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# Full Length Research Paper

# **Empirical research on impact of industrial services** brand on customers' relationship quality perception

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Industrial services brand will play a critical role in establishing high-quality customer relationships. Based on this, this study aims to empirically explore the influence of industrial services brand on customers' perceptions toward the two parties' relationships. The study develops a conceptual framework firstly for industrial services brand which includes expertise, corporate reputation, corporate promise and communication as construct elements. Data was collected using questionnaire survey of buyers in industrial logistics and analyzed using structural equation modeling. The results show that corporate reputation has significant impact on quality perception while expertise and corporate promise has positive and significant impact on customer trust. The results also show that communication has significant and positive impact on both quality perception and customer trust. The study has implications for industrial services companies to guide customers' psychological behaviors toward the two parties' relationships.

Key words: Industrial services, industrial services brand, relationship quality, relationship satisfaction.

#### INTRODUCTION

Industrial services are producer services that provide fullrange and high added-value services for manufacturing industry and defined as the service industry that provide guaranteed services for keeping continuity of upgrading of the industry as well as improving industrial technology development and industrial manufacturing processes, promoting production efficiency (Browning and Singelman, 1975). Industrial services are the associated services that accompany the manufacturing industry and new industries that develop independently from manufacturing industry's inner services sectors. Interest is growing amongst academics in understanding the industrial services phenomenon, particularly since industrial services as a midst industry is oftentimes endowed with important roles in promoting economic growth.

Developing long-term relationships with customers is a major objective in the industrial services sector (Webster, 1992; Achrol, 1997). In general cases, developing individual relationship with business customers offer suppliers a secure loyal customer base and opportunities to reach a high level of profitability (Rauyruen and Miller, 2007). Many supplying and selling firms have seen the importance of the strategic management of supplier and customer relationships (Eng., 2004) and engage in relationships with their business customers (Ryssel et al., 2004).

Since successful inter-organizational relationships are critical to firms' financial performance, researchers have paid efforts to uncover the drivers of inter-organizational relationships and its performance. Dall'Olmo Riley and de Chernatony (2000) reveal that service brand acts as a "relationship builder" or "relationship fulcrum" and is a holistic process beginning with the relationship between the firm and its staff and coming alive during the interaction between staff and customers. The brand creates "experiential image", "service experience promise" and "relationship trust" (Brodie et al., 2009). Within this perspective, the service brand acts as a "relationship

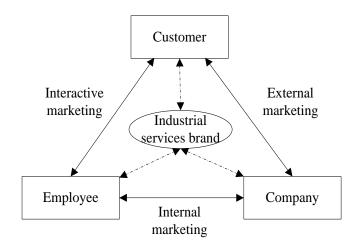


Figure 1. Marketing activities of the industrial service brand.

lever" in inter-organizational relationships, where it interfaces not just with end customers but also the company and its employees. In addition, firms tend to build customer relationships at an organizational level. A focal firm's organizational customers are more likely to depend on the name of the firm to make purchase decisions (Rao et al., 2004). Thus, it can be said that customer's perceptions of the service brand will influence their perceptions toward the two parties' relationships.

However, the majority of the research about brands, until recently, focuses on consumer goods settings and centers on understanding the influences of the awareness and image of the brand (Keller, 1993). Research on the context of industrial services is rare; especially, nowadays the branding of industrial services is a trend. Thus, how industrial services brand influences customers' perceptions toward the two parties and further how this perceptions influence their attitude toward the relationship they have with the service providers? The current literature has yet not given definite answer.

This study attempts to explore the questions. The logic of this study is customers' perception toward the industrial services brand will influence their perception toward the relationship they have with the service providers (that is, relationship quality) and such perception will further influence their attitude toward the relationship they have with them (that is, relationship satisfaction). The remainder of the paper is as follows: Firstly, the paper will develop a conceptual framework for industrial services brand and review theories about relationship quality and relationship satisfaction. Secondly, the hypotheses will be developed and a model linking industrial services brand, relationship quality and relationship satisfaction will be proposed. Thirdly, the research methodology and structural equation modeling results are reported. Finally, the conclusions and managerial implications are discussed and the limitations and future research directions will be presented.

# DEVELOPING A CONCEPTUAL FRAMEWORK FOR INDUSTRIAL SERVICES BRAND

Firstly, it is necessary to make a description of the distinction between service company brand and service brand. The two concepts are different, but closely related with each other. The service company brand concerns the whole organization's image and reputation while the service brand concerns the distinctive characteristics of the service offer. The brand name for the service is sometimes the same as that of the company, such as in the case of FedEx and UPS, which are two typical industrial services companies. In fact, in some studies, researchers do not rigorously distinguish the two concepts. Thus, in this paper, we adopt a broad sense of the services brand conception which includes the above two levels' meanings.

To develop the framework for industrial services brand, the model and terms depicting different marketing activities of the company by Grönroos (1990) were borrowed, that is, external marketing, internal marketing and interactive marketing (Figure 1). This manipulation follows Brodie et al. (2009)'s method. Because of their roles in aligning customer's brand perceptions and attitudes (Brodie et al., 2009), the external, internal and interactive marketing activities help form customer relationships.

Since the focus of this study is on the influence of the industrial services brand on customers' perceptions toward the two parties' relationships, it is necessary to firstly indentify the typical elements that construct the industrial services brand.

External marketing includes activities of communications between the company and customers by making promises about the service offer. Through external marketing efforts, an organization makes promises to its customers regarding what they can expect and how it will be delivered. This largely relates to the traditional external marketing communications organizations use. Traditional marketing activities such as advertising sales, special promotions and pricing are the common forms of this type of marketing. From the respective views of corporate level, the typical brand element is the corporate image that concerns its reputation. Balmer and Gray (2003) refer to corporate image and reputation as the corporate brand. Corporate reputation is considered as the value judgment of the corporate traits and has higher importance than that of corporate image (Gray and Balmer, 1998). Moreover, one of the salient characteristics of the industrial services is the two parties seek to establish long-term and stable relationships. Once a customer establishes a stable relationship with a provider, he will not frequently change suppliers randomly, because not only sellers are dedicated to establish a good trustbased and promise-based relationships with customers, but also buyers are realizing the importance of the stable and sustaining relationships with suppliers and thus begin to indentify the main vendors and reduce the numbers of vendors. They also need to be dedicated to establish

trust-based and commitment-based relationships with vendors (Xingquan et al., 2011). For them, maintaining good relationship or doing business with suppliers who have good reputations may be a thing that delights them or something they are proud of. Thus, reputation has special importance for industrial services providers. Thus, we choose corporate reputation as one element of our industrial service brand.

