

The quality of the quality consultants - An empirical study

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ABSTRACT

This paper aims to assess the quality of the service offered by quality consultancies. To this end, an empirical study was carried out on Spanish companies that had used consultants when introducing their quality system in keeping with the ISO 9000 standards. Company representatives were asked about their previous expectations of the service and about the real benefits obtained from the consultants. This research study establishes a series of indicators designed to measure the input of the consultant in setting up the quality system. A gap was detected between the previous expectations of the service and the actual benefits obtained therefrom.

Keywords: ISO 9000, Quality Consultants, Servqual, Quality Service, Empirical Study

1.0 Introduction

In recent years, the academic field has carried out much in-depth, empirical research into the phenomenon of the introduction of ISO 9000 quality systems at national and international level. Among other considerations, these research studies have attempted to analyse why companies decide to introduce ISO 9000, along with the difficulties involved and the benefits derived therefrom.

All these studies confirm the importance of the consultant services engaged by companies in order to introduce the new ruling, but the actual influence of these services has not been fully analysed. Nevertheless, obvious questions on the subject spring to mind: What contributions has the consultant services brought to companies that are involved in introducing ISO 9000? Has the consultant service proved beneficial? Have the consultants lived up to the expectations of their clients? What benefits are involved?

These questions are obviously of interest to the companies involved but also to consultants eager to determine the degree of client satisfaction, on which their very future depends. For all the above reasons, and in order to

resolve the issues thereby raised, the present empirical study was carried out on companies that have used consultancy services to introduce their ISO 9000 quality systems.

2.0 Antecedents

Many studies mention the importance of the support lent by consultant services for the introduction of the ruling. In this country, previous research showed that approximately 80% of 286 Spanish companies surveyed use external consultant services (Casadesús, 1998).

In like manner, some research studies mention the relative importance of companies that have used external consultancies compared to those that have not (Vloeberghs and Bellens, 1996) but no study has assessed the real quality of the services offered by the consultancies or whether this service was really what the client company expected. Some considerations on the contributions of consultant firms can be found (including factors such as employee training, information and motivation), but no studies have been made on issues of such crucial interest as the following: to what extent does the engagement of a consultant service provide benefits to the firm? Can these benefits be measured? Are the benefits of an intangible nature that is hard to express in monetary terms? This is a complex issue indeed, as has already been pointed out in the literature on the subject (Nachum, 1999), where some authors have put forward their own methodology for calculating the yield from an investment in consultation services (Phillips, 2000).

The present paper aims to summarise the main conclusions drawn from a research study that analyses the expectations and fulfilment of expectations among client companies that have used consultancy services to introduce ISO 9000 quality assurance systems.

3.0 Methodology

An empirical research study has been recently carried out with the aim of analysing and attempting to provide an answer to these questions. A sample of companies was taken that had used consultant services for implementing quality assurance systems in keeping with the ISO 9000 standards on the subject. This model or type of quality management was chosen because it is undoubtedly the most widely used in Spain.. In more specific terms, the research was carried out within the industrial area of Catalonia and focuses on companies that were certified in 1997, 1998 and 1999.

The companies in the sample were sent a questionnaire, adapted from the widespread SERVQUAL model drawn up by Zeithaml et al. (1993), for consulting services in Spain. This is a model whereby the quality of a given service is assessed on the basis of the expectations and perceptions of the clients.

In short, the questionnaire was designed to gather information about the quality of the consultancy service as perceived by companies that engaged the service to introduce ISO 9000 and about the expectations of this type of service that were previously held by the company. The questionnaire was delivered via ordinary mail to 483 managers who are responsible for ISO 9000. The 87 valid questionnaires returned represent a response rate of 18%, but only 65 of these came from companies that had used consultancies to introduce their quality system.

4.0 Perceived quality of the quality consultant services

Zeithaml et al. (1993) distinguish five different dimensions that define the quality of a given service:

Tangibles: appearance of the physical facilities, equipment, personnel and communication equipment.

Reliability: ability to perform the promised service dependably and accurately.

Responsiveness: willingness to help clients and provide prompt service.

Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence

Empathy: caring, individualised attention the firm offers its clients.

The quality of the service as perceived by clients will be derived from comparing their prior expectations of the service with their appreciation of the actual service provided, in such a way that a given service will be considered excellent for the client when the benefit exceeds prior expectations.

