Antecedents and Consequences of Service Quality in Business-to-Business Services

MARTIN WETZELS
KO DE RUYTER
JOS LEMMINK

In the services marketing literature, the main focus has been on consumer services, leaving business-to-business services as a relatively unexplored area of research. Industrial services can be divided into two broad groups (Boyt and Harvey 1997): (a) maintenance and repair services and (b) business advisory services or professional services. This dichotomy essentially is related to the difference between goods-related or customer services and “pure” services. Professional services are related to core business elements of service providers and as such seem to be important. At the same time, it has been argued that customer services may be the single most important competitive factor in business-to-business environments (Clark 1993). Both types of business services, therefore, seem to be important and will be taken into account in this chapter.

One of the key issues in services marketing research to date has been the search for an in-depth understanding of the measurement and management of service quality. Here, the dominant point of view on quality has been customer perceptions of service provider performance. Although a relatively large body of knowledge has accumulated with regard to consumer services, only a few studies have taken the specific characteristics shared by business-to-business services into account. It seems relevant, therefore, to discuss the point of reference that customers take in their quality assessment of business services. A second key issue in the research literature is the contribution of service quality to the establishment and maintenance of long-term relationships. The exact nature of the (positive) impact of service quality on customer loyalty has remained somewhat equivocal.
Figure 20.1 Overview of the Structure of This Chapter

With the emergence of the relationship paradigm in services marketing, a number of other factors or "relationship building blocks" have been advanced that may account for the development and maintenance of customer loyalty. Central to both issues is the role of the customer service employee. Because relationships are established between people and because customer perceptions of employee attitudes and behavior in service encounters are the basis of service quality measurement systems, it has been concluded that customer-contact service personnel are essential to the ultimate economic success of the service organization (Hartline and Ferrell 1996). Determinants of the performance of service employees therefore may be considered a third key issue.

In this chapter we propose to discuss the aforementioned issues from the perspective of business-to-business services. First of all, we discuss the focal construct of service quality in business services. Second, we examine a number of factors that may affect the ability of service employees to deliver service quality. Finally, we explore the relative impact of service quality on long-term relationships in business-to-business markets, taking into account relationship as well as business market characteristics. Figure 20.1 provides an overview of the structure of this chapter, linking organizational antecedents to customer relationships in business-to-business services via the central role of the customer-contact employee.

SERVICES QUALITY IN BUSINESS-TO-BUSINESS SERVICES

The most widely used approach to measuring service quality is that of a customer's overall judgment of the service experience, based on a number of dimensions. The SERVQUAL instrument, which identifies five service quality dimensions, is the most widely used exponent of such an approach, particularly
in relation to consumer services. Although several successful applications of the SERVQUAL model have been reported in relation to business services, a number of authors have presented alternative, customer-based service quality models that have been developed specifically for the evaluation of business services. The point taken is that in relation to consumer services, business services are characterized by relatively high degrees of intangibility, customization, and customer participation.

Szamadi (1993), for instance, proposes a three-dimensional service quality model for business services that makes a distinction between “hard quality,” “soft quality,” and “outcome quality.” The hard quality dimension refers to what is actually received by the customer from the service provider (e.g., a concept commercial, a market research report). It is related to the technical aspects of the services, which in most cases can be objectively measured. The soft quality dimension is related to the way in which the service is delivered by the employee(s) of the service provider (e.g., the after-sales technician). It is strongly related to the attitude and behavior of service employees. Both dimensions pertain to the quality of the service delivery process in contrast with the outcome quality dimension, which refers to the question whether the outcome of the service process is in line with the objectives of the customer. Szamadi (1993) argues that outcome quality is different because it is susceptible to matters that are beyond the service provider’s control. For instance, a business consultant may come up with a report that meets both hard and soft quality standards, but the actual implementation may not always result in the desired results.

Other authors have suggested further nuances in the outcome quality concept (e.g., Halinen 1994), making a distinction between immediate and ultimate outcomes based on an inherent time perspective. The former reflects the fact that a solution to a client-specific problem is offered, whereas the latter is concerned with the consequences of the solution after it has been implemented. The business consultant’s advice may provide the right solution to a firm’s problem but it may not necessarily result in expected turnover. In the literature on business services quality, the element of the outcome is more emphasized. This seems consistent with the alleged importance of long-term relationships in business markets. Central to the process dimensions, however, is the performance of the service employee. This is an issue to which we turn in the next section.