Internal marketing involves the company and people working in the company. Berry (1995) terms internal marketing as marketing to employees, which enables them to have skills, abilities and motivation to deliver the promises. The typical brand element here is the expertise that the employee has. Bitner (1995) argues that promises are easy to make, but unless employees are trained and well rewarded, the promise may not be kept. Thus, expertise has the roles of guaranteeing promise is kept. In industrial services, services are provided by qualified professionals (Yorke, 1990) and when compared to consumer services, industrial services are more complex (Gounaris, 2005) and more technology driven (Jackson and Cooper, 1988), and thus, the expertise and skills qualified professionals have are key elements of the quality of the service provided for services purchased from organizations (Yorke, 1990). Brodie et al. (2009) also posit that, internal marketing has an indirect effect on customers' perceptions of the service brand. Thus, this paper includes expertise as another element of the industrial services brand in this study.

Interactive marketing means interactions between people working within the company and customers. Bitner (1995) argues that it is in those moments of truth that the service relationships are built when customer interacts with the company and the service is produced and consumed. Thus, the two-way communication between the two parties' employees is an effective vehicle by which the promise can be communicated (Berry, 1983). Through this communication, the expectations between the two parties are properly set and thus a relationship between two parties will be not off to a shaky or weak beginning. In industrial services, the intensity and frequency of the interactions between two parties is far higher than that of interactions between individual customer and service providers (Qin et al., 2010). Hausman (2003) argue that qualified professionals interact closely with managers from the buying organization and on a very frequent basis. Such interaction is mainly conduct by communications between two parties' persons. For industrial services, one of the most important factors for success in relationship marketing will be a service marketing orientation among employees throughout the depth and breadth of an organization (George, 1990). The interactions between the two parties' employees will develop into friendships and thus create stronger partners (Barrett, 1986). Thus, in industrial services, the communication between employees will have quite important influence on two parties' relationships. Based on this, the paper chooses communication as the third element of the industrial services brand in this study.

In addition, promise relates all three marketing activities (Bitner, 1995). Grönroos (1990) views service relationship as being achieved by "mutual exchange and fulfillment of promises". As far as the industrial services being concerned, promises are the fundamental units of interaction in businesses. They coordinate organizational activity and stir up the passions of employees, customers and suppliers (Sull and Spinosa, 2007). In addition, industrial services happen because of its downstream production or processing. The services provided will impact the organizational customers' own service to their customers (Gounaris, 2005). Thus, often, a customer will solicit a promise from a provider and explains the rationale for the request and invests time to ensure that the provider understands their mission (Sull and Spinosa, 2007). Based on this, the paper includes promise as the forth element of the industrial services brand in this study.

Based on the above discussion, we develop a framework for the industrial services brand that includes expertise, corporate reputation, corporate promise and communication as its construct elements according to the different marketing activities they correspond with. Here, what need to note is that the elements that constructs the industrial services brand is not restricted to the above four ones. There are also elements other than the four chosen that could be used to portray the industrial services, which are excluded for parsimony.

### Relationship quality and relationship satisfaction

### Relationship quality

In this paper, we use relationship quality to depict customers' perception toward the two parties' relationships. Relationship quality is often defined as an overall assessment of the strength of a relationship and the extent to which it meets the needs and expectations of the parties based on a history of successful or unsuccessful encounters or events (Smith, 1998b). Johnson (1999) simply describes relationship quality as the overall depth and climate of the inter-firm relationship.

There is no definitive set of dimensions that can be said to make up relationship quality. In the literature, relationship quality is typically conceptualized as a higher-order construct composed of trust, satisfaction and commitment (Ulaga and Eggert, 2006). Trust is central to relational exchanges (Morgan and Hunt, 1994) and is thus used as an indicator of the relationship quality. The commitment construct is omitted from the set of quality indicators because of its similarity to relationship long-term orientation (Ganesan, 1994) and the unclearness it has with some explanatory variables of future loyal behaviors (Mitrega and Katrichis, 2010) as well as such type of commitment relationship might being investigated

in a classical social psychology studies about romantic relationships (Rusbult, 1980) which making it may not be immediate, but an outcome type of variable. With regard to the satisfaction construct, given that it usually being considered as an outcome of a buyer-seller relationship (Chang and He, 2005), we regard it as an outcome type of variable here, rather than a dimension of the relationship quality. The perceived product/service quality is included as one dimension of the relationship quality, which is response to Hennig-Thurau and Klee (1997) advocation. They further argue that, any buyer-seller relationship is founded on the exchange of products and/or services, thus it is necessary to include the overall products and/or service-related quality perception first as a basic component of relationship quality. This study supports this viewpoint and includes perceived product/ service quality as one dimension of the relationship quality. Reflecting the customer's perception and evaluation of a relationship as a whole, where product-or service-related and relational aspects are blended into one outcome, relationship quality is thus conceptualized as comprising two dimensions: (a) the customer's overall quality perception and (b) trust in the service provider.

### Relationship satisfaction

Keeping strong relationships with customers will not only enhance sales and profits (Palmatier et al., 2006), but also expand markets and reduce costs (Cannon and Homburg, 2001). Thus, selling firms will attempt to fulfill the needs of customers in order to make them satisfied. In this paper, we focus on two parties' relationship and defined satisfaction as the customer's cumulative feelings toward the relationship between two parties after a series of specific transaction (Anderson et al., 1997), which is a concept different from the past literatures in relationship quality which defines satisfaction as customer's feelings toward the perceived product and/or service performance (Ulaga and Eggert, 2006). In essence, service satisfaction measures firm's performance along transactional dimensions, whereas, relationship satisfaction emphasizes the intangible aspects of on-going interactions over one-off encounters. Relationship satisfaction measures the intangible aspects of the relationships and is over and above the core elements of the service satisfaction.

## Hypotheses development

### Expertise hypotheses

Expertise typically refers to the extent to which a person (salesperson/service operator/communicator) possesses knowledge, experience or skills concerning the focal service. A customer's perception of an employee's expertise reflects the identification of the competencies associated with the goods or service transaction (Crosby

et al., 1990).

Services that a service provider provides are often inextricably entwined with their human representatives. In many cases, a person is perceived to be the service (Shostack, 1977). Thus, human variables are important factors during the service delivery and service personnel's attitude; expertise and actual behavior directly influence customer's evaluation of the service (Brady and Cronin, 2001). Czepiel et al. (1985) also suggest the employee's skills as well as other elements such as their attitudes and behaviors define the quality of the delivered service and ultimately affect what clients evaluate as a satisfactory encounter. Thus, we propose:

H<sub>1a</sub>: Perceived service provider expertise is positively related to customer's quality perception in industrial services.

Thanks to his/her expertise, the employee can reduce customer's uncertainties and feelings of the vulnerability during the encounter (Guenzi and Georges, 2010), since expertise reflects the mastery of the relevant competencies in the service delivery. Customers are more likely to trust a partner who is perceived as possessing greater expertise (Bendapudi and Berry, 1997). Thus, perceived expertise should be a predictor of customer trust in the partners. Empirical research also confirms the positive effect between expertise and trust in a salesperson (Busch and Wilson, 1976; Swan et al., 1985) and that between expertise and perceived relationship quality (Crosby et al., 1990; Doney and Cannon, 1997; Jonson and Grayson, 2005). Thus, we propose:

H<sub>1b</sub>: Perceived service provider expertise is positively related to customer trust in an industrial services provider.