In order to determine the perceived quality, a questionnaire extracted mainly from the SERVQUAL model was used, with a total of 14 questions in all. It should be noted, however, that we adapted these questions to our circumstances, following these studies: Samson and Parker (1994) into the engineering consultancy industry in Australia; Domingo Ribeiro (1996) into the consultancy sector in Valencia; Casadesús (1998) of the introduction of ISO 9000 into Catalonia; and Escanciano (2000) on quality systems in Spain.

Table 1 shows the grouping of the different questions or items in each of the dimensions of Zeithaml model. The reliability of the data was examined for the 14 perception-item using the Alpha of Cronbach: the standard value is 0.9355, and the 14 Alphas obtained when one of the items is deleted are all between 0.9271 and 0.9356. The data collected during field work referring to the quality of the consultancy services as perceived by the companies was analysed following the principal components method. In this way, after the varimax rotation method was applied, only three factors with eigenvalues greater than 1 were obtained. These three factors combine to explain the 72.3% of the total of the variance.

Factor	Description of items
1: Tangibles	Personal appearance of staff.
	Visual attractiveness of equipment in the consultancy.
	Client-friendly software.
2: Reliability	Ability to perform the promised service
	Fulfilment of commitments within the established time limits
	Co-ordination between different company departments
	Detailed specification of aims and time limits
3: Responsiveness	Willingness to help clients
	Enthusiasm and involvement in the project.
4: Assurance	Ability to inspire trust and confidence
	Professional knowledge and expertise of consultants
5: Empathy	Company concern for the best interests of the client
	Communication and interpersonal skills of the consultant
	Client satisfaction with consultation

Table 1. Distribution of the 14 items surveyed in relation to the different dimensions of the model proposed by Zeithaml et al. (1993)

On the other hand, it can be deduced from the grouping of questions about perceived quality suggested by the factor analysis that a relative similitude exists to the generic model by Zeithaml et al. (1993). Table 2 shows the dimensions of the Zeithaml et al. model in the column headings. The factors determined by the factor analysis figure in the rows underneath.

	Tangibles			Reliability				Responsiveness		Assurance		Empathy		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Factor 1				X				X	X	X	X	X	X	X
Factor 2					X	X	X							
Factor 3	X	X	X											

Table 2. High saturations of the three factors with the principal component method with varimax

The three factors that define the perceived quality of ISO 9000 consultancy service are the following:

- *Factor 1: Personal quality of the consultant . This factor refers to a set of aspects such as the consultant's knowledge of the ruling, involvement of the consultant in the client company's interests, care and individualised attention given by the consultant to the company, the consultant's willingness to help, and the climate of trust and confidence that is transmitted to the client.*
- *Factor 2: Scheduling. The scheduling factor represents the skills of the consultants in completing the work within the agreed time periods. It refers thus to the result of the service, i.e. the obtaining of the certificate within the established budget and time period. This factor should be a sine qua non condition for good service because it is assumed that the providers of a service must fulfil their promises.*
- *Factor 3: Tangibles. This last factor refers to the office appearance, to the equipment used therein and even to the personal appearance of the consultants. The perception detected in this factor is rated at 3.62. A first conclusion to be drawn from the results is that the quality of the service is good. Several additional factors also exist to bear up this statement.*

It must be borne in mind here that 55% of the companies have in fact returned to the same consultant after receiving their certificate (not necessarily for quality-related tasks). This is a high index considering that the specific purpose of the introduction process is fulfilled on obtaining certification. If the companies continue to use the consultant after this point, it would seem to indicate a high degree of satisfaction.

5.0 Expectations of service given by quality consultants

Company expectations of the services given by consultants was researched using the same methodology and analysing the same aspects and equivalent sets of questions to those already used to assess perceived quality in the same services. From the results obtained, it can be observed that the most important of the five dimensions defined by the Zeithaml et al. model (1993), is considered to be "Reliability" (in which the consultant delivers the agreed service in an accurate and trustworthy manner). From a total of 100 points, "Reliability" received 28 points whereas "Tangibles" were only awarded 12 points. However, this same "Reliability" dimension, most closely related to the "Scheduling" factor, coincides exactly with the lowest rated factor in terms of service quality. This points to an urgent need for the consultants to improve this factor.

