis		Confirmatory factory analysis	
		Standard loadings ^a	Bartlett's test of sphericity Kaiser–Meyer–Olkin index	R ²	Composite reliability tests
Quality management practices (QMPs)	QC1	.778	χ^2 (sig.): 593.416 (.000) Degree of freedom: 6 KMO: .770 % variance: 64.097	.473	Cronbach's alpha: .810 Range for Cronbach's alpha removing one item: .725–.779 Range for correlations of the items and the sum of the subscale: .594–.700 Composite reliability: .645
	QC2	.776		.423	
	QC3	.844		.683	
	QC4	.802		.587	
Operational performance	OP1	.812	χ^2 (sig.): 277.073 (.000) Degree of freedom: 3 KMO: .663 % variance: 65.285	.273	Cronbach's alpha: .804 Range for Cronbach's alpha removing one item: .733–.783 Range for correlations of the items and the sum of the subscale: .494–.623 Composite reliability: .773
	OP2	.758		.706	
	OP3	.851		.348	
Employees' working methods	EMP1	.813	χ^2 (sig.): 397.968 (.000) Degree of freedom: 3 KMO: .700 % variance: 71.258	.499	Cronbach's alpha: .793 Range for Cronbach's alpha removing one item: .680–.711 Range for correlations of the items and the sum of the subscale: .596–.677 Composite reliability: .846
	EMP2	.868		.641	
	EMP3	.850		.574	

Table 3 continued

Construct	Variable code	Exploratory factor analysis		Confirmatory factory analysis	
		Standard loadings ^a	Bartlett's test of sphericity Kaiser–Meyer–Olkin index	r ²	Composite reliability tests
Customer satisfaction performance	COS1	.833	v ² (sig.): 366.905 Degree of freedom: 3 KMO: .704 % variance: 69.767	.467	Cronbach's alpha: .781 Range for Cronbach's alpha removing one item: .684–.718 Range for correlations of the items and the sum of the subscale: .610–.635 Composite reliability: .874
	COS2	.827		.428	
	COS3	.845		.555	
Competitiveness	COM1	.814	v ² (sig.): 1,107.317 (.000) Degree of freedom: 10 KMO: .832 % variance: 66.982	.545	Cronbach's alpha: .871 Range for Cronbach's alpha removing one item: .825–.872 Range for correlations of the items and the sum of the subscale: .598–.788 Composite reliability: .928
	COM2	.882		.738	
	COM3	.807		.556	
	COM4	.853		.567	
	COM5	.728		.350	
Financial performance	PER1	.896	v ² (sig.): 616.930 (.000) Degree of freedom: 3 KMO: .706 % variance: 79.438	.715	Cronbach's alpha: .869 Range for Cronbach's alpha removing one item: .754–.876 Range for correlations of the items and the sum of the subscale: .682–.818 Composite reliability: .971
	PER2	.926		.883	
	PER3	.850		.562	

^a All significant at p value = 0.01

Table 5 shows the values of various indices. Therefore, these measures of overall fitness reflect the explanatory power of the model.

The standardised solution of the causal model is presented below (see Fig. 2). With regard to the results concerning the specific hypotheses, it can be observed that all the hypotheses are supported at the 0.05 level.

These findings confirmed the results of the descriptive analysis to the effect that the factors are closely inter-related along the lines of the dimensions identified in the literature, thereby confirming the six working hypotheses.

5 Discussion of the results

The statistical results validated the overall model proposed. The hypothesis will now be contrasted, and the findings are explained below.

QMP adoption has a direct, positive impact on operations, employees and customers, as previous studies have found. The proposed hypotheses H1, H2 and H3 are therefore supported, although our findings show that the greatest impact is on employees. This finding is in line with the results reported by Alonso-Almeida et al. (2012), who found that quality-certified systems have a stronger impact on employees than on operations or customers in the hotel industry.

Employees are directly involved in the implementation of QMPs. They are the ones responsible for travel agency services and, therefore, for achieving the quality objectives set out by management. Consequently, the employees' commitment and motivation are vital to the success of the adoption of quality practices by a company (Rodríguez-Anto'n and Alonso-Almeida 2011).