### Corporate reputation hypotheses

Corporate reputation is defined as the extent to which firms and people in the industry believe a corporate is honest and concerned about its customers (Doney and Cannon, 1997; Ganesan, 1994). Reputation is both a symbol of value reciprocation and an expression of empathy for the customer. A firm can gain a good reputation by doing things not only because they are fair and balanced, but also because they are the "right thing" to do (Johnson and Grayson, 2005).

Corporate reputation is a result of the past actions of a firm (Nguyen and Leblanc, 2001). It can be viewed as a mirror of the firm's history which serves to communicate to its target groups the information regarding the quality of its products or services (Yoon et al., 1993). Thus, reputation serves as a signal of the underlying quality of a firm's products and services (Roberts and Dowling, 2002). Chen and Dubinsky (2003) apply signaling theory in an online environment to find that as an extrinsic cue, reputation plays an important role for customers when

determining the product quality of an online retailer. Thus, we propose:

H<sub>2a</sub>: Perceived corporate reputation is positively related to customer's quality perception in industrial services.

Reputation and trust are positively related in three ways, with reputation as an antecedent of trust. First, reputation is often associated with the reduction of uncertainty (Walsh and Beatty, 2007). A positive reputation usually forms based on superior performance over a certain period of time, thus, a customer can have confidence and reduce risk perceptions when making judgment on firm's performance and quality of products or services. Thus, a firm with a highly favorable reputation will be more highly trusted by the customer. Secondly, reputation provides signals of credibility to potential partners on whom a relationship can be initiated. Favorable reputation is easily transferable across firms, thus buyers can infer the trustworthiness of the firm through the words and actions of other people and organizations (Doney and Cannon, 1997).

For example, a customer who is not yet sufficiently familiar with a firm may extrapolate his/her opinions directly from the reputation of the firm. A firm's reputation gives a buyer "the needed first piece of evidence to take some initial risk" on the road to developing a trusting relationship (Das and Teng, 1998). Thirdly, reputation stands for a substantial cost for a firm who acts in an untrustworthy manner. Reputation is "fragile", which requires considerable time and investment to develop, but it is easy to destroy (Hall, 1993). Reputable companies are thus less likely to engage in negative behaviors that jeopardize their reputation, which strengthens customers' confidence in their integrity and reliability. Empirical evidence for reputation as an antecedent of trust can also be found (Ganesan, 1994; Johnson and Grayson, 2005; Walsh and Beatty, 2007; Ken and Xie, 2009). Thus, we propose:

H<sub>2b</sub>: Perceived corporate reputation is positively related to customer trust in an in industrial services provider.

#### Corporate promise hypotheses

Promise is defined as the pledge that a provider makes to satisfy the concerns of a customer within or outside the firm (Sull and Spinosa, 2007). Keeping promises is the essence of a mutually beneficial service relationship (Grönroos, 1990).

The positive relationship between promise and quality perception might be understood from the process that quality perception forms. Quality in a service provider is a measure of the extent to which the service delivered meets the customer's expectations. This means that the quality perception is influenced not only by the service performance a service provider delivered, but also by

customer's expectations. Customer expectations are pretrial beliefs about a product or service (Olson and Dover, 1979) and can be influenced by several factors with a particular company. These factors include prior exposure to the service, word of mouth, publicity and communications controlled by the company (for example, advertising, personal selling and price) promise, as well as prior exposure to the competitive services (Zeithaml et al., 1991). Thus, the provider of service can be proactive in shaping the "customer's expectations" through its marketing and external communication efforts. The promise depicts how the service will be performed (Grönroos, 1984) and the customer's expectation is created by these promises (Grönroos, 2009). Thus, we propose:

H<sub>3a</sub>: Corporate promise is positively related to customer's quality perception in industrial services.

Service promise is one means to build trust (Berry, 1995). First, promises can help bridge the gaps between the two parties and foster a mutual sense of own obligation to deliver the goods. Making a promise is one way in which a firm can demonstrate to others its confidence in its own competence and reliability with regard to specific activities. So a firm may promise to act in a certain way, believing that those who know of this action can be reasonably expected to rely on them to fulfill their obligation (Blois, 1999). Promise also forces the firm to improve service to avoid the cost and embarrassment of frequent payout (Berry, 1995). Second, service promises can symbolize a company's commitment to fairly play with customers. When making a promise, there is the opportunity to make as explicit as is possible what the other party can rely on a provider to do in return for what. It gives customers the opportunity to know what will happen if the promise is not fulfilled. Specially, customers can invoke the promise and receive compensation for the burden they endured. Thus, it presumably enables customers to feel a limited form of trust of the type defined by Barney and Hansen (1994) as "semi-strong trust" (Blois, 1999). In conclusion, promise enables customers to trust with minimal vulnerability and is an artificially contrived and secured case of mutual trust (Baier, 1986). Thus, we propose:

H<sub>3b</sub>: Corporate promise is positively related to customer trust in an industrial services provider.

### **Communication hypotheses**

Communication is an inherent element of the process of inter-firm relationship development (Mitrega and Katrichis, 2010). It is often defined as the formal as well as informal exchanging and sharing of meaningful and timely information between buyers and sellers (Sin et al., 2005). Research in relationship marketing highlights the

importance of information exchange in business relationships.

Communication positively relating with perceived service quality has been mentioned by many researchers. Parasuraman et al. (1985) addressed ten determinants that matter customers' perception of quality, in which communication is one. Johnston (1995) also addresses 18 quality determinants according to whether they resulted in customer's satisfaction or dissatisfaction, which is the communication between two parties. Being open and disclosing information that is not only relevant and positive for the relationship, but also sometimes negative and exigent, is intuitively rated as a positive quality perception (Hansen et al., 2008). For example, the service firm might reveal information on expected changes in the market that the customer is unaware of. This will enable the customer to be prepared or take necessary precautions if the provider's predictions are brought to fruition. Hence, information sharing might improve the perceived quality of customers. Additionally, information sharing might reduce customer's perceptions of the service's performance ambiguity, thus enabling them to more positively assess the quality received. Thus, we propose:

 $H_{4a}$ : High quality communication of the service provider is positively related to customer's quality perception in industrial services.

