

THE ROLE OF RELATIONAL FACTORS IN THE EVALUATION OF A PROFESSIONAL SERVICE AND THE MAINTENANCE OF A LONG-TERM RELATIONSHIP WITH THE SERVICE PROVIDER¹

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ABSTRACT

This study presents the results of empirical research on the role of three relational factors (customer participation, the commitment of the firm and service delivery by the project manager) in the evaluation of consulting engineering services and the maintenance of a long-term relationship with the service provider.

INTRODUCTION

The eighties brought major economic and technological changes which had a tremendous impact on the marketing of services rendered to organizations (Berry, 1995). On the one hand, enterprises have reacted to these rapid technological changes and increasingly fierce competition by relying more and more

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heavily on the services of specialized firms or on developing associations with partners with complementary expertise. On the other hand, the information technologies have enabled enterprises to integrate their operations to a degree that would have been impossible in the past. Finally, the growth of the services sector and its importance in marketing since the mid-1980s has resulted in a better understanding of the mutual advantages (profit, value, stability) associated with the maintenance of close relationships between service provider and customer (Berry, 1995). It is not surprising, therefore, that there is an increase in the popularity of relational marketing among both practitioners and academicians (Bitner, 1995; Grönroos, 1995, 1994; Berry, 1995, 1983; Dwyer, Schurr and Oh, 1987; Jackson, 1985). In fact, understanding how to form, maintain and improve relations between customer and service provider has become an essential strategic element in the success of the service enterprise.

PROBLEM

We have over the years developed a good understanding of the components of service that affect perceptions of quality and satisfaction, and we know how to measure the performance of a service transaction fairly accurately. We also recognize that relationships between customer and service provider are built up one transaction at a time. However, our understanding of the role of each transaction in the maintenance of a long-term relationship remains limited.

This is a particularly serious deficiency for the providers of professional services to organizations, because the transactions involved are often complex and costly in terms of time and effort, while at the same time being of critical importance to the customer. What is more, each transaction is important in the maintenance of the long-term relationship. The manager of professional services to organizations must therefore understand the impact of service delivery on the life of the

customer-service provider relationship. The objective of this research is to explore the links among three relational factors involved during professional service delivery, and their impact on the perceptions of the customer in terms of quality, satisfaction and orientation in the long term with respect to the customer's relationship with the service provider.

This study focuses on professional technical services rendered to organizations, an important sector of the economy on which very few empirical studies have been carried out to date (e.g. Boström, 1995; Lapierre, 1993; Lapierre, Filiatrault and Chebat, 1995). The very large majority of the studies conducted have addressed mass market services (Alreck, 1994; Bolton and Drew, 1991; Brown, Churchill and Peter, 1993). Our choice is justified by the fact that previous work has underlined the critical role of the customer-professional relationship (Alreck, 1994; File and Prince, 1994) which can be explained by the complex nature of a service and the difficulty often experienced by the customer in evaluating it. Moreover, even though the service is critically important to the customer, the expertise and ability of the customer to understand the service can also have an impact on the customer's loyalty to a service provider.

CONCEPTUAL FRAMEWORK

Link between quality and satisfaction

Most of the service evaluation models have stressed the links between quality as perceived by the customer and the satisfaction of the customer (Gotlieb, Grewal and Brown, 1994; Iacobucci, Grayson and Ostrom, 1994; Cronin and Taylor, 1992; Bolton and Drew, 1991). In general, all are agreed that the evaluation of quality is a cognitive judgement which is largely subjective (Iacobucci, Grayson and Ostrom, 1994). Quality is affected by the process of using the service, and also by the cost of the service, the image of the enterprise and by publicity

(Dodds, Monroe and Grewal, 1991). Satisfaction is also affected by the customer's utilization of the service, but derives from a more emotional judgement which is associated with the customer's own values (Iacobucci, Grayson and Ostrom, 1994). Although some contradictory hypotheses have been verified, the majority of empirical studies have shown that quality is antecedent to satisfaction (Lapierre, Filiatrault and Chebat, 1996; Cronin and Taylor, 1992; Woodside, Frey and Daly, 1989).

