Working Paper Series

06/2006

Educating customers: its impact on consumer trust and implications for management consulting

Eisingerich, A.B. and Bell, S.J.

CAMBRIDGE
Judge Business School

Author contact details are as follows:

Andreas Eisingerich
PhD candidate
Judge Business School
a.eisingerich@jbs.cam.ac.uk

Simon Bell
Judge Business School
University of Cambridge
s.bell@jbs.cam.ac.uk

This paper was presented at the Academy of Management Annual Meeting 2005.

Please address enquiries about the series to:

Research Support Manager
Judge Business School
Trumpington Street
Cambridge CB2 1AG, UK
Tel: 01223 760546 Fax: 01223 339701
E-mail: research-support@jbs.cam.ac.uk

EDUCATING CUSTOMERS: ITS IMPACT ON CONSUMER TRUST AND IMPLICATIONS FOR MANAGEMENT CONSULTING

Andreas B. Eisingerich

Judge Business School
University of Cambridge
Trumpington Street
Cambridge CB2 1AG
United Kingdom
Phone: +44 1223 339700
Fax: +44 1223 3390701
e-mail: a.eisingerich@jbs.cam.ac.uk

Simon J. Bell

Judge Business School
University of Cambridge
Trumpington Street
Cambridge CB2 1AG
United Kingdom
Phone: +44 1223 339628
Fax: +44 1223 339701
e-mail: s.bell@ jbs.cam.ac.uk

Keywords: Customer Education, Management Consulting, Consumer Trust, Professional Services, Services Marketing

EDUCATING CUSTOMERS: ITS IMPACT ON CONSUMER TRUST AND IMPLICATIONS FOR MANAGEMENT CONSULTING

ABSTRACT

The effectiveness of increased customer involvement in services selling is to a large extent dependent on the knowledge, expertise, and trust of customers. Successful consultants, therefore, need to be aware of the dynamic relationships between customer education, expertise, and service quality in driving customer trust. To test this notion, we use data collected from 1268 clients of a global financial services firm. Overall, the present study successfully models the multi-faceted impact of customer education on the service quality-trust relationship. Resultant implications point to new business opportunities in an increasingly competitive economic environment and, consequently, are of interest to consultants and researchers alike.

Service providers' attention on creating the necessary conditions for long-term relationships with their customers has to be guided by an understanding of the dimensions that are of importance to their clients. Past research has convincingly advocated customer 'co-production' as a competitive strategy (Prahalad & Ramaswamy, 2000) to deliver superior service and increased productivity (Bettencourt et al., 2002; Lengnick-Hall, 1996). Specifically, in the context of management consulting, 'high impact' can be achieved by helping clients make better use of their own skills and abilities (Schaffer, 2002). Customer participation is also likely to develop social bonds at an emotional level that make the client-service provider relationship more resistant to intermittent failures. Co-opting customers into the creation and delivery of service, however, is accompanied by complications that are particularly acute for providers of high involvement, professional services.

Because of their high complexity and intangibility, many customers have difficulties to assess professional services' outcomes confidently even after purchase (Crosby, Kenneth, & Cowles, 1990; Darby & Karni, 1973). Since expert clients possess a richer experience base (Bettman & Park, 1980; Brucks, 1985), they may process new information in greater depth and may feel more confident in assessing technical outcomes and questioning advisors' explanations than do novices when making decisions. Accordingly, customers' knowledge and skills are likely to play an important role in their ability to understand, and contribute to, effective service delivery. Although sufficient evidence exists to suggest that the degree of prior customer expertise matters for information evaluation and choice, fundamental questions remain about the impact of customer education on trust and the dynamic effects of both customer education and expertise on the perceived service quality-trust relationships. For example, does customer education lead to a change in the way service quality is perceived and hence, client's willingness to trust an organization? If so, what are some of the key dimensions of service production and delivery toward which serviced providers might direct

their efforts? Answers to these questions are managerially useful and relevant to consultants, trying to help clients unlock the payoffs from articulated and unarticulated needs of their customer base.

Higher levels of consumer trust, for example, can provide a means by which organizations can achieve more profitable positions in micro segments through enhanced customization and opportunities for cross-selling. Thus, a deeper understanding of how customer education affects perceived quality could be a crucial source of competitive advantage. Firms, using customer education as a tool, will be more alert to changing needs over the client life cycle and assess their particular opportunities and threats to an extent competitors cannot aspire to achieve. Often actors may not be sure about the impact of customer education on their bottom line. Consultants should be able to provide business intelligence that enables managers to trade upon this ambiguity, thereby contributing to actors' innovativeness and success.

The objectives of this study are threefold. First, we examine the relative importance of customer education and perceived service quality in driving customer trust. Second, we consider the dynamics of customer education by exploring the relationship between customer education and perceived service quality. More specifically, we examine how the positive impact of technical service quality (*what* is delivered) and functional service quality (*how* it is delivered) on customer trust changes over varying levels of customer education. Finally, we investigate the potential for three-way interaction between these variables, in which the influence of customer education in the service quality-trust relationship is affected by customer expertise. In doing so, we provide implications critical to the competitiveness of service providers in an increasingly difficult economic environment.

Our analysis is organized as follows. The next section develops a conceptual model to evaluate the proposed linkages and presents 9 formal hypotheses to be empirically tested. This

is followed by an outline of the research design and method, an analysis of the sample and a discussion of the results. The final section concludes with limitations of the study, draws managerial and consumer implications from the findings and offers suggestions for future research.

CONCEPTUAL FRAMEWORK

Background

We selected the financial planning services context for this study to examine the potential of customer education to create new business opportunities for consultants. The services literature suggests that effective relationship selling will be most critical when (1) the service is complex, customized, and delivered over a continuous stream of transactions, (2) many buyers are relatively unsophisticated about the service (Crosby, Kenneth, & Cowles, 1990) and (3) customers face uncertainty regarding technical outcomes (Zeithaml, 1981). The service context selected for this study possesses all these characteristics, making it an appropriate setting for assessing the dynamic effects and evaluating the implications of customer education and investment expertise. First, the service is both highly complex and highly intangible. Because clients not only lack a concrete object but may also lack the technical knowledge and experience, technical service outcomes are intrinsically difficult for customers to confidently evaluate even after purchase. Further, one of the primary functions performed by financial service employees is product customization. Advisors are specialized and trained in conducting detailed needs assessments and presenting personalized proposals to customers. Interactions also tend to be ongoing rather than single encounters because the core service may only unfold over time.