This finding also confirms the relevance of the role human capital plays in the process of achieving customer service quality and satisfaction in service companies (Yong and Wilkinson 2003) and when recommending action concerning factors related to customer relationships (Forza and Flippini 1998). Quoting Deming (1986) and Ishikawa (1985) identified three sources of human motivation in the workplace that can be tapped through QMP adoption: intrinsic motivation determined by individual growth in the form of learning; task motivation due to work well done; and social motivation, which is determined by sharing knowledge and experiences with others.

Regarding customers (H3), QMPs have a direct impact on customer satisfaction performance, although this impact is weaker than in the case of operations and employees. Fotopoulos and Psomas (2009) noted that customer satisfaction requires both quality improvements and the adoption of a customer focus strategy. Therefore, this finding suggests that an action plan needs to be established to develop an effective quality framework. QMP adoption could initially act as a driver of customer satisfaction performance in the short term (Das et al. 2000); however, without deliberate changes in service processes and delivery, this effect could disappear in the long term.

Hypotheses H4 and H5 were both supported in this study. The operational changes and improvements in the company directly impact service delivery and, subsequently, customer perceptions and satisfaction with performance (Das et al.

Table 4 Correlation matrix and discriminant validity

	Quality practices	Operations	Employees	Customers	Competitiveness	Performance
QMPs	<i>.595*</i>					
Operational performance	.122	<i>.729*</i>				
Employees' working methods	.182	.501	<i>.804*</i>			
Customer satisfaction performance	.316	.582	.596	<i>.837*</i>		
Competitiveness	.113	.184	.168	.172	<i>.850*</i>	
Financial performance	.138	.122	.087	.098	.381	<i>.958*</i>

* Italicized values are square root of AVE

2000; Nair 2006; Rodriguez-Anto'n et al. 2011). Furthermore, improvements in the workplace environment and in the employees' skills may be perceived by customers and may thus have an impact on customer satisfaction with performance, specifically in relation to the number of complaints and the level of customer retention (Kumar et al. 2009; Yee et al. 2010). The relationship between customer satisfaction and performance is slightly stronger with regard to employees than in terms of operations. However, both relationships are essential for achieving customer satisfaction with performance through QMP adoption.

These findings reinforce previous research explaining the impact of processes and people on customer satisfaction with performance (e.g. see Nair 2006; Singh et al. 2008) and the importance of both factors when focusing on the customer.

Flynn et al. (1995) found that the top contributors to competitive advantage are related to quality market outcomes and, specifically, to offering a service superior to competitors' service and ensuring satisfaction-based relationships with customers. Previous research has shown that competitive position is strongly influenced by customer satisfaction (Zhao et al. 2008; Fotopoulos and Psomas 2009). The results of this study confirm these findings. Moreover, these results reinforce previous research of business management, showing that QMP adoption was one of the main strategies to be followed to achieve a competitive advantage (e.g., Karim et al. 2007). Hypothesis H6 is therefore supported.

Finally, hypothesis H7 is also supported. Previous research has shown that financial performance is mediated mainly by other variables, such as customer satisfaction and competitiveness (Arawati 2005; Zhao et al. 2008; Fotopoulos and Psomas 2009), and our results confirm this relationship amongst QMP adoption, customer satisfaction performance, competitiveness and financial performance. Zhao et al. (2008) even found that the contribution made by QMPs to financial performance was greater in services than in manufacturing firms. These findings suggest that QMP adoption is the appropriate strategy for achieving a competitive

Table 5 Indices tested for overall model fit

Assessment item	Results	Ideal results
92 (Chi square)*	438.7380	Smaller the better
92/df (normed Chi square)	2.410	\3
GFI (goodness of fit index)	0.867	[0.8
AGFI (adjusted goodness of fit index)	0.832	[0.8
RMSEA (root mean square error of approximation)	0.067	\0.06
CFI (comparative fit index)	0.907	[0.9