ROLE STRESS AND SERVICE QUALITY

Service employees fulfill a boundary spanning role and form the continuous link between the organization and the customer. Furthermore, the performance of the customer-contact service employees is essential to the economic success of the organization. In many business-to-business settings, customer-contact service employees are called on to perform innovative and creative activities to solve customers’ problems and deliver service quality. Again, this is due to the relatively high degrees of intangibility, customization, and customer participation in busi-
ness-to-business services. These characteristics may be in sharp contrast with rules, regulations, and targets that have been designed by the service company. As a result, service employees (particularly in business-to-business settings) are prone to role stress, which may in turn affect their ability to deliver service quality. This is an aspect that we will discuss in some detail by developing a conceptual framework of antecedents and consequences of service employee role stress.

Classical role theory posits that each individual performs a certain role in an organization. This role cannot be seen in isolation but is related to other roles in the organization. Other individuals, organizational policies, and the demands and needs of customers attempt to exert influences on employees by communicating role pressures or role expectations. This may result in role conflict and role ambiguity. Role conflict has been defined as "the simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other" (Kahn et al. 1964, p. 19). For service employees, expectations of the organization, managers, or coworkers stressing operational efficiency may clash with the demands of customers who want problem resolution and/or satisfaction. Role ambiguity occurs when a person does not have access to sufficient and useful information to perform his or her role as a service employee adequately. Role ambiguity may result from the fact that the service employee is uncertain about supervisory expectations or from the fact that he or she does not know how performance will be evaluated and rewarded. We will now examine a number of antecedents and consequences of service employee role stress and develop a conceptual framework.

In many organizations, rules and regulations or formalization is used to govern employee attitudes and behavior. For instance, in an after-sales setting it is frequently specified how many customers should be served within a certain time frame. We assume that formalization will negatively affect role ambiguity and positively affect role conflict. Formalization will create clarity regarding what the organization, management, and colleagues expect from the service employee and thus reduce role ambiguity. Role conflict, on the other hand, may be increased by limiting the discretionary power of the service employee. The service employee is required to work "by the rules," and the rules might not necessarily reflect the customer's point of view.

In contrast, many service organizations nowadays are experimenting with the concept of empowerment. Empowerment reflects providing the service employee with both competence and autonomy in delivering service quality. In relation to role stress, it seems plausible that both employee competence and autonomy will reduce role stress.

In addition to formalization and empowerment, which are often specified in terms of organizational policies, it can be argued that management behavior may also affect role stress experienced by service providers. We argue that leadership behavior, in terms of both initiating structure and leader consideration, will decrease employee role stress. Leader initiating structure pertains to the way in which a manager guides employees, provides explanations, monitors efficiency, and stimulates employees to perform better. This dimension explicitly focuses on goal/task-specific issues. Leadership consideration is how management supports
the social and interpersonal relationships of workers (Jackson and Schuler 1985). Leadership consideration is thus primarily oriented toward creating good relationships with employees.

Finally, a supportive working environment depends not only on the behavior and attitude of supervisors but also on the concern and dedication of coworkers. A group-level attribute that has been identified as an antecedent of role stress in organizations in the literature is group cohesiveness (Griffith 1988). Group cohesiveness has been defined as "the desire of individuals to maintain their membership in a group" (Lott and Lott 1968, p. 260). As Kahn and Quinn (1970) argue, the psychological support of direct colleagues may help to decrease the strain of occupational roles. The underlying assumption here is that groups in which close ties between group members exist are more supportive of individual employees than noncohesive groups. Employees in cohesive groups are more likely to communicate with coworkers about problems they experience with respect to role ambiguity and role conflict.