Link between satisfaction and the long-term relationship

In general, greater satisfaction on the part of the customer should generate customer loyalty, while a dissatisfied customer would be expected to end the relationship. Storbacka, Strandvik and Grönroos (1994), however, suggest that such a statement is sometimes too simplistic. Two other aspects must be taken into consideration: the links between customer and enterprise, and the commitment of the customer. Many customer-enterprise links exist (legal, economic, technological, geographical, temporal, social, cultural and psychological). The effects of these links can be felt in the relationship in a longitudinal fashion and may only be observed over the life of a number of episodes. The links also affect the strength of the relationship, and may do so independently of the performance of the service. For these reasons, we have not included customer-enterprise links in this study. The commitment of the customer, the second aspect considered by Storbacka et al. (1994), is defined as the attitude or the intentions of the customer with respect to the relationship with the service provider. Commitment is distinct from loyalty or the strength of the relationship in that each of the latter is operationalized as an observable behavior in time. Commitment, on the other hand, represents the degree to which a customer is willing to adapt to a partner in a relationship. Commitment is influenced by customer satisfaction and the customer's perception of the value of the relationship. This concept is very similar to the concept of long-term orientation which is found in the literature on buyer-seller relationships

(Ganesan, 1994). In the buyer-seller context, long-term orientation refers to the intentions of the customer with respect to maintaining a long-term relationship with the supplier. It represents the degree to which a customer is willing to make an effort or a sacrifice in order to maintain the relationship. For the purposes of this study, we will integrate these concepts, and use the term "long-term commitment". Briefly, the three variables that will be retained in this study are quality, satisfaction and long-term commitment. The first two reflect the performance of the provider of the professional service, while the third represents the attitude of the customer with respect to developing a long-term relationship with a consulting engineering firm.

We will now present the relational factors that can have an influence on the three variables cited above during delivery of the service.

Relational factors

Because of their intrinsic character, services generate interactions between customer and service provider. Each interaction represents an opportunity for the establishment of a long-term relationship between the two entities. In this study, we will retain only those factors that have a role to play in evaluating performance (quality and satisfaction) and in the evolution of the relationship during these interactions. The choice of relational factors is based on the results of exploratory research on the management of relationships in the context of professional services rendered to organizations (Filiatrault and Lapierre, 1996) and of recent discussions on the role of confidence in the relationship (Berry, 1995).

Customer participation and service delivery by the project manager

The Filiatrault and Lapierre (1996) study focuses on the identification, by the managers of consulting engineering firms, of the various phases of service delivery and on the factors that influence it during these phases. What we find is that the participation of the customer and the delivery of the service by the project manager are two factors which affect the success of a service.

Customer participation favors better understanding of the customer's needs on the part of the consulting firm and greater understanding of the advantages to be gained, as well as a stronger feeling of being part of the decisions being taken on the customer's behalf (Davis and Heineke, 1994; Alrek, 1994; Kelley, Donnelly and Skinner, 1990). These results are in agreement with the conclusions of studies on EDP services (Barki and Hartwick, 1994; McKeen, Guimaraes and Wetherbe, 1994) and on telecommunications (Sioukas, 1995; Lapierre, 1995) with respect to the critical role of customer participation in the success of a project, both in terms of quality and of satisfaction.

Service delivery by the project manager also plays a critical role (Lapierre, 1993). Customers are particularly intolerant of the incompetence of managers (Filiatrault and Lapierre, 1996), and the quality of a service may be seriously compromised by a manager who has little in the way of technical or interpersonal skills. At the same time, the manager is the key contact person in the management of the relationship with the customer. The manager is also the individual who informs the customer when there are problems, and who thus enables the consulting engineering firm to correct the problem if they make an error. As a result, the project manager can have an influence on the customer's perception of quality, level of satisfaction and intention of maintaining a long-term relationship with the consulting engineering firm.