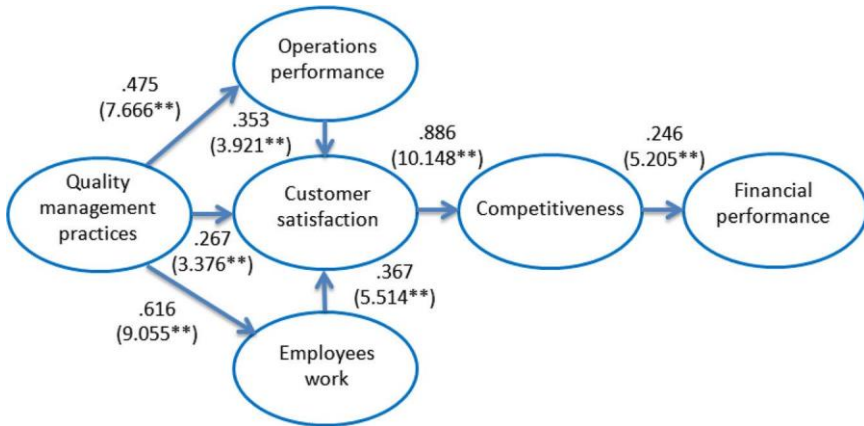


Fig. 2 Standardised solution of the causal model. **Path coefficient; robust statistics significant at the 0.05 level in parentheses

advantage that could help ensure company survival in times of crisis (Alonso-Almeida et al. 2012).

6 Conclusions

The conclusions presented below are particularly important, bearing in mind that business practices related to quality have been identified as key drivers for achieving customer satisfaction, competitiveness and financial performance in service firms. Nevertheless, previous studies have focused on service companies in general (with the exception of hospitality); therefore, little research has been conducted on small firms. As a result, conclusions drawn from the study of the travel agency industry, which is dominated by small and micro enterprises, may be especially relevant for both academics and practitioners.

With regard to academics, three conclusions can be drawn from this study. First, QMP adoption has a significant direct impact on customer satisfaction and an indirect significant effect on customer satisfaction through operational performance and employees' work methods. Therefore, developing a culture based on proper

QMP adoption—in this case, the involvement of managers, working with the client and suppliers to improve the product, identifying improvements in the service delivery process, monitoring compliance with objectives (and, where appropriate, the correction of any deviation from these objectives) and the implementation of a culture of continuous improvement—has a significant and direct impact on customer satisfaction, employees' working methods and operational performance. Second, this study reinforces previous research on the importance of quality as a global corporate strategy with the goal of obtaining a competitive advantage based on customer focus, human capital skills and operational flexibility (Rodríguez-Anto'n and Alonso-Almeida 2011). The significant direct impact of customer satisfaction on competitiveness corroborates this fact. On one hand, customers may repurchase more frequently. On the other hand, word-of-mouth from satisfied customers could attract new customers (Yee et al. 2010) and could thus impact competitiveness. In fact, the service company could obtain a competitive advantage by improving their image, increasing employee commitment and enhancing customer satisfaction with performance. Thus, given that one of the key drivers to obtaining a competitive advantage in these turbulent times is quality-based (Alonso-Almeida and Bremser 2013) this behaviour suggests an impact on financial performance.

The final conclusion is that the significant direct effect of competitiveness on financial performance confirms previous research in the field. It is unsurprising that organisations with motivated employees that adopt a strategy of customer-focused internal and external processes are more likely to survive in times of crisis. Thus, travel agencies have undergone drastic changes over the last 10 years. Indeed, in only 10 years, the industry has changed from being characterised by local businesses that are based mainly on the personal trust of the client in the travel agency to an environment with more global businesses, intense competition and an abundance of information available to any agent in the market. The Internet has contributed significantly to this change. The increasing competition due to the emergence of a new sales channel (Internet) with lower operating costs, the greater amount of available information and the previously limited possibility of comparing prices and products have driven prices down. Thus, the resulting decline in margins and profits has significantly reduced the number of small travel agencies operating in the sector. In addition to these changes, sales have dropped due to the current economic crisis; therefore, measures to improve competitiveness and thus the company's financial perspective should be welcomed by managers in the sector. Consequently, two recommendations can be extended to practitioners (travel managers).

First, practitioners should develop a culture based on quality to improve the competitiveness of their companies, given that QMPs can have a dual role in the company: on one hand, QMPs can strengthen a company's market orientation; and on the other, they can act as a transformational internal driver to add value for customers (Demirbag et al. 2006). Therefore, an improved customer focus resulting in higher customer satisfaction is a good strategy to promote business survival in times of crisis. Involvement with customer requirements is vital for competitiveness in service industries to improve product design and development or create new

products (Flynn et al. 1994). Second, QMPs determine the extent to which the travel agency has fulfilled customer expectations before the respective customers become dissatisfied and are subsequently lost. Customer feedback is also useful for evaluating suppliers. Given that in the travel industry, the act of purchase and consumption occurs consecutively, if travel agencies do not monitor their customers' travelling experiences, they will miss an opportunity to strengthen their buyer-supplier relationships and improve the quality of the products they offer.