In addition to the aforementioned antecedents, a number of consequences of service employee role stress have been identified. Job satisfaction has often been associated with lower levels of role stress (Babin and Boles 1996). Job satisfaction represents the attitude or knowledge structure that encapsulates workers' feelings and beliefs about the nature of their job and the organization (George and Jones 1996). The higher the level of role stress, the less satisfied a service employee will be. Furthermore, it seems unlikely that unhappy employees will be able or motivated to make customers happy. Alternatively, several authors have suggested that there is a positive relationship between job satisfaction and job performance of service employees in terms of service quality, in terms of both outcome and process quality. An overview of the relationships between role stress (conflict and ambiguity) and its antecedents and consequences is given in Figure 20.2.
Wetzels (1998) has empirically tested the model in the context of an after-sales organization for office equipment, using structural equation modeling. Participants in the study were 256 service engineers, and the study was based on employee perceptions of customer evaluations of service quality. We will briefly summarize the results. It was found that the empowerment autonomy component exerted a strong negative influence on both role ambiguity and role conflict. In addition, it was also found that giving employees a higher degree of autonomy leads to higher job satisfaction levels. In contrast, neither formalization nor empowerment competence had a significant impact on the two role stressors. In an after-sales service organization, therefore, it seems advisable not to rely on mechanistic control systems and to allow employees to customize the service the way they think fit. With regard to the two leadership dimensions, it was found that initiating structure had a negative influence on role ambiguity, whereas leader consideration did not seem to affect either role stressor. Initiating structure seems to be able to clarify role requirements and expectations. Service managers may need to clarify their goals and expectations with regard to their customer-contact service employees. This might be even more important if empowerment is introduced, using self-directed work teams (Barry and Stewart 1997). Group cohesiveness decreases role conflict. In terms of role stress consequences, a negative relationship between role ambiguity and job satisfaction was found. In particular, lack of clarity seems to be responsible for decreasing job satisfaction of service employees. Finally, evidence was found for relatively strong positive relationships between job satisfaction and both process and outcome quality. The satisfaction of service employees seems a necessary condition for delivering excellence in service quality. Service quality, however, is not an end in itself; it is a means to an end. Now that we have discussed the terms and conditions for service quality in a business-to-business setting, we will take a closer look at the impact of service quality on customer loyalty in the next section.

SERVICE QUALITY, RELATIONSHIPS, AND CUSTOMER LOYALTY

Ultimately, customer loyalty in business services is considered the key factor for the development of a sustainable competitive edge (Gremler and Brown 1996). During past decades, customer evaluative judgments (i.e., service quality, satisfaction, and value) have been advanced to account for customer loyalty (Dick and Basu 1994). Here, the implicit theme is that positive evaluations of service quality instigate customers to favor service providers with their patronage. The direct relationship between customer evaluations of services and loyalty in business markets, however, remained somewhat equivocal. First, Wetzels (1998) demonstrates that the service quality–loyalty relationship in business markets is often not simple and straightforward because affective commitment on the part of the customer may act as a moderator. Second, it could be argued that the relationship
between satisfaction and loyalty is nonlinear, leading to the fact that loyalty remains unaffected over a relatively large range of satisfaction levels that fall below the critical threshold. Third, in many business markets there is a tendency to develop relationships with single-source suppliers, leading to increased levels of interdependence and switching costs (Wilson 1995). Finally, business service encounters are often characterized by multiple interactions, what has been called the multiheaded customer and seller (Gummesson 1987) in which communication and cooperation play important roles. The direct relationship between customer evaluations and loyalty in business services may be filtered, therefore, by a number of factors. The relationship paradigm suggests a number of these.

Commitment and trust are two "relationship building blocks" that have been suggested frequently. Trust has been conceptualized as the confidence that relationship partners have in the reliability and integrity of each other (Morgan and Hunt 1994). Commitment refers to the motivation to stay with a supplier or, as Moorman, Zaltman, and Deshpande (1992) state, to an enduring desire to maintain a valued relationship. Kumar, Hibbard, and Stern (1994) distinguish two different types of commitment: affective and calculative. Affective commitment expresses the extent to which customers like to maintain their relationship with their supplier. Affective commitment is based on a general positive feeling toward the exchange partner. Calculative commitment refers to a firm's motivation to continue the relationship because it cannot easily replace its current partner and because it cannot obtain the same resources and outcomes outside its current relationship. This dimension posits commitment as a calculative act in which costs and benefits are traded off.

Because commitment entails vulnerability, parties will seek only trustworthy partners (Morgan and Hunt 1994). Trust leads to a high level of affective commitment or, in other words, a strong desire to maintain a relationship. Empirical support for this argument is given by Morgan and Hunt (1994) and Geyskens et al. (1996). Trust may lead customers to focus more on the positive motivation because of a sense of affiliation and identification with the supplier, and this may be a stimulus to focus less on calculative reasons for attachment to a supplier firm. In addition, Geyskens et al. (1996) report a negative relation between trust and calculative commitment. When a firm's trust in a partner increases, there will be less reason to continue the relationship because it feels it needs to on the basis of cost-benefit analyses.

In the complex setting of business services, market and relationship characteristics may determine commitment and trust, in addition to service quality characteristics. Furthermore, commitment and trust may in turn affect loyalty in service relationships. Figure 20.3 represents a framework of business-to-business service relationships.