Model Development and Hypotheses

The conceptual model guiding this research is depicted in Figure 1. Our analysis begins by conceptualizing consumer trust to be a function of perceived service quality (technical and functional), and customer education. Further, we explore the moderating effects of increases in customer education on the service quality-consumer trust relationship. More specifically, we suggest that as customer education increases, functional service quality delivered by advisors will have an *increased* effect on customer trust in an organization, whereas technical elements or what advisors deliver are expected to have a *reduced* effect. In addition, we examine the impact of perceived service quality on trust over the range of clients' investment expertise and explore the potential for three-way interaction between investment expertise and customer education. We discuss each of these relationships in detail and present specific research hypotheses to test our propositions.

[Insert Figure 1 about here]

Service Quality and Consumer Trust

In this study consumer trust is defined as existing when one party has confidence in the exchange partner's reliability and integrity (Morgan & Hunt, 1994), and as the expectations held by the consumer that the service provider can be relied on to deliver on its promises (Sirdeshmukh, Singh, & Sabol, 2002). This definition spans the two general approaches in the literature viewing trust as a belief or expectation about an exchange partner's trustworthiness that results from the partner's expertise or reliability and the conceptualization of trust as a reliance on a partner involving vulnerability and uncertainty on the part of the trustor (Anderson & Weitz, 1990; Moorman, Deshpandé, & Zaltman, 1993). Trust can be the 'oxygen' of intimate, highly successful advisory relationships and, thus, has

been of special interest to management consulting (Joni, 2005; May, 2004; Pagano, & Pagano, 2004). Service quality, on the other hand, is frequently defined by its two sub-dimensions (Grönroos, 1983). First, technical quality refers to advisors' competency in achieving the best return on investment for their clients, at acceptable levels of risk, thus, assisting the clients to achieve their financial goals (Sharma & Patterson, 1999). The technical dimension, however, may not account for clients' total evaluation of the service interaction. Perceived functional service quality, conceptualized as the courteous, caring and responsive behavior displayed by an adviser, may take on added significance as customers form service judgements based on the evaluation of peripheral rather than core service benefits (Taylor & Miyazaki, 1995). Accordingly, service providers need to focus customers' feelings and not just on service outcomes. Glen (2002), for example, argues that most clients complain about the way in which consultants deliver their services, not about technical outcomes. Customers seek effective relationships with professionals who care, listen, and relate to their ideas, feelings, and concerns (Pagano & Pagano, 2004; Sheth & Sobel, 2002; Weisinger, 1998). Finally, the manner in which an advisor delivers service outcomes can provide insight into the character of the organization. Competency may require the test of time, but the behaviors of an advisor can serve as a proxy to set initial levels of trust. Accordingly, it is hypothesized:

H_1: The greater technical service quality, the stronger customer trust in an organization

H_2: The greater functional service quality, the stronger customer trust in an organization

Customer Education, Trust, and Moderating Effects

Due to their lack of skills and information needed to evaluate the performance level of investments confidently, clients often wonder if an organization is delivering value for

money. Moreover, savvy customers are increasingly suspicious of any incentives that service providers might have and are unlikely to trust an organization fully, unless they are confident that the relationship will be mutually rewarding and long lasting. Customer education, therefore, can be an important source of value creation for clients. Urban (2004), for instance, suggests that clients reciprocate with their trust, as companies provide clear and comprehensive information. We define customer education as the extent to which service employees provide customers with the skills and abilities to utilize critical information (Burton, 2002). More specifically, customer education refers to service adviser's ability and willingness to explain financial concepts as well as the pros and cons of recommended investment opportunities to their clients. Since investments in one client are impossible to re-deploy to other channel relationships, customer education may benefit only committed firms over time. Customer education, therefore, may serve as a strong signal of commitment, strengthening the service provider-client relationship. In addition to this, a person is more likely to trust others, the greater the extent to which a person is perceived to be re-active to other people (Swap & Rubin, 1983). Moreover, customer education can make sure that clients understand what the company is offering in terms of products and services so as to manage customers' expectations and increase trust. Therefore, we hypothesize:

H_3: Customer education will be positively related to customer trust in an organization

Despite the well-recognized significance of trust building in consumer-firm relationships, there has been no consideration of the potential moderating effects that customer education has in the perceived service quality-trust relationship. Trust has often been viewed as involving dependability, vulnerability, and uncertainty on the part of the trustor (Coleman, 1990; Schlenker, Helm, & Tedeschi, 1973). We suggest that customer

education will reduce the positive effect of technical service quality on clients' trust in an organization. First, educated customers have the tools to verify a company's claims and map the position or performance level of their investment as compared to peers. Consequently, they may be less willing to trust a single organization to do what is right. Second, as customers gain greater confidence in their own ability to evaluate technical outcomes, they may generally demand higher levels of technical outcomes and display a growing distrust of business if expected outcomes are not achieved. In contrast, we suggest customer education to enhance the positive impact of perceived functional quality on trust as it can make clients feel 'in control' rather than constrained by the system and build further credibility with customers about the sincerity of the advisor's efforts. The more clients know about financial products and services, the easier it will become for them to see the value of timely information that is difficult and costly to obtain (Dawar & Vandenbosch, 2004). Educated clients who seek to make informed decisions about services they purchase are more likely to feel comfortable asking questions and, thus, appreciate advisors' personal attention. In addition, transaction cost reasoning suggests that pledging in the form of making idiosyncratic investments in customers may cause clients to be more confident in advisers' interests, personal attention and commitment to the relationship as organizations sustain economic consequences if the relationship ends (Kenis & Knoke, 2002; Madhok, 1995). On the basis of this rationale we hypothesize:

H_4: The positive impact of technical service quality on consumer trust will be weaker the higher the level of customer education

H_5: The positive impact of functional service quality on consumer trust will be stronger the higher the level of customer education

The Moderating Role of Investment Expertise

Past research has shown that expert consumers differ from novices in the amount, content and organization of their knowledge and, consequently, that the degree of prior expertise a client has about a product is likely to influence information evaluation and choice (Alba & Hutchinson, 1987; Rao & Monroe, 1988). In this study, investment expertise refers to a customer's (1) accrued knowledge of financial planning services, (2) ability to understand the adviser's techniques and strategies, and (3) confidence in evaluating the advisor's financial recommendation and performance outcomes of investments. Novice customers may be unable to interpret technical aspects of the service successfully due to a lack of technical skills and a deeper understanding of financial products. Consequently, they may have no choice but to trust their advisor, relying on more tangible cues of the functional aspects of financial services (Sharma & Patterson, 2000). However, as clients gain investment experience they may be better able to assess messages from their advisors in relation to their prior knowledge and may become more confident in evaluating technical attributes of the service quality (Moorthy, Ratchford, & Talukdar, 1997). The use of more tangible cues, such as empathy and friendliness of service employees, by novices may occur because such information is easier to interpret than technical outcomes. Increased customer expertise is likely to change the relative importance of technical and functional service quality dimensions. More specifically, technical service dimensions will be of greater importance to clients' trust in an organization, whereas the impact of functional service quality dimensions will decrease as customer expertise increases. Accordingly:

H_6: The positive impact of technical service quality on consumer trust will be stronger where clients have more investment expertise

H_7: The positive impact of functional service quality on consumer trust will be weaker where clients have more investment expertise

Three-Way Interaction Between Investment Expertise and Customer Education

In financial planning services, uncertainty exists in both the possible performance outcomes of an investment and the associated probabilities of occurrence of these outcomes. Earlier it was argued that customer education may provide clients with the tools to verify the claims of their advisors and map relative performance levels of investments, thereby reducing the positive impact of service outcomes on customer trust in a single organization. Customers' evaluations of new information, however, are likely to be influenced by their ability to assess the new facts in relation to their prior knowledge (Park & Lessig, 1981). Experts, for example, may already know what technical outcomes to expect realistically. As a result, inevitable ups and downs of varying investment performance may not automatically reduce their trust in a company. Because experts possess a richer knowledge and experience base, they are also more likely to recognize and value service employees' availability and efforts to offer additional information. Courtesy, empathy and personal attention may also build further credibility with customers about the sincerity of the organization's efforts. Taken together, functional service quality dimensions will have an increased effect on trust as both customer education and investment expertise increase. The negative moderating role of customer education on the positive relationship between technical dimensions and trust, on the other hand, will be attenuated as investment expertise increases. Thus, hypotheses H_8 and H_9 are:

H_8: The negative moderating effect of customer education on the relationship between technical service quality and trust will decrease as customer expertise

increases.

H_9: The positive moderating effect of customer education on the relationship between functional service quality and trust will increase as customer expertise increases.

RESEARCH DESIGN AND METHOD

Selection of Sample

A global financial services organization co-operated in the study by providing contact details of clients for the administration of a self-administered survey questionnaire. The firm offers a wide range of financial services, including financial advising/planning, stock brooking, and funds management. All products lend themselves towards relationship marketing. In addition, we chose this organization based on the rationale that access to a large sample could help us increase the reliability of the data. A list of 4244 clients, randomly chosen from the population of clients classified as 'high value' by the firm, was obtained for this study. High value customers are more likely to interact frequently with advisors and thus, may be in a better position to evaluate quality of service outcomes and delivery.

Pre-testing of the questionnaire was conducted by arbitrarily selecting 20 clients from the sample. The questionnaire was also sent to the firm's managers and marketing academics to elicit their comments on the content, to modify scale items to suit the specific industry/firm context and to assess questions for face validity. A total of 1268 usable questionnaires were returned, for a response rate of 30 per cent. The final sample was representative of the total population based on demographic criteria. Table 1 reports the characteristics of the sample.

[Insert Table 1 about here]

Measures

All scales used a seven-point Likert scale with anchors of strongly disagree (1) and strongly agree (7). A full list of items that comprise each measure are presented in Appendix A.

Technical service quality refers to the outcome-related aspects of the service (i.e. advisors' ability to provide the best return on investments) and was operationalized by four items specifically developed for high-involvement, professional services (Sharma & Patterson, 1999). Functional service quality is concerned with processes of how end results of the service encounter are transferred to customers. In this study, the 5-item functional quality scale represents the courtesy, friendliness, accessibility and empathy of advisors (Hartline & Ferrell, 1996). Our rationale behind these items is the current discussion in the management consulting literature that both competency and caring are required for building trust (Glen, 2002; Joni, 2005; May, 2004). We operationalized investment expertise by measuring clients' market related experience and developed a 4-item scale by modifying the experience scale of Sharma and Patterson (2000). Slight changes in wording were required to fit the professional services context. Customer education refers to the extent to which service employees provide customers with the abilities and techniques to utilize critical information (Burton, 2002). We adapted a 4-item scale (Sharma & Patterson, 1999), intended to capture advisors' provision of information to train clients in how to evaluate the core service performance. In the context of this study, consumer trust refers to customers' confidence in the exchange partner's integrity and to the expectations held by consumers that the service provider can be relied on to deliver on its promises. The measure of trust included four items and was constructed by adapting the scale of Morgan and Hunt (1994) and Sirdeshmukh, Singh and Sabol (2002).

Control Variables

Client age, gender, and relationship length were used as control variables. Due to their greater accumulation of experience, older customers may demonstrate differences in trust. Similarly, relationship length might serve as a proxy for consumer experience with an organization, which could be associated with greater trust. Past research, for instance, shows that relationships deepen and actors' trust increases as exchange partners continuously interact and share information over time (Bouty, 2000; Coleman, 1990).