Communications incorporates all walks of contacts between the two companies. Thus, it can foster trust in three ways. First, communication helps align perceptions and expectations. The frequency and quality of information exchange is a significant factor in determining the degree to which two parties understand each other's objectives and coordinate their efforts to achieve those objectives (Grabner and Rosenberg, 1969; Guiltinan et al., 1980). One specific aspect of communications particularly relevant to achieving objective compatibility and mutual trust is feedback. Feedback, both positive and negative, provides information to customers about the other party's perception of its performance. Customers can use this information to adapt its behaviors or attempt to alter the other party's objectives. Friman et al. (2002) posits the integration of communication systems brought the exchanging partners closer together. Second, regular, open and two-way communications conveys the firms' interest in customer's welfare. Communication influences customers' opinions about their relationships with the seller (Mitrega and Katrichis, 2010). By showing relationship is a true one that they are interested; firms with high communication intensity can encourage customer's perceptions of "special status" (Czepiel, 1990) and "closeness" (Barnes, 1994), thereby positively affecting customers' trust in a seller. Thirdly, Communication assists in resolving disputes (Etgar, 1979). Lack of communication easily leads to problems and eventually

causes poor relationships between two parties. Straight communication can help preserve the relationship from further damage (Friman et al., 2002) and thus be in favor of fostering trust. In conclusion, frequent and high quality communication - that is, relevant, timely and reliable - will result in greater trust (Morgan and Hunt, 1994). Moreover, empirical researches have also supported communication positively related to trust (Anderson and Weitz, 1989; Anderson and Narus, 1990; Morgan and Hunt, 1994; Palmatier et al., 2007; Mitrega and Katrichis, 2010). Thus, we propose:

H<sub>4b</sub>: High quality communication of the service provider is positively related to customer trust in industrial services.

# Hypotheses between relationship quality dimensions and relationship satisfaction

Quality perception is defined as a stable attitude-like overall evaluation of the product or service (Hennig-Thurau and Klee, 1997). A product or service that meets the customer's needs is considered as an absolutely indispensable condition of high relationship quality.

Relationship is a process that develops gradually (Rotter, 1967). The process of development requires an initial sequence of experiences with an exchange partner that provides the customer with the opportunity to judge his performance. In an early stage of a developing relationship, the predominant source for these experiences is the perception of the overall quality where the customer matches the provider's performance against his/her internal standard (Anderson and Sullivan, 1993). A consistent sequence of positive experiences may then lead to satisfaction toward their relationship with the partners. Thus, we proposed:

 $H_5$ : Customer's quality perception is positively related to its relationship satisfaction toward the service provider in industrial services.

Trust is defined as the belief that the buyer has confidence in a service provider's reliability and integrity (Morgan and Hunt, 1994). Since many products/services Contain credence elements of quality (such as the industrial services we examine), customers may not have the ability to discern performance even after experiencing it (Chiou and Droge, 2006). Ambiguous performance tends to be misinterpreted in the direction of a priori expectations (Trawick and Swan, 1981), and moral hazard issues will remain unresolved after purchase when violations of quality claims cannot be unambiguously recognized (Kirmani and Rao, 2000). For this kind of product or service, strong customer confidence is prominent.

Trust is divided into one before initiation of an exchange (pretrust) and the one after an exchange

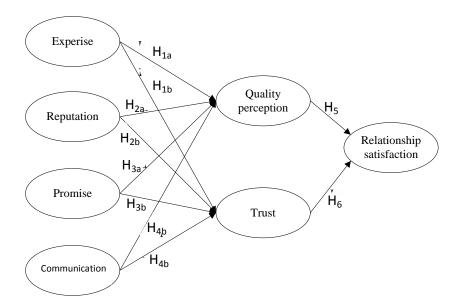


Figure 2. Conceptual model.

(posttrust). On the basis of social exchange theory, customers' pretrust will have direct influence on their post purchase satisfaction. Therefore, we can argue that cumulative trust perceptions will affect cumulative satisfaction over time. In any case, if a customer does not trust the provider based on past experience, he or she will probably be dissatisfied with that provider. In addition, the term confidence benefit (which is very similar to trust in the current study), put forward by Gwinner et al. (1998) when they study the relational benefits that customers experience in long-term relationships with the service firm, they provides another rationale for the relationship from trust to satisfaction. Confidence benefits include a sense of reduced anxiety, faith in the provider, reduced perceptions of risk and knowing what to expect. When customers feel these benefits, their overall satisfaction will be enhanced over the long run. Thus, we propose:

H<sub>6</sub>: Customer trust is positively related to relationship satisfaction in industrial services.

Building on the above literature, we propose the following model that links industrial services brand and customer's relationship satisfaction through relationship quality (quality perception and customer trust) together (Figure 2). Each aspect of the industrial services brand is hypothesized to have a direct influence on customer's quality perception and its trust in the service provider, which are in turn positively related to their satisfaction toward their relationship with the service provider.

### **METHODOLOGY**

### Sample and data collection

A large-size logistics company in China agreed to assist with data

collection for this research. The company mainly provides logistics services for industrial goods and its customers are all organizational manufacturing companies which uses these industrial goods as raw materials or machine accessories. Goods categories that the logistics company mainly transports included coals, minerals and relevant equipments and accessories. According to the taxonomy of services of Barry and Terry (2008), industrial services means the services that is delivered to other organizations by manufacturing companies and includes pre-purchased industrial services such as engineering, industrial services delivered at purchase such as training of operations staff and transportation and after-sales industrial services such as technical maintenance. The sampling in this study conforms to the characteristics of the industrial services and has the representativeness.

The questionnaire survey was employed. 388 copies of questionnaires were sent by the logistics company to their current customers. After three months' survey, a total of 299 responses were received, among which 27 copies were unusable due to missing data. Thus, the final sample for analysis consisted of 272 observations. The effective response rate is 70.1%. The average years that the investigated company has been with the focal company are 2.91 years. A multi-  $^t$  test on responses of the key constructs between the investigated company that has been with the focal company less than 2.91 years and those has been more than 2.91 years indicates that none of the key constructs was significantly different among the two groups. The finding supports for an absence of non-response error in the data.

### Measures

All measures were adopted or modified from previous research. In all, 24 items capture each industrial services branding elements (expertise, corporate reputation, corporate promise and communication), quality perception customer trust and relationship satisfaction. Expertise and corporate reputation were measured using the scale adopted respectively from Doney and Cannon (1997) and Johnson and Grayson (2005). For the variable of corporate promise, we select the relevant item, which was mentioned previously to measure other variables, such as service quality. Communication was measured using the scale adapted

from Sin et al. (2005). We developed items of quality perception based on Zeithaml (1988)'s definition: "The consumer's judgment about a product and service's overall excellence or superiority". The three items were adapted from Cronin et al. (2000). Measures of customer trust were adapted from Keh and Xie (2009), Doney and Cannon(1997) and Sin et al. (2005), with one item capturing credibility, two capturing benevolence and the other three items capturing integrity. Relationship satisfaction was measured using items from Ulaga and Eggert (2004) and Ping (1993). Table 1 shows the detailed items for each construct.

To ensure conceptual equivalence and word-clarity, we conducted translation and back-translation. The translated questionnaire was evaluated again respectively by one professor and two PhD candidates in marketing and one company manager engaging in industrial logistics to examine its face and content validities. Feedback from these persons was used to improve the measuring instrument. All the items were measured using a seven point scale (1 = "strongly disagree", 7 = "strongly agree").