Service quality characteristics are a decisive factor in determining customer trust and commitment. MacKenzie (1992) demonstrated that customer trust in the office equipment market is influenced positively by customer perceptions of the service offering. Likewise, Venitis (1997) found empirical evidence for a positive relationship between service quality and relationship commitment in
advertising agency–client relationships. In addition to service quality, however, services suppliers are increasingly focusing on relational exchange activities. These comprise the relationship characteristics.

The importance of relationships with customers in business markets as part of companies' operating strategies has been widely acknowledged (Morgan and Hunt 1994). As relationship management becomes institutionalized in firms and emphasis is placed on integrated networks between suppliers and customers, relationship promoters or account managers are appointed and formal transactions reflect informal and interpersonal agreements and commitments (Gemunden and Walter 1994; Ring and Van de Ven 1994). In business service markets, personal contact between supplier and customer is viewed as the most important source of information. Larson (1992), for instance, reports that personal relationship management by boundary spanners leads to a reduction of perceived risk and uncertainty and that personal trust is a major consideration for supplier selection. Furthermore, through personal contacts affective commitment can be established. Account support seems to be an important relationship management variable. In addition, communication, the formal as well as informal sharing of information through frequent two-way dyadic interchanges, also plays an important role in realizing the benefits from a relationship (Anderson and Weitz 1992). As MacKenzie (1992) contends, communication is an aspect that will be considered when relationships are evaluated by customers. Dwyer, Schurr, and Oh (1987) argue that communication is an important input to customer commitment. Anderson, Gerbing, and Hunter's (1987) argument that communication is positively associated with customer trust has been empirically verified by Anderson and Narus.
Moreover, cooperation is another antecedent of trust. Cooperation is a frequent phenomenon in business markets. For instance, CPA firms and their clients may develop joint information systems to facilitate the exchange of information and reduce information asymmetry. Finally, in business relationships, conflict may occur as a result of disagreement or perceived impediments to the attainment of mutual goals and objectives (Dwyer, Schurr, and Oh 1987). Although conflict can have a negative effect on relationships (Anderson and Weitz 1992), solving conflicts constructively may actually strengthen interpersonal relationships and lead to greater trust and affective commitment (Weitz and Jap 1995). It is aimed at reaching mutually acceptable compromises without having to resort to formal procedures and as such is an important input to customer commitment (Gundlach, Achrol, and Mentzer 1998). Harmonization or conflict solving therefore is another relationship management variable.

It has been pointed out that supplier-customer relationships in business are multifaceted phenomena (Heide and John 1988). Whether other suppliers in the market form real alternatives, customer commitment is based not only on the service or relationship offering but also on the costs and risks associated with switching suppliers. We propose, therefore, to take a number of market variables into account. We distinguish three variables: replaceability, perceived switching costs, and perceived switching risks. The replaceability variable refers to the difficulty of replacing one's partner because of the lack of alternative partners (Heide and John 1988). Switching costs and switching risk refer to the costs expressed as time, effort, money, and financial risk involved in switching suppliers. Suppliers may influence perceptions of replaceability and of the costs and risks of switching not only through incompatibility of services but also by developing specific relationship routines and procedures and "vendor-specific learning" (Heide and Weiss 1995). Furthermore, developing supplier-related quality standards has been advocated as an important instrument for lowering switching behavior (Meldrum 1995). Finally, communicating the rapidity of technological developments enables suppliers to close customer consideration sets to competitors (Heide and Weiss 1995). It has been argued that the more dependent a customer is on its supplier, the more motivated the customer will be to develop a strong, cooperative, long-term relationship with its supplier (cf. Ganesan 1994). Kumar, Scheer, and Steenkamp (1995) and Geyskens et al. (1996) provide empirical evidence for a positive relationship between dependence and relationship commitment. Likewise, it has been shown that a positive relationship between perceived switching costs and risk, on one hand, and commitment, on the other, exists in business relationships (Venetis 1997). The more a customer experiences difficulties with switching, the more he or she feels the need to continue working with the supplier.

Commitment indicates the motivation to maintain a relationship. Commitment also has been conceptualized in terms of a temporal dimension, focusing on the fact that commitment becomes meaningful only when it develops consistently over time (Moorman, Zaltman, and Deshpande 1992). As a result of continuity, customer turnover may be reduced and partners will be more inclined
Figure 20.4 Results of Empirical Study
NOTE: Standardized path coefficients vary between 1 and -1 and indicate direction and magnitude of the relationship.

To work together to achieve mutual goals (Anderson and Narus 1990). Through long-term commitment and trust relationship, consequences such as decreased opportunism can be realized (Morgan and Hunt 1994). Kumar, Hibbard, and Stern (1994) use intention to stay in the relationship as an important desirable consequence of commitment that has a direct impact on supplier-customer relationships. Intention to stay reflects the customer's motivation to continue the relationship.