Measure Assessment

We conducted exploratory and confirmatory factor analyses to test for the satisfaction of all psychometric property requirements. First, we examined factor loadings (> .40) and cross-loadings (< .40) to purify the measurement items for each construct. Based on these guidelines, one item from the initial functional service quality scale was dropped from the original pool of items. Before proceeding to the next step of analysis, we verified that the deletion of the item would not alter the intended meaning of the construct it was part of. We then used a second principal component analysis in which five meaningful factors emerged that mirrored the predetermined scales. There was no general factor in the unrotated factor structure (Podsakoff & Organ, 1986), indicating that common method bias was not a significant threat to the interpretation of the hypotheses test results. Intercorrelations and descriptive statistics of the variables are provided in Table 2.

[Insert Table 2 about here]

In addition, we further tested the validity of our measures via confirmatory factor analysis

(CFA), using maximum likelihood estimation with AMOS 5 (Arbuckle, 1994). On the basis of the statistical test for the goodness of absolute fit, the hypothesized model produced the following results: $\chi^2_{(215)} = 1637.4$ (see table 3 for the results of the CFA). An important criticism of the chi-square measure is that it is too sensitive to sample size differences, especially for cases in which the sample size exceeds 200 respondents (Green et al., 1997). Another indicator of absolute fit that is not affected by the sample size is the root mean square error of approximation (RMSEA). It is seen that the point estimate of RMSEA is less than 0.08 and the upper 90 per cent confidence limit does not exceed 0.10, indicating that the hypothesized model effectively reproduces the observed variance-covariance matrix. Consistent with this, incremental fit indices, such as the normed fit index (NFI), comparative fit index (CFI) and incremental fit index (IFI), exceed the recommended acceptance level of 0.95 and thus, indicate that the proposed model is a good explanation of observed covariances among the study constructs (Bentler, 1990; Bentler & Bonnett, 1980). In addition, the Tucker-Lewis index, also known as non-normed fit index (NNFI), which is thought to provide an indicator of balance between explanation and parsimony, exceeds 0.98, indicating that the hypothesized model strikes an appropriate balance between these competing goals (Tucker & Lewis, 1973). Moreover, as evidence of internal consistency of the constructs, composite reliabilities are large (ranging from 0.86 to 0.94) and exceed the threshold value for acceptable reliability (0.70).

[Insert Table 3 about here]

Average variances extracted (AVE) exceed the recommended level of 0.50 indicating that in each case the variance captured by the construct is greater than the variance due to measurement error (Fornell & Larker, 1981). As an indication of discriminant validity, the

AVE for each construct should be higher than the squared correlation between that construct and any other construct. With reference to Tables 2 and 3, this test holds, since in no cases is there a squared correlation between any two constructs that is higher than either of the constructs' AVE. Furthermore, factor loadings are significant and substantively large, providing evidence of convergent validity. Appendix B illustrates that reliability estimates for the scales were uniformly high with Cronbach alpha coefficients ranging from 0.84 to 0.97, demonstrating support for reliable measures.

Hypotheses Testing

We performed moderated hierarchical regression analysis to examine the hypotheses outlined in the model. Each of the five scales was averaged to form a composite. In order to avoid any potential threat of multicollinearity when operationalizing the interaction terms, each composite for the six constructs was standardized by mean centering (Aiken & West, 1991). Taking the product of the mean-centered constructs created two-way and three-way interaction terms. With variance inflation factor (VIF) scores well within the recommended cut-off figure of 10 (Neter; Wasserman, & Kutner, 1985), VIF statistics confirmed that multicollinearity was not a problem for the model. Results are presented as unstandardized regression coefficients as they are not affected by changes in the means or zero points of the variables nor by the addition of arbitrary constants to the variables in the model (Allison, 1977).

RESULTS

Table 4 depicts the results of the regressions of consumer trust on the control, main and interaction effects. As hypothesized, perceived technical and functional service quality had a significant and positive impact on trust (0.22, $p<0.01$ and 0.29, $p<0.01$, respectively),

providing support for H_1 and H_2. Consistent with H_3, customer education had a significant, direct and positive effect on consumer trust (0.16, $p<0.01$). In accord with H_4, customer education attenuated the positive impact of technical service quality on trust (-0.06, $p<0.01$). Regarding H_5, the positive and significant interaction coefficient between functional service quality and customer education (0.08, $p<0.08$) showed that the positive effect of functional service quality on customer trust was indeed stronger when customer education was high. Reference to the interaction coefficients between technical quality and customer expertise (0.07, $p<0.05$) as well as functional quality and investment expertise (-0.08, $p<0.10$) also provides support for H_6 and H_7, respectively. Earlier we hypothesized that the negative moderating effect of customer education on the relationship between technical service quality and trust should decrease as customer expertise increases. In support of H_8, the negative and significant three-way interaction term (-0.05, $p<0.05$) implied that the negative interaction between technical quality and customer education was indeed weakened as clients' investment expertise increased. Moreover, in accord with H_9, the positive effect that customer education had on the relationship between functional quality and customer trust was further corroborated as customers displayed more expertise.

[Insert Table 4 about here]

DISCUSSION

This study is the first empirical effort to examine the impact of customer education in concert with perceived service quality (both technical and functional), investment expertise and customer trust in a high-involvement, professional services context. The finding that both technical and functional elements of service quality had a positive and significant impact on

customer trust was not particularly surprising. Clients' trust in an organization is affected by a variety of factors that are tied to technical competence and the process by which the core product is delivered. The results also indicate that customer education has a significant, direct and positive effect on customer trust. It may be argued that customer education not only keeps clients' information up-to-date, but also builds further credibility with customers about the sincerity of the organization's efforts. For example, the effort to help clients to become more financially literate may address consumers' need for control so that the 'trusted' do not behave opportunistically (Shapiro, 1987). In this respect clients would perceive an organization's effort to provide essential information as service augmentations (Glen, 2002; Pagano & Pagano, 2004). Our research findings are consistent with notions of relationship selling and partnership building (Weitz & Bradford, 1999). More frequent contact between parties can result in enhanced information sharing, which in turn may increase the parties' mutual knowledge about each other, thereby fostering the development of similar goals, emotional contagion and ultimately, reciprocity (McFayden & Cennalla, 2004; Nahapiet & Ghoshal, 1998).