After deletion of items that have high cross-loadings in the confirmatory factory analysis, all remaining measures had Cronbach alphas greater than the cut-off point of 0.7 (Nunnally, 1978), indicating that the measures for the main constructs exhibited good internal consistency.

### **ANALYSIS AND RESULTS**

### **Construct validity**

The two-step procedure proposed by Anderson and Gerbing (1988) was employed to ensure an adequate measurement and structural model. Composite reliabilities (CR) and averaged variances extracted (AVE) are shown in Table 1. The composite reliability of indicators of each construct is acceptable, ranging from 0.833 for corporate reputation to 0.952 for customer trust (Bagozzi and Yi, 1988). AVE are all above the recommended 0.5 level (Fornell and Larcker, 1981). In addition, all indicators loaded significantly on the respective latent constructs (p<0.001) with the values varying from 0.76 to 0.94. Thus, the convergent validity was confirmed. Anderson and Gerbing (1988)'s suggestion was adopted to assess the discriminant validity. The confidence interval (±two standard errors) around the correlation estimate between any two latent variables does not include 1.0 (Table 2), providing support for the discriminant validity.

### Hypotheses testing

The analysis proceeds to examine the structural model. A LISREL procedure was used to estimate the model. The overall model fit (chi-square=550.48, d.f.=217, CFI=0.99, NFI=0.98, NNFI=0.99, IFI=0.99, GFI=0.85, AGFI=0.81, RMSEA=0.075) provides an acceptable fit of the data.

Table 3 and Figure 3 show the structural model results. The results show that expertise is not significantly related to customer's quality perception ( $\beta=0.17,\,t=0.96$ ), which does not support  $H_{1a}.$  In contrast, the positive relationship between it and customer trust ( $\beta=0.29,\,t=3.50$ ) is significant,  $H_{1b}$  is supported. Contrary to that of expertise,

reputation is significantly associated with customer's quality perception ( $\beta=0.74,$  t=9.18)) but not the case for customer trust ( $\beta=0.22,$  t=0.82), thus  $H_{2a}$  is supported whereas  $H_{2b}$  is not supported. Corporate promise is not significantly associated with customer's quality perception ( $\beta=0.18,$  t=0.78) which does not support  $H_{3a}$ , while the positive impact it has on customer trust is significant ( $\beta=0.49,$  t=6.12), which supports  $H_{3b}$ . In terms of communication, the antecedent role it has on both customer's quality perception ( $\beta=0.21,$  t=2.73) and customer trust ( $\beta=0.21,$  t=3.41) are both supported, thus  $H_{4a}$  and  $H_{4b}$  are supported. In common with hypotheses, the results show that both quality perception ( $\beta=0.37,$  t=5.59) and customer trust ( $\beta=0.62,$  t=8.99) are found to have positive and significant influence on customer's relationship satisfaction, which support  $H_5$  and  $H_6$ .

To test the robustness of the hypothesized model, an extended model where each element of the industrial services brand has direct influences on relationship satisfaction is proposed. From the fit indices, the extended model ( $\chi^2$ =541.65, d.f.=211, GFI=0.85, AGFI=0.81, RMSEA=0.076, NFI=0.98, NNFI=0.99, CFI=0.99, IFI=0.99) fits the data a little better than the proposed one. However, only five coefficients of all the paths in the extended model are significant (see Table 3), whereas seven of the ten paths in the hypothesized model are significant. Based on the common standard (Morgan and Hunt, 1994; Ellen and Johnson, 1999), we posit that the hypothesized model fit the data better.

In order to further test for the robustness, following Baron and Kenney (1986), the study excludes the effect of relationship quality (quality perception and customer trust) on relationship satisfaction from the extended model. A nested Chi-square difference test between the hypothesized model and this parsimonious model is examined. The Chi-square difference test indicates that the parsimonious model does not provide a significantly better fit to the data than the hypothesized model ( $\Delta \chi^2$ =22.06, p>0.05), which once again indicates the hypothesized model fits the data better.

### **DISCUSSION AND IMPLICATIONS**

Industrial services has been identified as a development tool by many developing areas, due to its potential of integrating diverse activities and resources available in these areas that are further increasingly demanded by the industrial market. The need for empirical research which leads to a better theoretical and practical understanding of how customers' perception of the industrial services brand influences their perception toward the two parties' relationships motivates this study. From the theoretical framework, the study derives a conceptual model of industrial services brand. The model includes four elements, that is, corporate reputation and promise

Table 1. Measurement model results.

Constructs	Measures	Loadings	t-value	Cronbach's α	CR	AVE
	XYZ's employee is knowledgeable	0.91	19.40 <sup>b</sup>			
Expertise	XYZ's employee knows his or her products very well	0.89	18.55	0.917	0.917	0.787
	XYZ's employee is not an expert	0.86	17.60			
	XYZ is highly regarded in the industry	0.76	14.61			
Corporate reputation	XYZ is known to be concerned about customers	0.81	15.80	0.833	0.830	0.619
	XYZ is one of the most capable firms in the industry	0.79	15.37			
	XYZ representative makes reliable promises	0.91	19.36			
Corporate promise	When XYZ promise to do something by a certain time, it does so	0.91	19.23	0.930	0.933	0.822
	XYZ employee provides the same service as it was promise	0.90	18.98			
Communication	We communicate and express our opinions to each other frequently <sup>a</sup>	-	-			
	We can show our discontent toward each other through communication	0.89	18.19	0.904	0.906	0.829
	We can communicate honestly	0.93	19.73			
Quality perception	Overall, XYZ's service quality is excellent	0.93	20.09			
	Overall, XYZ's service quality is superior	0.89	18.84	0.943	0.943	0.847
	Overall, XYZ's service quality is of high standard	0.94	20.53			
	XYZ is capable of doing its job	0.85	17.26	0.952	0.953	0.773
	XYZ's representative has made sacrifices for us in the past	0.82	16.40			
	XYZ's representative cares for us	0.89	18.65			
Customer trust	XYZ keeps promises it makes to our firm	0.88	18.27			
	XYZ are trustworthy on important things	0.92	19.93			
	XYZ is trustworthy.	0.91	19.52			
Relationship satisfaction	We think that we did the right thing when we purchased the service from XYZ	0.88	18.09	0.952	0.953	0.773
	Overall, my company is very satisfied with its relationship with XYZ	0.90	18.95			
	Overall, XYZ is a good company to do business with	0.84	16.98			

<sup>&</sup>lt;sup>a</sup>, Items which is deleted in the final analysis due to high cross loadings; <sup>b</sup>, P<0.001.

Table 2. Correlations and standard errors.