The conceptual framework presented in Figure 20.3 has been empirically tested in the context of high-technology office systems. A sample of 491 customers was used to test the conceptual framework. In Figure 20.4, an overview of the results obtained via structural equation modeling is rendered.

We find that affective commitment is positively influenced by relationship characteristics. This means that activities aimed at managing the relationship with customers contribute to a perception of an enjoyable relationship. Similarly, trust has a positive impact on affective commitment in supplier-customer relationships in business markets. Trust pertains to a customer's confidence and faith that the supplier will be reliable and willing to listen to the customer's wishes and act in his or her best interests. We also find a positive relationship between market characteristics and affective commitment. This may seem counterintuitive but may be explained as follows. It may be indicative of the fact that because of the limited number of suppliers, a high degree of dependence, and high switching costs and risks, suppliers of high-technology products and services may have a
relatively powerful position in the market, often as a single-source supplier. Frazier, Gill, and Kale (1989) contend that in such situations the powerful party does not have to resort to coercive measures to ensure well-functioning relationships, but instead can use noncoercive strategies that result in an exchange atmosphere that is perceived as positive and agreeable by the more dependent partner in the relationship. With respect to trust, we find that both offer characteristics and relationship characteristics have a positive impact. Service as well as account support are often cited as major reasons for choosing a supplier in high-technology markets. Furthermore, relationship managing activities by suppliers are often geared toward achieving the customer’s confidence by information sharing, cooperative synergy, and lowering levels of perceived risk. For instance, an open information exchange in which proprietary data is shared will instigate customers to work more closely with their supplier and to share their own information. Finally, we find that calculative commitment is relatively strongly determined by market characteristics. Because a relatively large degree of dependence exists in high-technology markets, the motivation to protect idiosyncratic investments in the relationship with a supplier would be in the interest of the customer. The relative impact of market conditions can also be accounted for by the fact that there are likely to be few alternatives that can replace the current supplier in the market. On the other hand, we find a negative relationship between trust and calculative commitment. The less trust a customer has in the supplier, the more the motivation will be based on a calculation of costs and benefits.

In terms of customer loyalty intentions, we find support for the positive impact of the three variables on the intention to remain in the relationship. Our study provides evidence for the relatively important role of affective commitment in business relationships. Because of the complexity of relationships (relatively high uncertainty as well as large investments), all three variables play a role of some importance. The decision to remain in the relationship with the supplier will be based on affective as well as cognitive motivations. We also encounter a direct effect of offer characteristics on the intention to continue the relationship. The centrality of service quality seems to underline the relative importance of this construct.

CONCLUSION AND MANAGERIAL IMPLICATIONS

This chapter focuses on three important issues in business-to-business services. First, the nature of business-to-business service quality was discussed. In contrast to consumer services, we find that in business-to-business services there is more emphasis on the outcome component of service quality. Second, the service employee in business-to-business services plays a pivotal role. It is the performance of the service employee that is equated with service quality. We presented
a model that introduced several factors affecting performance of the service employee in terms of service quality. The autonomy component of empowerment is shown to have comprehensive effects throughout the model; it reduces role stress and increases job satisfaction. Finally, we introduced the relationship paradigm to shed some light on the relationships between service quality and customer loyalty. Trust in the company and commitment appear to be important intermediate variables. Apart from the important role of service quality, other factors such as relationship characteristics and market characteristics play an important role.

In sum, these conclusions provide management with ample opportunities to actually manage the relationship with customers. First, changing the control system in the organization so as to empower employees may have a positive impact. Second, communication and cooperation as well as introducing customer-oriented account systems can shape customer relationships. Third, management may change market characteristics by introducing new factors (e.g., long-term contracts to increase switching costs). Although the role of marketing management may be an important one, implementing these organizational changes certainly is not a task for marketing management alone. It requires inherent cooperation with other functional areas within the company to empower employees and to establish customer-oriented account management.

REFERENCES


Gemunden, Hans G. and Achim Walter (1994), "The Relationship-Promoter: Key Person for Interorganizational Innovation Co-operation," in *Relationship Marketing: Theory, Methods and...
Service Quality in Business-to-Business Services

Applications, Jagdish N. Sheth and Atul Parvartyar, eds., proceedings of the 2nd Research Conference on Relationship Marketing, Roberto C. Goizueta Business School, Center for Relationship Marketing, Atlanta.