In extending the current literature, our results highlight the differential effect of customer education on the service quality-trust relationship. The results illustrate that the positive impact of technical service quality dimensions on trust decreased as customer education increased. Functional service quality, on the other hand, had an even stronger positive effect on trust as customer increased. A possible explanation may be that customer education fosters trust based on utilitarian consideration. Since investments in one client are costly and impossible to re-deploy to other channel relationships, service providers are more likely to resist opportunistic behavior owing to the costly sanctions that are associated with a lost customer of 'high value'. Customer education, therefore, can serve as a strong signal of commitment, strengthening the service provider-client relationship. Superior technical

outcomes, however, may come as a surprise to clients who thought they were told everything by their advisors. Consequently, clients may start to question service employees' reliability and become less willing to trust an organization. In contrast, customer education may enable clients to appreciate the value of additional personal attention displayed by service employees. Novices, for instance, may feel less confident in trusting their advisors' friendliness or empathy because of their limited ability to assess technical outcomes. Through education, on the other hand, clients may be in a better position to assess the subtleties of service they receive (Söderlund, 2002). The more customers know about services and products and how to use them, the easier it becomes for them to see the value of advisors' personal attention.

The moderating effects of investment expertise indicate that technical outcomes rather than functional dimensions of service quality more heavily influence clients' trust in an organization. Experts are more effective in elaborate information processing (Alba & Hutchinson, 1987). As customers feel more comfortable in assessing technical service outcomes, they may begin to discount process-related elements, such as advisors' courtesy and friendliness.

The findings of the proposed three-way moderating effects of customer education and investment experience suggest that functional service quality dimensions play an even more important role in building consumer trust as both expertise and customer education increase. In accordance with Söderlund's (2002) argument, expert clients are better able to assess and appreciate the subtleties of service they receive. The courtesy and friendliness of service employees can make clients with limited expertise uncomfortable or suspicious, whereas expert clients are more likely to value the additional personal attention they receive. In addition, the moderating role of customer education on the positive relationship between technical service quality and consumer trust is attenuated as clients gain more experience. Customers with high expertise are likely to know what technical outcomes to expect

realistically. Inevitable ups and downs of varying investment performance in the short-term are, thus, less likely to reduce their trust in an organization. Similarly, experts may evaluate advisors' technical information more confidently so that the positive impact of service outcomes on trust is corroborated.

Implications for Management Consulting

The results of this study imply that customer education can be an important source of competitive advantage. Professional service firms, however, have to be aware of the changing nature of customer perceptions as education contributes to customer expertise over time. Management consultants that provide business intelligence to their clients, enabling them to detect and trade upon the new business opportunities offered by customer education, will be in superior positions to maximize their competitiveness.

Efforts to provide customers with the skills and abilities to utilize critical information can provide a foundation on which firms build trust relations with their clients. Activities based on trust can be a vital source of cross selling that allow firms to identify clients' unmet needs and propose new business. Further, rent generation can be superior in relations characterized by trust because of improved compatibility in decision processes, information and control systems. Although customer education creates the potential for rents, these may only be unlocked if firms are equipped with sufficient co-ordination and problem solving skills. To develop and nurture trust-based relationships service firms have to become more transparent to customers, supplying them with comprehensive and open information. As customer education enhances the 'visibility' of investment processes, a greater degree of customization may occur as clients start to intervene in investment strategies. Higher levels of customization require advisors to be proficient at diagnosing problems and thinking creatively in order to satisfy customer needs. Consequently, service firms might consider opportunities

to grant service employees the autonomy or behavioral latitude within their jobs to explain concepts to customers. All too often constrictive job designs and impractical reward structures hinder the pursuit of laudable goals. Management consultants may help firms to become more alert to changes in customer preferences and establish practices that facilitate excellent service by making employees understand that superior customer service is expected, desired and rewarded.

The current findings suggest that functional service quality attributes become even more important as customer education and customer expertise increase. Although advisors' expertise may be necessary for the development of trust, this characteristic alone does not appear sufficient. Customers have to be made aware and reassured that an organization is taking very special care of them. Accordingly, businesses are more likely to be successful when they communicate the value of their services so as to manage consumer expectations, and keep a running dialogue open to integrate customers' suggestions into their service offering. Training programs may be used to sensitize contact service employees to the nature of the social process underlying interpersonal relationship development. In concert with these efforts, management consultants may help firms in devising performance incentives that link customer feedback with rewards. Furthermore, performance standards that are explicitly set on client expectations are more likely to encourage employees' engagement in behaviors that are particularly effective in achieving desirable customer outcomes.

Relationships deepen as firms and customers continuously interact and share information. In order to eliminate misunderstanding and suspicions, however, service providers need to view relationships with customers as dynamic. Education contributes to customer expertise, thereby changing customer perceptions over time. Service selling strategies, therefore, have to adapt to clients' investment expertise and achieve the right tone of voice to prompt favorable evaluations by novices and experts alike. Moreover, customer

education entails costs for firms. The distribution of knowledge within organizations and companies' ability to transfer this knowledge internally becomes a critical source of competitive advantage. Thus, cost effective means, such as on-line interfaces, for responding to increasing value of detailed information about product portfolios and opportunities for co-production to expert clients need to be identified. Management consultants that are the first to trade upon the opportunities offered by customer education will enable organizations to meet a wider range of customer demands and serve clients more successfully.