	1	2	3	4	5	6	7
Expertise	1						
Reputation	0.93(0.02)	1					
Promise	0.89(0.02)	0.96(0.02)	1				
Communication	0.84(0.02)	0.83(0.03)	0.83(0.02)	1			
Quality perception	0.88(0.02)	0.90(0.02)	0.89(0.02)	0.83(0.02)	1		
Trust	0.90(0.02)	0.92(0.02)	0.92(0.01)	0.87(0.02)	0.87(0.02)	1	
Satisfaction	0.88(0.02)	0.93(0.02)	0.90(0.02)	0.82(0.03)	0.91(0.02)	0.94(0.01)	1

Note: Figures in parentheses are standard errors.

Table 3. Hypotheses testing results.

	Doth	Hypothesize	ed model	Extended model		
	Path	Coefficient (t-value)	Estimate result	Coefficient (t-value)	Estimate result	
H1a	Expertise→quality	0.17 (0.96)	Not supported	0.07 (0.49)	Not supported	
H1b	Expertise→trust	0.29 (3.50***)	Supported	0.21 (1.35)	Not supported	
	Expertise→satisfaction	-	-	-0.36 (-1.24)	Not supported	
H2a	Reputation→quality	0.74 (9.18***)	Supported	0.67 (4.53***)	Supported	
H2b	Reputation→trust	0.22 (0.82)	Not supported	0.18 (0.57)	Not supported	
	Reputation-satisfaction	-	-	0.99 (1.53)	Not supported	
Н3а	Promise→quality	0.18 (0.78)	Not supported	-	-	
Н3а	Promise→trust	0.49 (6.12***)	Supported	0.36 (1.63)	Not supported	
	Promise→satisfaction	-	-	-0.56 (-1.35)	Not supported	
H4a	Communication→quality	0.21 (2.73**)	Supported	0.21 (2.68**)	Supported	
H4b	Communication→trust	0.21 (3.41***)	Supported	0.24 (3.61***)	Supported	
	Communication→satisfaction	-	-	-0.01 (-0.13)	Not supported	
H5	Quality-satisfaction	0.37 (5.59***)	Supported	0.26 (2.41**)	Supported	
H6	Trust→satisfaction	0.62 (8.99***)	Supported	0.65 (4.40***)	Supported	

<sup>\*\*,</sup> P<0.01; \*\*\*, P<0.001.

which are on the firm level, expertise and communication that belong to the operating level. The research shows that each element plays a critical role and hence provides empirical evidence to support the use of the theoretical framework in this paper. On the whole, customers' perceptions toward the service brand in the industrial services will influence their perceptions toward the two parties' relationships, and also indirectly influence their satisfaction toward the two parties' relationships through relationship quality perception.

Each aspect's influence of the service brand on perceptions of the two parties' relationships differs. Specifically, corporate reputation has significant impact on quality perception, while the influence it has on customer trust is not significant which proves Suh and Houston (2010)'s version that there is inconsistent evidence on the relationship between reputation and trust. Expertise and corporate promise has positive and significant impact on

customer trust while the influence they have on quality perception is not significant. Communication is found to have significant and positive impact on both quality perception and customer trust, which shows the importance of the straight, high-quality and two-way communication between the two parties in industrial services.

Researches on the roles of service brand in two parties' relationships in the past are mainly qualitative. This study empirically verifies the important roles of service brand in establishing high-quality customer relationships by undertaking a quantitative investigation. This study provides insight for corporate managers to objectively understand the nature of the service brand.

With regard to the relationship between relationship quality and relationship satisfaction, this study finds that customers' perception toward the service quality has significant influence on their satisfaction with the relationship they have with the sellers. Trust is also found

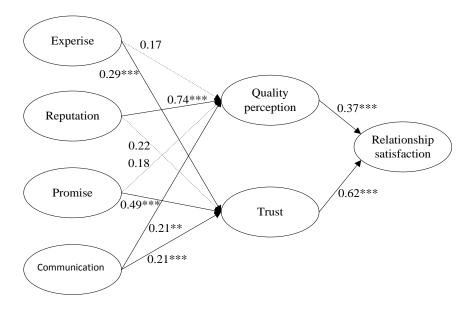


Figure 3. Structural model results.

to have positive and significant impact on relationship satisfaction. That is, the more trust customers have in the sellers, the more satisfied they are prone to be with their current relationship with the sellers.

This study provides implications for those industrial services companies who want to guide customers' psychological behaviors toward the two parties' relationships. This study confirms that the service brand has significant impact on customers' perceptions toward the two parties' relationships in industrial services, thus providing experiential support for industrial services companies to guide customers' psychological expectancy before they purchase. That is to say, companies must realize that the service brand can play a critical role in the development of the two parties' relationships. This is especially important for the industrial services companies who are relationship-oriented. The industrial services company can consider being to promote a better relationship with the customer as one of the orients and starting points when conducting service brand marketing activities, that is, to proactively guide customers' perceptions toward the two parties' relationships through the service brand. Specifically, companies can improve their reputation in the market and make a reliable promise on the corporate level to build an image of being honesty and integrity. On the other hand, on the operational level, the company can enhance the staff training to improve their employee' expertise and communication with customers to build "employee brand" that is perceivable by customers and express sincerity to customers of emphasizing and caring for them, and by this to make the customer create positive feeling about the company and thus then encourage them to have a positive perception toward the two parties' relationships.

# LIMITATIONS AND FURTURE RESEARCH DIRECTIONS

Also limitations of this study must be acknowledged and might be addressed in future approaches to validate or refine the model. First, this study only conceptualizes four elements in the theoretical framework of the industrial services brand. Future research needs to test competing models. An alternative theoretical framework may lead to a different conceptual model. Other meaningful industryspecific factors, such as brand image, corporate image and service variability, may be explored. Second, the scope of the study only chooses one empirical setting, which may restrict the generalization of the results. Further research should be enlarged to other contexts to examine the validity of the model. This could involve other logistics services and the service industries with similar characteristics such as equipment repair, equipment leasing and training of operations staff. However, an important task is to extend the study to a broader range of industries where the characteristic of the services varies. Boyt and Harvey (1997) points out that the category of services, for example, consultants, designers, surveyors, architects are of high levels of credence properties require personal delivery and are highly complex. Central to these investigations, is whether expertise, corporate reputation, corporate promise and communication adequately represent "the service brand" or whether more context specific measures are appropriate and whether the influence of the service brand differs across different services industries. Thirdly, this study uses single period customer data. The single period of data does not allow a test of dynamics of the relationships between the two parties. Since the two parties in

industrial services emphasize maintaining long-term relationships, the magnitude between the two parties and the importance one party is for the other one are likely to change over time. Hence, an important extension to the research is to use multiple period data to examine the evolutionary process of the drivers.