The devotion of the firm

Confidence is an aspect of the relationship which is increasingly cited as being a variable which influences the willingness of a customer to maintain a relationship with a supplier (Berry, 1995). In effect, the greatest source of uncertainty for an enterprise which uses external services is ensuring that the supplier's employees will place the interests of their customer before those of their own enterprise. This uncertainty generates costs in terms of monitoring and interface management (Pilling, Corsby and Jackson, 1994). If a customer has confidence in a supplier, then this customer can capitalize on the supplier's expertise without incurring the costs associated with the use of external resources. In this case, the notion of confidence can be considered as being antecedent to the customer's commitment to a long-term relationship. Because confidence is so important, we must identify a relational factor which can impact positively on the customer's confidence. The variable selected as the third relational factor is the firm's devotion. By "devotion", we mean the attitude shown by the supplier towards the customer as measured by the effort, sacrifices and professionalism regarded by the supplier as necessary to meet the customer's objectives. This variable is inspired by the literature on supplier-distributor relationships, as operationalized by Oliver and Swan (1989). Now, since consulting engineering services are by nature intangible and their benefits difficult to evaluate objectively, the devotion of the firm should also influence the customer's perception of the quality of the service and customer satisfaction.

METHODOLOGY

This study was conducted among organizational customers of consulting engineering service providers. A pre-test was carried out among 40 individuals, of whom 20 were chief operating officers (COOs) of organizations using consulting engineering services, 2 were representatives of engineering associations and

18 were fourth-year students finishing their undergraduate studies in engineering.

The sample, which included 1230 organizations in the manufacturing, services and public sectors, was drawn from the Dun and Bradstreet data bank. The analysis unit was the chief operating officer (COO). Each received a direct-response letter, which gave a brief description of the project and its objectives, and a copy of the questionnaire. The respondents were surveyed on the evaluation of consulting engineering services delivered under the terms of the last contract awarded. A follow-up was conducted two weeks after the first mailing. A total of 342 questionnaires were received, for a response rate of 28%.

MEASURES

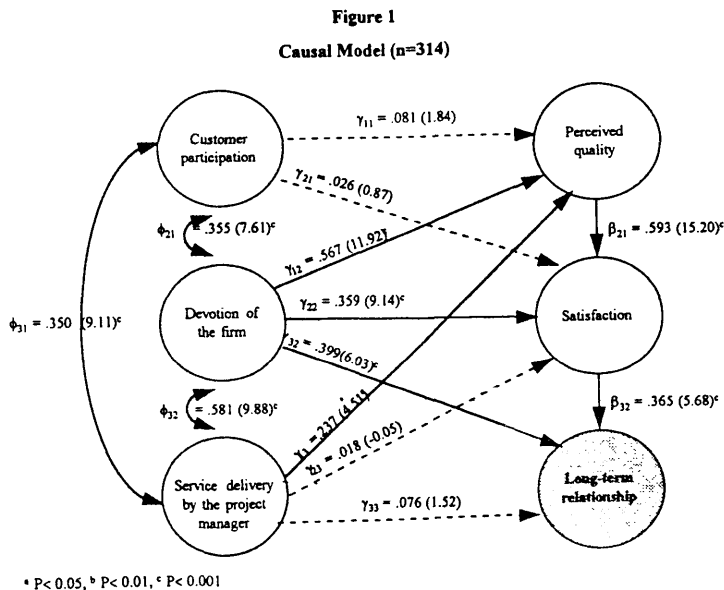
The six variables of the structural model were:

- customer participation,
- devotion of the firm,
- service delivery by the project manager,
- perceived quality,
- satisfaction, and
- the long-term relationship.

With the exception of the *service delivery by the project manager* variable, all the other variables were tested and validated in other contexts. Since three of the scales used in this research were translated and adapted (*participation of the customer in decisions*, *devotion of the firm* and *the long-term relationship*), and the scale on *service delivery by the project manager* was developed for this research, we validated these measures in accordance with the procedures suggested by Bagozzi (1994) and Venkatraman (1985).

STRUCTURAL MODEL AND HYPOTHESES

Figure 1 presents the model and the hypotheses which were tested. Significant links between the latent variables are indicated by solid lines, and non-significant links are indicated by dotted lines.



The procedures used to specify the model are those recommended by Jöreskog and Sörbom (1989): the latent variables are represented by a compound index calculated using the items of each multidimensional scale. These authors also recommend fixing the factorial scores to 1. The estimates of the parameters and the X^2 statistic were calculated by the maximum likelihood method on the covariance matrix.