Dis-satisfied customers may not be able to complain during their travels and may turn directly to a travel agency's competitors without realising that the retail travel agency concerned cannot be held responsible for their unsatisfactory travelling experience. Considering the nature of the interactions between employees and customers in the service industries; and in particular, in travel agencies, a number of conclusions can be drawn from this study. QMP adoption should emphasise the need for more autonomous, self-motivated and committed employees. In addition, standardisation should be implemented in a clear and simple way to allow effective service to be provided to customers without slowing down the resolution of difficult situations, both during the purchasing process and during travel consumption or post-consumption. Moreover, QMPs that are specifically related to continuous improvement should be established to ensure the constant enhancement of work processes, along the lines described above. Although this study does not examine the role of effective communication, such communication appears to be a crucial factor in travel agencies.

Each travel agent should communicate information about any successfully resolved problem, information that may be useful for the company as a whole, and thus share pertinent information with all other members of their chain of travel agencies. The travel agents could convert this information into a dynamic corporate knowledge base, thus enabling them to achieve a high level of customer satisfaction with their performance. Therefore, QMPs could be a key driver involved in keeping the travel agency in the market. Finally, this study reinforces the importance of quality as a global corporate strategy aiming to achieving a competitive advantage based on human capital skills and operational flexibility (Rodriguez-Anto'n and Alonso-Almeida 2011). As Navickiene and Bucioniene (2007) concluded, service quality is a key driver of competitive advantage in the tourism industry. In other *ceteris paribus* conditions, the successful interplay between employees and customers could influence income. In this study, it can be observed that QMPs have the greatest impact on employees. Thus, it can be concluded that an investment in service quality is profitable.

This study indicates other questions that warrant further research, such as determining the most important quality principles in service industries or those quality practices that have the greatest impact on competitiveness. To help bridge this gap, we propose that this study should be extended to other service industries. Customers and employees should also be questioned about the changes that have been realised and should highlight any room for further improvement. Another interesting line of research could be a comparison of the effects of QMP implementation on the SME manufacturing sector with the benefits of the adoption of these measures in the service business sector.

Finally, this study is subject to certain limitations, one of which is common to most surveys of this type: because this study was conducted in a single specific region, the findings may be difficult to extrapolate to other countries or other service sub-industries. Nonetheless, because the sample can be considered representative of the region studied, it may be indicative of the current situation of this sub-industry across Spain. Data collection via interviews involves a further limitation, inasmuch as this method may introduce elements of subjectivity or bias. However, this problem is counteracted by the large volume of surveys conducted, as confirmed by the results of the statistical tests.