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#### **REFERENCES**

- Achrol RS (1997). Changes in the theory of interorganizational relations in marketing: toward a network paradigm. J. Acad. Mark. Sci. 25(1):56-71.
- Anderson E, Weitz B (1989). Determinants of continuity in conventional industrial channel dyads. Mark. Sci. 8(4):310-323.
- Anderson EW, Fornell C, Rust R (1997). Customer satisfaction, productivity and profitability: difference between goods and services. Mark. Sci. 16(2):129-145.
- Anderson EW, Sullivan MW (1993). The antecedents and consequences of customer satisfaction for firms. Mark. Sci. 12(2):125-143.
- Anderson JC, Gerbing DW (1988). Structural equation modeling in practice: a review and recommended two-step approach. Psychol. Bull. 103(3):411-423.
- Anderson JC, Narus JA (1990). A model of distributor firm and manufacturer firm working partnerships. J. Mark. 54 (1):42-58.
- Bagozzi RP, Yi Y (1988). On the evaluation of structural equation models. J. Acad. Mark. Sci. 16(1):74-94.
- Baier A (1986). Trust and antitrust. Ethics 96(2):231-260.
- Balmer JMT, Gray ER (2003). Corporate brands: what are they? What of them?. Eur. J. Mark. 37(7/8): 972-997.
- Barnes JG (1994). The issues of establishing relationship with customers in service companies: when are relationships feasible and what form should they are? Paper presented at the third annual Frontiers in Services Conference, American Marketing Association and Vanderbilt University Center for Services Marketing, Nashville, TN. October: 6-8.
- Barney JB, Hansen MH (1994). Trustworthiness as a source of competitive advantage. Strateg. Manage. J. 15(1):175-190.
- Baron RM, Kenney DA (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. J. Pers. Soc. Psychol. 51(6):1173-1182.
- Barrett J (1986). Why major account selling works. Ind. Mark. Manage. 15(1):63-73.
- Barry J, Terry TS (2008). Empirical study of relationship value in industrial services. J. Bus. Res. Ind. Mark. 23(4):228-241.
- Bendapudi N, Berry LL (1997). Customers' motivations for maintaining relationships with service providers. J. Retail. 73(1):15-37.
- Berry LL (1983). "Relationship marketing" In emerging perspectives on services marketing. Eds Leonard L Berry, G Lynn Shostack, and Gregory Upah Chicago. IL American Marketing Association pp.25-28.
- Berry LL (1995). Relationship marketing of services: growing interest, emerging perspectives. J. Acad. Mark. Sci. 23(4):236-245.
- Bitner MJ (1995). Building service relationships: it's all about promises. J. Acad. Mark. Sci. 23(4):246-251.
- Blois KJ (1999). Trust in business to business relationships: an evaluation of its status. J. Manag. Stud. 36(2):197-215.
- Boyt T, Harvey M (1997). Classification of industrial services: a model with strategic implications. Ind. Mark. Manage. 26(4):291-300.
- Brady MK, Cronin JJJ (2001). Some new thoughts on conceptualizing

- perceived service quality: a hierarchical approach. J. Mark. 65(3):34-
- Brodie RJ, Whittome JRM, Brush GJ (2009). Investigating the service brand: a customer value perspective. J. Bus. Res. 62(3):345-355.
- Browning H, Singelman J (1975). The emergency of a service society: demographic and sociological aspect of the sectoral transformation in the labor force of the USA national technical information service. Springfield Virginia.
- Busch P, Wilson DT (1976). An experimental analysis of a salesman's expert and referent bases of social power in buyer-seller dyad. J. Mark. Res. 13(1):3-11.
- Cannon JP, Homburg C (2001). Buyer-supplier relationships and customer firm costs. J. Mark. 65(1):29-43.
- Chang YY, He LH (2005). A study on PRC market entry mode and operational performance of Taiwanese Small-medium enterprises under asymmetric information circumstances. Paper presented at the third annual "Academic Seminar on Management Thinking and Pragmatic". Graduate School of Technology Management. Chung Hua University. Xinzhu. Taiwan.15-35.
- Chen Z, Dubinsky A (2003). A conceptual model of perceived customer value in e-commerce: a preliminary investigation. Psychol. Mark. 20(4):323-347.
- Chiou JS, Drog C (2006). Service quality, trust, specific asset investment and expertise: direct and indirect effects in a satisfactionloyalty framework. J. Acad. Mark. Sci. 34(4):613-627.
- Cronin JJ, Brady MK, Hult GTM (2000). Assessing the effects of quality, value and customer satisfaction on consumer behavioral intentions. J. Retail. 76(2):193-218.
- Crosby L, Evans KR, Cowles D (1990). Relationship quality in services selling: an interpersonal influence perspective. J. Mark., 54(3): 68-81.
- Czepiel JA (1990). Service encounters and service relationships: Implications for research. J. Bus. Res. 20(1):13-21.
- Czepiel JA, Solomon MR, Surprenant CF (1985). The service encounter. Lexington MA: Lexington Books.
- Dall'Olmo Riley F, de Chernatony L (2000). The service brand as a relationship builder. British J. Manage., 11: 137-150.
- Das TK, Teng BS (1998). Between trust and control: developing confidence in partner cooperation in alliances. Acad. Manage. Rev. 23(3):491-512.
- Doney PM, Cannon JP (1997). An examination of the nature of trust in buyer-seller relationships. J. Mark. 61(2):35-51.
- Ellen G, Johnson MS (1999). The different roles of satisfaction, trust and commitment in customer relationships. J. Mark., 63(2):70-87.
- Eng TY (2004). Does customer portfolio analysis relate to customer performance? an empirical analysis of alternative strategic perspective. J. Bus. Ind. Mark., 19(1): 49-67.
- Etgar M (1979). Sources and types of intrachannel conflict. J. Retail., 55: 77-78.
- Fornell C, Larcker DF (1981). Evaluating structural equation models with unobservable variables and measurement error. J. Mark. Res., 18(1): 39-50.
- Friman M, Gärling T, Millett B, Mattsson J, Johnston R (2002). An analysis of international business-to-business relationships based on the Commitment-Trust theory. Ind. Mark. Manage., 31(5): 403-409
- Ganesan S (1994). Determinants of long term orientation in buyer-seller relationships. J. Mark. 58(2):1-19.
- George WR (1990). Internal marketing and organizational behavior: a partnership in developing customer-conscious employees at every level. J. Bus. Res. 20(1):63-70.
- Gounaris S (2005). Measuring service quality in b2b services: an evaluation of the SERVQUAL scale vis-a-vis the INDSERV scale. J. Serv. Mark. 19 (6/7):421-436.
- Grabner J, Rosenberg L (1969). Communications in distribution channel systems, in Distribution Channels: Behavioral Dimensions, L.W. Stern, ed. Boston: Houghton-Mifflin Company 2:27-52.
- Gray ER, Balmer JMT (1998). Managing corporate image and corporate reputation. Long Range Plann. 31(5):695-702.
- Grönroos C (1984). A service quality model and its marketing implications. Eur. J. Mark. 18(4):36 -44.
- Grönroos C (2009). Marketing as promise management: regaining customer management for marketing. J. Bus. Ind. Mark. 24(5/6):351-359.