On quantifying the level of quality expected from these services, using another set of fourteen questions equivalent to the previous set (on the same scale), the arithmetic mean is found to be 4.35. Thus, expectations of the service are much higher than perceived quality of the same. Analysing the gap between expected quality and the quality it can be observed from Figure 1 that the gap is greatest in the "Scheduling" factor, and least significant in the "Tangibles" factor.

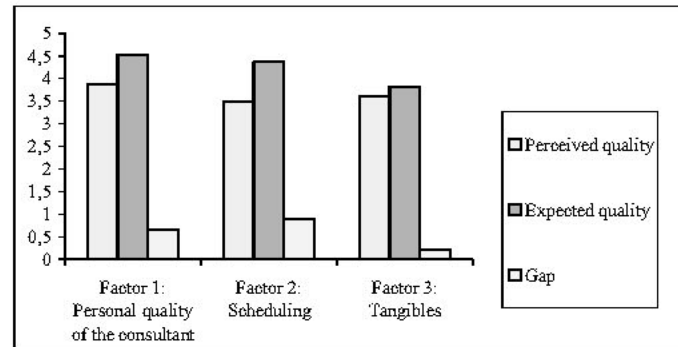


Figure 1: Perceived quality, expected quality and the gap between expectations and quality in each of the three factors used to define service quality.

We can conclude this part of the analysis by stating that although the companies hold a good opinion of the quality of the advisory services received, prior expectations of the same were considerably higher. This conclusion shows that there is still room for improvement of the service offered by quality consultants.

6.0 Relationship between perceived quality and benefits provided by the consultant

The next step consisted in establishing the relationship between perceived quality and the benefits obtained from using the service of a consultant. This relationship was analysed in two different ways: from questions eliciting an overall assessment on quality and benefits and from the analysis of the relationship between the variables of mean quality and mean benefits calculated as a mean from the corresponding sets of questions.

The two questions crossed are “make a global evaluation of the consultant” and “make a global evaluation of the benefits provided by the consultant”. In this respect, the Pearson chi-square statistics and the likelihood ratio indicate the existence of a relationship. The association measurements that are normally used on an ordinal scale also detect a relationship between the different variables. A log-linear model was set up to explain the frequencies in the contingency table cells and the saturated model was found to be the most suitable for the purpose. To sum up, it has been statistically shown that the variables have a clear positive correlation. The higher the perceived quality, the higher the benefits, and vice-versa.

On the other hand, a linear regression was made between two variables that were calculated as the mean from the set of questions on perception and the mean from the questions on benefits. The analysis indicates that the variables are correlated, although the Pearson correlation coefficient is 0.588, with zero significance level. Leaving the mean perceived benefit as an independent variable, the linear regression has been calculated as:

$$\text{Mean Arithmetic Benefit} = 0.456 + 0.702 * \text{Mean Perceived Quality}$$

The slope of the regression is positive, but less than the unit. A unitary increase in quality does not result in a unitary increase in benefits, but only in an increase of 0.7 points. The regression coefficient associated with the dependent variable obtained a zero significance level. In summary, the analyses point to the existence of a significant relationship between the efforts of the consultant to provide a better quality service and the client's perception of improved benefits.

7.0 Conclusions

One of the characteristics that differentiates a service from a product or material goods is that the service is sold first and later "manufactured". Moreover, the production and consumption of the service are simultaneous, i.e. a service cannot be stored. Thus, the overall assessment of the client springs from two sources: the end result of the service and the very process by which the service is provided (Berry, 1995). For these reasons, the assessment of the quality of a service is not an easy task and, as pointed out by Gorth and Dye (1999), the providers of a service should bear in mind this dual aspect by which a service is appraised. They should therefore be able to recognise the different degrees by which the service itself and the provision of the service are being assessed. Despite this, we consider it important to assess these services from the point of view of the client company, as has been done in the present research study.

From all this, we can draw the overall conclusion that the ISO 9000 advisory services are favourably regarded on the whole. However, it should also be noted that clients expect an even higher quality. In short, the client companies expect a higher quality from the service than that which is actually provided.

Finally, it has been shown that the concept of quality can be broken down into three factors, one of which is the skill of the consultant in introducing the ruling within the agreed time period, and this is the aspect of the service that obtains the poorest quality rating. This factor is closely linked to the reliability factor, which is considered to be of the highest importance by the client companies. For this reason, the most reiterated request for improvement by the clients is that the consultants perform the required tasks within the agreed time periods.

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