Taken together, customer education has important implications for human resource management, operations and service selling strategies. Organizations that view relationships with clients as dynamic, devise appropriate performance incentives and training programs for service employees and manage the internal distribution of knowledge effectively will be in a superior position to assess their particular opportunities and threats of customer education to an extent no competitor can aspire to achieve.

We recognize that a single, cross-sectional study can offer only initial insights. Accordingly, the next section discusses the limitations of the study and examines opportunities for future research.

Limitations and Directions for Future Research

First, drawing cause/effect inferences from cross-sectional data may be tenuous and the proposed model would clearly benefit from a longitudinal design to establish the hypothesized sequence of effects. Education contributes to customer expertise over time. It is likely that rates of customer learning, and thus, the impact of customer education, will be non-linear. An intriguing avenue for future research would be the investigation of customer education's longitudinal impact on consumer purchase behavior. Given the substantial costs involved in relationship building, it would be critical to examine whether lasting

improvements in relationship depths occur.

The parsimony of our proposed model suggests that some additional variables might help explain key relationships further. For instance, the examination of clients' availability of time, perceived cost of acquiring investment techniques, knowledge of available alternatives and switching costs might prove promising.

We chose a single-industry approach to minimize systematic and random noise attributable to industry differences (McKee, Varadarajan, & Pride, 1989; Voss & Voss, 2000). Although single-industry studies may sometimes be preferable to establish the internal validity of a proposed model, replication in different service contexts would provide greater confidence in the generalizability of the current results. Additional evidence in alternative settings would be critical for gaining a deeper understanding of customer education's potential opportunities and threats in various business contexts.

CONCLUSION

The current study hypothesized and demonstrated the pivotal direct influence of customer education on customer trust and underscored the significance of its dynamic three-way interaction with clients' expertise, affecting the service quality-trust relationship. Firms need to be aware of the changing nature of customer perceptions as education contributes to customer expertise over time. The implications of our findings point to new market opportunities for management consultants.

Figure 1

The empirical model tested for estimating the interrelationships among perceived service quality, investment expertise, customer education and trust

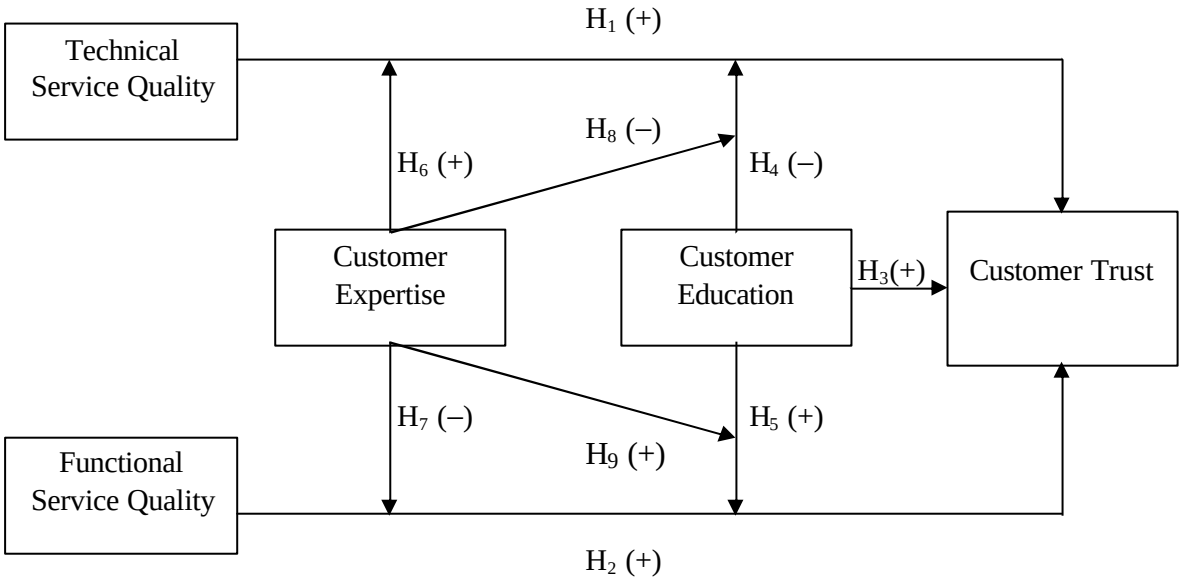

Table 1

Sample characteristics (n = 1268)

Gender	Percentage	Age group	Percentage	Relationship duration	Percentage
Male	84	18-30 years	0.4	< 1 year	1.10
Female	16	31-45 years	8.8	1-5 years	33.1
		46-65 years	50.0	5-10 years	31.1
		66-80 years	35.5	10-15 years	13.3
		81+ years	5.3	15-20 years	10.2
				20+ years	11.2
	100.0		100.0		100.0

Table 2

Intercorrelations and Descriptive Statistics: Consumer Trust (n = 1268)

	1	2	3	4	5
1) Customer Trust	1.00				
2) Technical Service Quality	0.59	1.00			
3) Customer Education	0.58	0.77	1.00		
4) Functional Service Quality	0.58	0.70	0.78	1.00	
5) Investment Expertise	0.24	0.28	0.32	0.32	1.00
Mean	5.67	4.83	5.44	5.96	5.55
Standard deviation:	1.25	1.54	1.22	0.98	0.99

Note: all entries significant at the 0.01% level, using a one-tailed t-test.