References

- ADV (2012) Agencias de viaje: provincia de Madrid. Datacom Multimedia, Madrid (Spain). <http://www.agencias-de-viajes.com/viajes/agencias-viajes-provincia.asp?Provincia=Madrid>. Accessed 8 Nov 2012
- Ahire SL, Golhar D, Waller MA (1996) Development and validation of TQM implementation constructs. *Decis Sci* 27(1):23–31
- Alonso-Almeida MM, Bremser K (2013) Strategic responses of the Spanish hospitality sector to the financial crisis. *Int J Hosp Manag* 32:141–148
- Alonso-Almeida MM, Rodríguez-Antoñ JM, Rubio-Andrada L (2012) Reasons for implementing certified quality systems and impact on performance: an analysis of the hotel industry. *Serv Ind J* 32(12):919–936
- Arasli H (2002) Diagnosing whether northern Cyprus hotels are ready for TQM: an empirical analysis. *Total Qual Manag* 13(3):34–364
- Arawati A (2005) The structural linkages between TQM, product quality performance, and business performance: preliminary empirical study in electronics companies. *Singap Manag Rev* 27(1):87–105
- Beheshti HM, Lollar JG (2003) An Empirical Study of US SMEs Using TQM. *Total Qual Manag Bus Excell* 14(8):839–847
- Brown A, Van der Wiele T, Loughton K (1998) Smaller enterprises experiences with ISO 9000. *Int J Qual Reliab Manag* 15(3):273–285
- Byrne B (1994) *Structural equation modeling with EQS and EQS/Windows*. Basic concepts, applications and programming. Sage, Thousand Oaks
- Carmines EG, McIver JP (1981) Analyzing models with unobserved variables. In: Bohrnstedt GW, Borgatta EF (eds) *Social measurement: current issues*. Sage, Beverly Hills, pp 53–86
- Chen C, Kao Y (2010) Relationships between process quality, outcome quality, satisfaction, and behavioural intentions for online travel agencies: evidence from Taiwan. *Serv Ind J* 30(12):2081–2092
- Claver-Cortes E, Pereira-Moliner J, Tari JJ, Molina-Azorín JF (2008) TQM, managerial factors and performance in the Spanish hotel industry. *Ind Manag Data Syst* 108(2):228–244
- Conca FJ, Llopis J, Tari JJ (2004) Development of a measure to assess quality management in certified firms. *Eur J Oper Res* 156:683–697
- Cruickshank M (2003) Total quality management in the higher education sector: a literature review from an international and Australian perspective. *Total Qual Manag Bus Excell* 14(10):1159–1168
- Das A, Handfield RB, Calantone RJ, Ghosh S (2000) A contingent view of quality management: the impact of international competition on quality. *Decis Sci* 31:649–690
- Dawson P, Patrickson M (1991) Total quality management in the Australian banking industry. *Int J Qual Reliab Manag* 8(5):66–76
- Deming WE (1986) *Out of the crisis*. MIT Press, Cambridge
- Demirbag M, Koh SCL, Tatoglu E, Zaim S (2006) TQM and market orientations impact on SMEs' performance. *Ind Manag Data Syst* 106(8):1206–1228
- Eurostat (2008) Enterprises by size class-overview of SMEs in the UE. *Stat Focus* 31:1–8

-
- Flynn BB, Schroeder RG, Sakakibara S (1994) A framework for quality management research and associated measurement instrument. *J Oper Manag* 11:339–366
- Flynn BB, Schroeder RG, Sakakibara S (1995) The impact of quality management practices on performance and competitive advantage. *Decis Sci* 26(5):659–690
- Forza C, Flippini R (1998) TQM impact on quality conformance and customer satisfaction: a causal model. *Int J Prod Econ* 55:1–20
- Fotopoulos CB, Psomas EL (2009) The impact of soft and hard TQM elements on quality management results. *Int J Qual Reliab Manag* 26(2):150–163
- Gustafsson R, Klefsjö B, Berggren E, Wellemens UG (2001) Experiences from implementing ISO 9000 in small enterprises: a study of Swedish organizations. *TQM Mag* 13(4):232–246
- Hair JF, Anderson RE, Tatham RL, Black WC (1998) *Multivariate data analysis*, 5th edn. Prentice Hall International Inc., Upper Saddle River
- Ho DCK, Duffy VG, Shih HM (2001) Total quality management: an empirical test for mediation effect. *Int J Prod Res* 39:529–548
- Hu L, Bentler P (1999) Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Struct Equ Model* 6(1):1–55
- Ishikawa K (1985) *What is total quality control?* Prentice-Hall, Englewood Cliffs
- John G, Reve T (1982) The reliability and validity of key informant data from Dyadic relationship in marketing channels. *J Mark Res* 19:517–524
- Karim A, Smith AJR, Halgamuge SK, Islam MM (2007) A comparative study of manufacturing practices and performance variables. *Int J Prod Econ* 112(2):841–859
- Kaynak H (2003) The relationship between total quality management practices and their effects on firm performance. *J Oper Manag* 2(1):405–435
- Kumar V, Choinsé F, de Grosbois D, Kumar U (2009) Impact of TQM on company's performance. *Int J Qual Reliab Manag* 26(1):23–37
- Ladhari R (2010) Developing e-service quality scales: a literature review. *J Retail Consumer Serv* 17:464–477
- Lee D (2012) Implementation of quality progress in health care organizations. *Serv Busi* 6:387–404
- Magd H, Curry A (2003) An empirical analysis of management attitudes towards ISO 9001:2000 in Egypt. *TQM Mag* 15(6):381–390
- Malhorta NK (2004) *Marketing research and applied orientation*, 4th edn. Prentice Hall Inc., Englewood Cliffs
- Molina-Azorín JF, Tari JJ, Claver-Cortés E, López-Gamero MD (2009) Quality management, environmental management and firm performance: a review of empirical studies and issues of integration. *Int J Manag Rev* 11(2):197–222
- Morrison M, Terziowski M (2001) Quality management practices and the link to potential learning outcomes within the Australian retail sector. *Learn Organ* 8(3/4):176–185
- Nair A (2006) Meta-analysis of the relationship between quality management practices and firm performance implications for quality management theory development. *J Oper Manag* 24:948–975
- Naor M, Goldstein SM, Linderman KW, Schroeder RG (2008) The role of culture as driver of quality management and performance: infrastructure versus core quality practices. *Decis Sci* 39(4):671–702
- Navickienė R, Buciniene I (2007) Determination of core competencies in Lithuanian tourism enterprises. *Econ Manag* 12:613–618
- Nunnally JC (1978) *Psychometric theory*, 2nd edn.
- Poksinska B, Dahlgaard JJ (2003) ISO 9001: 2000 the emperor's new clothes. *Eur Qual* 10(3):58–69
- Prajogo DI, Brown A (2006) Approaches to adopting quality in SMEs and the impact on quality management practices and performance. *Total Qual Manag* 17(5):555–566
- Rodríguez-Antoñ JM, Alonso-Almeida MM (2011) Quality certification systems and their impact on employee satisfaction in services with high levels of customer contact. *Total Qual Manag Bus Excell* 22(2):145–157
- Rodríguez-Antoñ JM, Alonso-Almeida MM, Rubio-Andrada L (2011) Shedding more light on the impacts of quality certified systems in small service enterprises. A multidimensional analysis. *Afr J Bus Manag* 5(19):7911–7922
- Rubio-Andrada L, Alonso-Almeida MM, Rodríguez-Antoñ JM (2011) Motivations and impacts in the firm and stakeholders of quality certification: evidence from small and medium-sized service enterprises. *J TQM Bus Excell* 22(8):833–852
- Samson D, Terziowski M (1999) The relationship between total quality management practices and operational performance. *J Oper Manag* 17(4):393–409