- Grönroos C (1990). Service management and marketing: managing the moments of truth in service competition. Lexington, MA Lexington Books.
- Guenzi P, Georges L (2010). Interpersonal trust in commercial relationships: antecedents and consequences of customer trust in the salesperson. Eur. J. Mark. 44(1/2):114-138.
- Guiltinan J, Rejab I, Rodgers W (1980). Factors influencing coordination in a franchise channel. J. Retail. 56(3):41-58.
- Gwinner K, Gremler D, Bitner MJ (1998). Relational benefits in service industries: the customer's perspective. J. Acad. Mark. Sci. 26(2):101-114
- Hall R (1992). The strategic analysis of intangible resources. Strateg. Manage. J. 13(2):135-144.
- Hansen H, Samuelsen BM, Silseth PR (2008). Customer perceived value in B-t-B service relationships: investigating the importance of corporate reputation. Ind. Mark. Manage. 37(2):206-217.
- Hausman A (2003). Professional service relationships: a multi-context study of factors impacting satisfaction, re-patronization, and recommendations. J. Serv. Mark., 17(3): 226-242.
- Hennig-Thurau T, Klee A (1997). The impact of customer satisfaction and relationship quality on customer retention: a critical reassessment and model development. Psychol. Mark. 14(8):737-764.
- Jackson R, Cooper P (1988). Unique aspects of marketing industrial service. Ind. Mark. Manage. 17(2):111-118.
- Johnson D, Grayson K (2005). Cognitive and affective trust in service relationships. J. Bus. Res. 58(4):500-507.
- Johnson JL (1999). Strategic integration in industrial distribution channels: managing the inter-firm relationship as a strategic asset. J. Acad. Mark. Sci. 27(1):4-18.
- Johnston R (1995). The determinants of service quality: satisfiers and dissatisfiers. Int. J. Serv. Ind. Manag. 6(5):53-71.
- Keh HT, Xie Y (2009). Corporate reputation and customer behavioral intentions: the roles of trust, identification and commitment. Ind. Mark. Manage. 38(7):732-742.
- Keller K (1993). Conceptualizing, measuring, managing customer-based brand equity. J. Mark. 57(1):1-22.
- Kirmani A, Rao AR (2000). No pain, no gain: a critical review of the literature on signaling unobservable product quality. J. Mark., 64(2): 66-79.
- Mitrega M, Katrichis JM (2010). Benefiting from dedication and constraint in buyer-seller relationships. Ind. Mark. Manage. 39(4):616-624.
- Morgan RM, Hunt SD (1994). The commitment-trust theory of relationship marketing. J. Mark. 58(3):20-38.
- Nguyen N, Leblanc G (2001). Corporate image and corporate reputation in customers' retention decisions in services. J. Retail. Consum. Serv. 8(4):227-236.
- Olson JC, Dover P (1979). Disconfirmation of consumer expectations through product trial. J. Appl. Psychol. 64(2):179-189.
- Palmatier RW, Dant RP, Grewal D (2007). A comparative longitudinal analysis of theoretical perspectives of interorganizational relationship performance. J. Mark. 71(4):172-194
- Palmatier RW, Rajiv PD, Grewal D, Evans KR (2006). Factors influencing the effectiveness of relationship marketing: a meta-analysis. J. Mark. 70(4):136-153.
- Parasuraman A, Zeithaml VA, Berry LL (1985). A conceptual model of service quality and implications for future research. J. Mark. 49(4):41-50.
- Ping RA (1993). The effects of satisfaction and structural constraints on retailer exiting voice, loyalty, opportunism, and neglect. J. Retail. 69(3):320-352.
- Qin S, Yanwu C, Jixiang D (2010). A study on measuring service quality in B2B context based on certification service industry. Manag. Rev., 22(7):105-113, 128.
- Rao V R, Agarwal M K, Dahlhoff D (2004). How is manifest branding strategy related to the intangible value of a corporation?. J. Mark. 68(4):126-141.

- Rauyruen P, Miller KE (2007). Relationship quality as a predictor of B2B customer loyalty. J. Bus. Res. 60(1): 21-31.
- Roberts PW, Dowling GR (2002). Corporate reputation and sustained superior financial performance. Strat. Manage. J. 23(12):1077-1093
- Rotter JB (1967). A new scale for the measurement of interpersonal trust. J. Pers. 35(4):651-665.
- Rusbult C E (1980). Commitment and satisfaction in romantic associations: a test of the investment model. J. Exp. Soc. Psychol. 16(2):172-186.
- Ryssel R, Ritter T, Gemunden HG (2004). The impact of information technology deployment on trust, commitment and value creation in business relationships. J. Bus. Ind. Mark. 19(3):197-207.
- Shostack GL (1977). Breaking free from product marketing. J. Mark., 41(2): 73-80.
- Sin LY, Tse CB, Oliver HM, Chow PM, Lee SY, Lau BY (2005). Relationship marketing orientation: scale development and cross-cultural validation. J. Bus. Res. 58(2):185-194.
- Smith JB (1998b). Buyer-seller relationships: bonds, relationship management and sex-type. Canadian J. Adm. Sci. 15(1):76-92.
- Suh T, Houston MB (2010). Distinguishing supplier reputation from trust in buyer-supplier relationships. Ind. Mark Manage. 39(5):744-751.
- Sull DN, Spinosa C (2007). Promise-based management: the essence of execution. Harvard Bus. Rev. 85(4): 78-86, 141.
- Swan JE, Trawick IF, Silva DW (1985). How industrial salespeople gain customer trust. Ind. Mark. Manage. 14(3):203-231.
- Trawick F, Swan JE (1981). Satisfaction related to predictive vs. desired expectation? In New Finding on Customer Satisfaction and Complaining. Eds. Ralph Day and Keith Hunt. Bloomington: Indiana University School of Business pp.7-12.
- Ulaga W, Eggert A (2006). Relationship value and relationship quality: broadening the nomological network of business-to-business relationships. Eur. J. Mark. 40(3/4):311-327.
- Walsh G, Beatty SE (2007). Customer-based corporate reputation of a service firm: scale development and validation. J. Acad. Mark. Sci. 35(1):127-143.
- Webster F (1978). Management science in industrial marketing. J. Mark. 42(1):21-27.
- Xingquan Y, Tingrui Z, Yanchen L (2011). Trust, commitment, relational behavior and performance: the buyers' perspective. Manag. Rev., 23(3): 71-81.
- Yoon E, Guffey HG, Kijewski V (1993). The effects of information and company reputation on intentions to buy a business service. J. Bus. Res. 27(3):215-228.
- Yorke D (1990). Developing an interactive approach to the marketing of professional services. in Ford, D. (Ed.), Interaction, Relationships and Networks. Sage. London pp.346-358.
- Zeithaml VA Berry LL, Parasuraman A (1991). The nature and determinants of customer expectations of service. J. Acad. Mark. Sci. 21(1):1-12.
- Zeithaml VA (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. J. Mark. 52(3):2-22.