Table 3

Confirmatory factor analysis

	C.R.[1]	AVE[2]
Technical Service Quality (TSQ)	0.91	0.88
Functional Service Quality (FSQ)	0.90	0.68
Investment Expertise	0.87	0.62
Customer Education	0.91	0.71
Customer Trust	0.94	0.81

Goodness-of-Fit Statistics

Measures of absolute fit:	χ^2 = 1637.4 (d.f. = 215; p<0.01)
	RMSEA = 0.074
	(90% CI) = 0.071-0.078
Incremental fit measures:	NFI = 0.99
	CFI = 0.99
	IFI = 0.99
Parsimonious fit measure:	TLI = 0.98

Note: [1] Composite reliability

[2] Average variance extracted

Table 4

Regression Results: Hierarchical moderated regression analysis

(unstandardized β coefficients)

Dependent variable: **Customer Trust**

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Control variables				
Age	0.46***	0.22***	0.22***	0.214***
Gender	0.14	-0.04	-0.03	-0.03
Relationship length (yrs)	0.01**	0.01**	0.01**	0.01**
Main effects				
Technical Service Quality		0.22***	0.23***	0.23***
Functional Service Quality		0.29***	0.29***	0.29***
Customer Education		0.18***	0.15***	0.16***
Investment Expertise		0.03	0.03	0.05
Interaction effects				
Two-way				
Customer Education * TSQ			-0.05***	-0.06***
Customer Education * FSQ			0.07**	0.08***
Customer Education * Investment Expertise			0.02	-0.02
Investment Expertise * TSQ			0.07***	0.07**
Investment Expertise * FSQ			-0.15***	-0.08*
Three-way				
TSQ * Customer Education * Investment Expertise				-0.05**
FSQ * Customer Education * Investment Expertise				0.06**
R^2	0.091	0.436	0.446	0.449
Change in R^2		0.345***	0.010***	0.003*
F	37.7	124.3	75.2	65.1
Change in F		172.1***	4.12***	2.91*

Note: *** p < 0.01, ** p < 0.05, * p < 0.10, using a two-tailed t-test.

APPENDIX

Appendix A: Items comprising each measure

Construct	Sample Items (anchors: strongly disagree/strongly agree)
Technical Service Quality (four items)	1. My adviser has assisted me to achieve my financial goals. 2. My adviser has performed well in providing the best return on my investments. 3. My adviser has helped me to protect my current position by recommending the best investing options. 4. My adviser has performed well in investing my money in appropriate investment options.
Functional Service Quality (five items)	1. My adviser's behavior instills confidence in me. 2. My adviser is courteous. 3. My adviser gives me personal attention. 4. My adviser has my best interests at heart. 5. I can share my thoughts with my adviser.
Customer Education (four items)	1. My adviser keeps me very well informed about what is going on with my investments. 2. My adviser explains financial concepts and recommendations in a meaningful way. 3. My adviser always offers me as much information as I need. 4. My adviser always explains to me the pros and cons of the investment he/she recommends to me.
Customer Trust (four items)	1. [*Business Name*] is an organization that can be trusted at all times. 2. [*Business Name*] is an organization that is honest and truthful. 3. [*Business Name*] is an organization that can be counted on to do what is right. 4. I have confidence in [*Business Name*] as an organization.
Customer Expertise (four items)	1. I can understand almost all the aspects of the services I purchase from my adviser. 2. I possess good knowledge of financial planning services and products. 3. I am quite experienced in this area. 4. I can understand my adviser's techniques and strategies.

Appendix B

Reliability, convergent validity, unidimensionality of scales

Construct	Item	Cronbach alpha	Factor loading	Item to total correlation
Technical Service	TSQ1	0.97	0.94	0.89
Quality	TSQ2		0.97	0.94
	TSQ3		0.96	0.92
	TSQ4		0.96	0.93
Functional Service	FSQ2	0.86	0.78	0.63
Quality	FSQ3		0.88	0.76
	FSQ4		0.87	0.77
	FSQ5		0.86	0.75
Customer	CED1	0.91	0.87	0.78
Education	CED2		0.91	0.83
	CED3		0.89	0.80
	CED4		0.88	0.77
Trust	Trust1	0.96	0.95	0.91
	Trust2		0.95	0.90
	Trust3		0.95	0.91
	Trust4		0.93	0.88
Customer	Expertise1	0.86	0.82	0.69
Expertise	Expertise2		0.90	0.80
	Expertise3		0.88	0.77
	Expertise4		0.77	0.61

REFERENCES

Aiken, L. S., & West, S. G. 1991. **Multiple Regression: Testing and Interpreting Interactions**. Thousand Oaks, CA: Sage.

Alba, J. W., & Hutchinson, J. W. 1987. Dimensions of consumer expertise. **Journal of Consumer Research**, 13: 411-454.

Allison, P. D. 1977. Testing for interaction in multiple regression. **American Journal of Sociology**, 83: 144-153.

Anderson, E., & Weitz, B. 1990. Determinants of continuity in conventional industrial channel dyads. **Marketing Science**, 8: 310-323.

Arbuckle, J. L. 1994. Amos: Analysis of moment structures. **Psychometrika**, 59: 135-137.

Bentler, P. 1990. Comparative fit indexes in structural models. **Psychological Bulletin**, 107: 238-246.

Bentler, P., & Bonnett, D. 1980. Significance tests and goodness of fit in the analysis of covariance structures. **Psychological Bulletin**, 88: 588-606.

Bettencourt, L. A., Ostrom, A. L., Brown, S. W., & Roundtree, R. I. 2002. Client co-production in knowledge-intensive business services. **California Management Review**, 44 (4): 100-128.

Bettman, J., & Park, C. 1980. Effects of prior knowledge, exposure, and phase of the choice process on consumer decision processes: A protocol analysis. **Journal of Consumer Research**, 7: 234-248.

Bouty, I. 2000. Interpersonal and interaction influence on informal resource exchange between R&D researchers across organizational boundaries. **Academy of Management Journal**, 43: 50-65.

Brucks, M. 1985. The effects of product class knowledge on information search behavior. **Journal of Consumer Research**, 12: 1-16.

Burton, D. 2002. Consumer education and service quality: Conceptual issues and practical implications. **Journal of Services Marketing**, 16: 125-142.

Coleman, J. 1990. **Foundations of social theory**. Cambridge, MA: The Belknap Press.

Crosby, L. A., Kenneth, E. R., & Cowles, D. 1990. Relationship quality in services selling: An interpersonal influence perspective. **Journal of Marketing**, 54: 68-81.

Darby, M. R., & Karni, E. R. 1973. Free competition and optimal amount of fraud. **Journal of Law and Economics**, 16: 67-86.