-
- Saraph JV, Benson PG, Schroeder RG (1989) An instrument for measuring the critical factors of quality management. *Decis Sci* 20:810–829
- Schermelleh-Engel K, Moosbrugger H, Müller H (2003) Evaluating the fit of structural equation models: tests of significance and descriptive Goodness-of-Fit measures. *Psychol Res* 8(2):23–74
- Singh RK, Garg KS, Deshmukh SG (2008) Strategy development by SMEs for competitiveness: a review. *Benchmarking* 15(5):525–547
- Sousa S, Aspinwall E (2010) Development of a performance measurement framework for SMEs. *Total Qual Manag* 21(5):475–501
- Susskind AM, Kaemar MK, Borhgrevink CP (2007) How organizational standards and coworker support improve restaurant service. *Cornell Hotel Restaur Adm Q* 48(4):370–384
- Tari' JJ, Claver-Cortes E, Pereira-Moliner J, Molina Azorin JF (2009) Is it worthwhile to be a quality certified hotel? Evidence from Spain. *Int J Qual Reliab Manag* 26(9):850–864
- Terlaak A, King AA (2006) The effect of certification with the ISO 9000 quality management standard: a signaling approach. *J Econ Behav Organ* 60(4):579–602
- Tseng W, Do'nyei Z, Schmitt N (2006) A new approach to assessing strategic learning: the case of self-regulation in vocabulary acquisition. *Appl Linguistics* 27(1):78–102
- Visauta B (1998) *Ana' lisis estadí'stico con SPSS para windows. Volumen II estadí'stica multivariante*. McGraw Hill, Madrid
- Wolfenbarger M, Gilly M (2003) ETailQ: dimensionalizing, measuring and predictingetail quality. *J Retail* 79(3):183–198
- WTO (2011) UNWTO World Tourism Barometer. www.unwto.org. Accessed 8 Aug 2011
- Yee RWY, Yeung ACL, Cheng TCE (2010) An empirical study of employee loyalty, service quality and firm performance in the service industry. *Int J Prod Econ* 124(1):109–120
- Yong J, Wilkinson A (2003) From Kyoto to Singapore: the adoption of quality management in the services sector in Singapore. *Total Qual Manag Bus Excell* 14(8):849–873
- Zhao X, Yeung Andy CL, Lee TS (2008) Quality management and organizational context in selected service industries of China. *J Oper Manag* 22(6):575–587