The results are presented in Table 1. The indices suggest a good quality of the adjustment of the model ($X^2 3.39 (df 2)$, $p = .18$).

Table 1
Causal Model

(1) Links	(2) Standardized Coefficient	(3) T		
Exogenous				
γ_{11}	0.081	1.84	R2 η_1	0.632
γ_{12}	0.567	11.92 ^c	R2 η_2	0.829
γ_{13}	0.237	4.51 ^c	R2 η_3	0.616
γ_{21}	0.026	0.87		
γ_{22}	0.359	9.14 ^c	X ²	3.399
γ_{23}	-0.018	-0.05		
γ_{32}	0.399	6.03 ^c	dF	2
γ_{33}	0.076	1.52	P	0.183
ϕ_{21}	0.355	7.61 ^c	GFI	0.996
ϕ_{31}	0.350	9.11 ^c	AGFI	0.962
ϕ_{32}	0.581	9.88 ^c	RMR	0.014
Endogenous			CFI	0.999
β_{21}	0.593	15.20 ^c	Δ	0.998
β_{32}	0.365	5.68 ^c		

^a $P < 0.05$, ^b $P < 0.01$, ^c $P < 0.001$

As expected, *devotion of the firm* is related to *quality*, *satisfaction* and *the long-term relationship* in a positive way. The only significant link with *service delivery by the project manager* is *quality*. Contrary to the hypotheses, *service delivery by the project manager* is not associated in any significant way with *satisfaction* or *the long-term relationship*. Similarly, *customer participation in decisions* is not related in any significant way to *quality* and *satisfaction*. As far as the dependent variables are concerned, and as expected, *quality* has a highly significant direct relation to *satisfaction*. Similarly, *satisfaction* has a significant direct relation, although less strong, to *the long-term*

relationship. Finally, the three relational factors are correlated; however, the correlations are more significant between *devotion of the firm* and *service delivery by the project manager*, and between *customer participation* and *devotion of the firm*.

As indicated in Table 1, 63.2% of the variance in quality, 82.9% of the variance in satisfaction and 61.6% of the variance in the long-term relationship are explained by the model. The capacity of the model to recreate the sample of the covariance matrix is also shown by the other indices reported in Table 1.

DISCUSSION AND CONCLUSION

These results show how the organizational customers of consulting engineering firms integrate three relational factors in the evaluation of important concepts such as quality, satisfaction and the long-term relationship. We find that devotion is the most important relational factor. In their evaluation of quality, satisfaction and the potential for a long-term relationship, customers favored the aspects associated with the consulting engineering firm with which they did business under the terms of the last contract (expenditure of time and effort, and their knowledge of the project, major investment and professional effort). These aspects were considered more important than their own participation in decisions or the technical and interpersonal skills of the project manager.

Furthermore, these results show that *service delivery by the project manager* has only an indirect influence on *the long-term relationship*; that is, this factor only influences the long-term relationship through quality and satisfaction. The absence of links between the performance variables and the participation of the customer can be explained by the fact that the participants in the study were the chief operating officers (COOs) of large enterprises. The size of the enterprises surveyed is clearly a factor which colors the results relating to

service delivery by the project manager and customer participation.

Finally, two interesting avenues for research would merit more in-depth consideration. First, only three relational factors were explored when we know that the number could be very much higher (Anderson, 1995; Wilson, 1995). Second, considering the quite unexpected results associated with the principal actors in consulting engineering projects (customer and project manager), it would be interesting to test which characteristics of customers and service providers would enable identification of segments where the relationships between the variables studied behave differently. We hypothesize, for example, that the participation of the customer would be different if we were dealing with the public sector rather than the private sector. Also, the size of consulting engineering firms might make a difference in the impact of the project manager. Finally, the existence of an engineering department might mean that customers would value their participation in technical discussions during the project more highly. We must, however, emphasize that the results present the perceptions of a single group of actors - chief operating officers representing organizational customers - and that the perception of other individuals involved in the projects may be different.

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