Dawar, N., & Vandenbosch, M. 2004. The seller's hidden advantage. **MIT Sloan Management Review**, 45: 83-88.

Fornell, C., & Larcker, D. F. 1981. Evaluating structural equation models with unobservable variables and measurement error. **Journal of Marketing Research**, 18: 39-50.

Glen, P. 2002. Healing client relationships. **Consulting to Management**, 13: 4-7.

Green, S., Akey, T., Fleming, K., Hershberger, S., & Marquis, J. 1997. Effect of the number of scale points on chi-square fit indices in confirmatory factor analysis. **Structural Equation Modeling**, 4: 108-120.

Grönroos, C. 1983. **Strategic management and marketing in the service sector**. London: Chartwell- Bratt.

Hartline, M. D., & Ferrell, O. C. 1996. The management of customer-contact service employees: An empirical investigation. **Journal of Marketing**, 60: 52-70.

Joni, S. N. 2005. Trust and the third opinion. **Consulting to Management**, 16: 16-20.

Kenis, P., & Knoke, D. 2002. How organizational field networks shape interorganizational tie-formation rates. **Academy of Management Review**, 27: 275-293.

Lengnick-Hall, C. A. 1996. Customer contributions to quality: A different view of the customer-oriented firm. **Academy of Management Review**, 21: 791-824.

Madhok, A. 1995. Opportunism and trust in joint venture relationships: An exploratory study and a model. **Scandinavian Journal of Management**, 11: 57-74.

May, M. 2004. From consultant to courtier. **Consulting to Management**, 15: 17-34.

McFadyen, A. M., & Cennalla, A. A. 2004. Social capital and knowledge creation: Diminishing returns of the number and strength of exchange relationships. **Academy of Management Journal**, 47: 735-746.

McKee, D. O., Varadarajan, P. R., & Pride, W. M. 1989. Strategic adaptability and firm performance: A market-contingent perspective. **Journal of Marketing**, 53: 21-35.

Moorman, C., Deshpandé, R., & Zaltman, G. 1993. Factors affecting trust in market research relationships. **Journal of Marketing**, 57: 81-101.

Moorthy, S., Ratchford, B. T., & Talukdar, D. 1997. Consumer information search revisited: Theory and empirical analysis. **Journal of Consumer Research**, 23: 263-277.

Morgan, R. M., & Hunt, S. D. 1994. The commitment-trust theory of relationship marketing. **Journal of Marketing**, 58: 20-38.

Nahapiet, J., & Ghoshal, S. 1998. Social capital, intellectual capital, and the organizational advantage. **Academy of Management Review**, 23: 242-266.

Neter, J., Wasserman, W., & Kutner, M. H. 1985. **Applied linear statistical models: Regression, analysis of variance, and experimental design**. Homewood, IL: Richard Irwin.

Pagano, B., & Pagano, E. 2004. Try transparency, gain in credibility. **Consulting to Management**, 15: 20-23.

Park, W., & Lessig, P. 1981. Familiarity and its impact on consumer decision biases and heuristics. **Journal of Consumer Research**, 8: 223-230.

Podsakoff, P. M., & Organ, D. W. 1986. Self-reports in organizational research: Problems and prospects. **Journal of Management**, 12: 531-544.

Prahalad, C. K., & Ramaswamy, V. 2000. Co-opting customer competence. **Harvard Business Review**, 78: 79-87.

Rao, A. R., & Monroe, K. B. 1988. The moderating effect of prior knowledge on cue utilization in product evaluations. **Journal of Consumer Research**, 15: 253-264.

Schaffer, R. H. 2002. High-impact consulting. **Consulting to Management**, 13: 12-19.

Schlenker, B., Helm, B., & Tedeschi, J. 1973. The effects of personality and situational variables on behavioral trust. **Journal of Personality and Social Psychology**, 25: 419-427.

Shapiro, S. 1987. The social control of impersonal trust. **American Journal of Sociology**, 93: 623-658.

Sharma, N., & Patterson, P. G. 1999. The impact of communication effectiveness and service quality on relationship commitment in consumer, professional services. **The Journal of Services Marketing**, 13: 151-170.

Sharma, N., & Patterson, P. G. 2000. Switching costs, alternative attractiveness and experience as moderators of relationship commitment in professional, consumer services. **International Journal of Service Industry Management**, 11: 470-490.

Sheth, J., & Sobel, A. 2002. **Clients for life: Evolving from an expert-for-hire to an extraordinary adviser**. New York: Fireseide.

Sirdeshmukh, D., Singh, J., & Sabol, B. 2002. Consumer trust, value, and loyalty in relational exchanges. **Journal of Marketing**, 66: 15-37.

Söderlund, M. 2002. Customer familiarity and its effects on satisfaction and behavioral intentions. **Psychology & Marketing**, 19: 861-880.

Swap, W. C., & Rubin, J. Z. 1983. Measurement of interpersonal orientation. **Journal of Personality and Social Psychology**, 44: 208-219.

Taylor, V. A., & Miyazaki, A. D. 1995. Assessing actual service performance: Incongruities between expectation and evaluation criteria. **Advances in Consumer Research**, 22: 599-605.

Tucker, L., & Lewis, C. 1973. The reliability coefficient for maximum likelihood factor analysis. **Psychometrika**, 38: 1-10.

Urban, G. 2004. The emerging era of customer advocacy. **MIT Sloan Management Review**, 45: 77-88.

Voss, G. B., & Voss, Z. G. 2000. Strategic orientation and firm performance in an artistic environment. **Journal of Marketing**, 64: 67-83.

Weisinger, H. 1998. **Emotional intelligence at work**. San Francisco, CA: Jossey-Bass.

Weitz, B. A., & Bradford, K. D. 1999. Personal selling and sales management: A relationship marketing perspective. **Journal of the Academy of Marketing Science**, 27: 241-254.

Zeithaml, V. A. 1981. How consumers' evaluation processes differ between goods and services. **Marketing of Services**, Chicago, IL: American Marketing Association.