

Full Length Research Paper

How after-sales service quality dimensions affect customer satisfaction

Alireza Fazlzadeh¹, Fatemeh Bagherzadeh² and Pegah Mohamadi^{2*}

¹School of Economics, Tabriz Branch, Islamic Azad University, Tabriz, Iran.

²School of management, Master of international Marketing management, Islamic azad university-tabriz, Iran.

Accepted 29 April, 2011

An understanding of the effect of after-sales services in satisfaction and post behavioural intentions is important to services marketing managers because it allows them to differentiate their offering substantially, in a way that strengthens the relationship with their clientele in the short, as well as in the long run. The purpose of this paper is to investigate the effect of after-sales services on customers' satisfaction as well as on their behavioural intentions, namely "repurchase intention" and "word-of-mouth" (WOM). The research conducted followed a quantitative methodology. The selected research tool was a questionnaire. The study conducted was targeted at customers of a large retail chain marketing home appliances in Iran and 302 usable responses were utilised. A path analysis was performed using the "Amos 18" software. Findings show that after-sales service quality, affect satisfaction, which in turn affects behavioural intentions. Hence, after-sales services affect the overall offering and thus, the quality of the relationship with customers.

Key words: Retailing, after-sales services, service quality, customer satisfaction, word-of-mouth, repurchase intention.

INTRODUCTION

The role of service quality is widely recognized as being a critical determinant for the success of an organization in today's competitive environment. Any decline in customer satisfaction due to poor service quality would be a matter of concern. Consumers being more aware of rising standards in service, prompted by competitive trends, have developed higher expectations. In other words, service quality aspects possess a substantial strategic role for companies. This does not happen only in the pure service sectors, but also in many others where service is a considerable part of the augmented product. Indeed, the concept of "service quality" can be used by all sectors, since practically everywhere, the total product-offering is a mixture comprised of tangible and intangible part (Shostack, 1977). This also emerges in the case of retailing.

In addition, in a context of global competition and

decreasing profits from product sales, the after-sales services and activities (that is, those taking place after the purchase of the product and devoted to support customers in the usage and disposal of goods) constitute a relevant profit source as well as a key differentiator for manufacturing companies and resellers (Wise and Baumgartner, 1999; Levitt, 1983) profit generated by after-sales services is often higher than the one obtained with sales; the service market can be four or five times larger than the market for products (Bundschuh and Dezvane, 2003) and it may generate at least three times the turnover of the original purchase during a given product's life-cycle (Wise and Baumgartner, 1999).

In this paper, it is argued that after-sales services appear to be exceptionally significant to the overall "product-mixture" provided by retail companies, since they affect both the customers' satisfaction and their behavioral intentions. We concur with the view that after-sales services play a critical role in relationship building, and as such, they should be examined and evaluated attentively when obeying service quality theory. Besides, although the topic of service delivery has been frequently

*Corresponding author. E-mail: Mohamadi.pegah25@yahoo.com. Tel: +98-914-348-4738.

treated in the literature, its relation to the “product-service mixture offering” has been relatively neglected and it is even more so when the service quality aspect is also brought into the discussion.

Emphasis has been given in the managerial implications, since it is managers who make decisions in the retailing firms, regarding how to add value to the total offering they bring to the market.

BACKGROUND

After-sales services and retailing

Retailing includes all the activities involved in selling goods or services directly to final consumers for personal, non-business use. A retailer or retail store is any business enterprise whose sales volume comes primarily from retailing. Any organization selling to final consumers – whether it is a manufacturer, wholesaler, or retailer – is doing retailing. It does not matter how the good or services are sold (by person, mail, telephone, vending machine, or internet) or where they are sold (in a store, on the street, or in the consumer home) (Kotler, 2008).

Peterson and Balasubramanian (2002), in their extensive work on “retailing in the 21st century”, suggest that the role of retailing stands out clearly, as being to serve as the interface between firm and customer, what remains under-explored is to determine the ways to “increase the value of the (retailing) firm”.

Besides, regarding the related issue of “what is the basis of retail store choice and satisfaction”, various authors suggest that academics should give emphasis to the ways “satisfaction can be converted into higher retail earnings”, which are the ways through which this relationship will be proved beneficial in twofold, through satisfaction and performance. Both remarks manifest a need for further exploitation of the value-adding elements of the total offering. These are elements that are enhancing the core product-service offered and are embodied in the total offering during the selling process, prior as well as after the sale closing stage. According to some authors, the search for sustainable competitive advantages in retailing gives the after-sales services a pivotal role in the relationship between customers and sellers.

As a term, “after-sales services” has been used the most, to describe services that are provided to the customer after the products have been delivered (Vitasek, 2005). The same services are sometimes also called “field services”, when they are embodied in the main characteristics that are located at a customer’s site (Simmons, 2001). “After-sales support” (Agnihotri et al., 2002) as well as “technical support” or even just “services”, are terms also found in the literature (Goffin and New, 2001). “After-sales services” are often (Lele and Karmarkar, 1983) referred to as “product support

activities”, meaning, all activities that support the product-centric transaction. The after-sales service constitutes a means to uncover customer needs and a strategic driver for customer retention. It represents, in fact, “one of the few constant connections that customers have with a brand” (Gallagher et al., 2005), influencing customer satisfaction and loyalty. Finally, after-sales service is a way to allow a continuous improvement of product design and quality (Armistead and Clark, 1992; Cohen and Whang, 1997; Thoben et al., 2001). The perception of after-sales as a source of competitive advantage and business opportunity requires a shift from a traditional product-centric view, in which after-sales is considered a “necessary evil” (Lele, 1997) to customer-centric view.

Furthermore, the term “after-sales services” has been approached in the literature under two broad perspectives. When referring to service providing companies, after-sales services are being treated as one among several supplementary service elements provided by them (Oliva and Kallenberg, 2003). On the other hand, when referring to tangible goods, they are mostly seen as operative activities of some, or all members of the distribution chain (Gaiardelli et al., 2007). Such services are the transport/delivery to clients, the installation, the product-related training, the hot line and advice by the help desk, any repairing service and even the recycling process.

The theory of distribution services argues that the merchandise of explicit products or services is to be seen embodied in a variety of distribution services (Betancourt and Gautschi, 1988). According to the particular theory, these services accompany the merchandise possessing one of the two primary components or retailing (Barber and Tietje, 2003) and can be split further into five groups; assortment, information, location and ambiance and “assurance of immediate product delivery at the desired time and in the desired form” (Betancourt and Gautschi, 1988).

This research adopts the view offered by Oliva and Kallenberg (2003), under which both the tangible as well as the intangible part of the offering are treated to their full potential. Referring to the tangible and the intangible combination of an offering, they distinguish between the “product-installed base” as the “total number of products currently under use”, and the “installed base services” as “the range of product- and process-related services required by an end-user over the useful life of a product in order to run it effectively in the context of its operating process”. According to this view, the relationship between the seller and the buyer does not end in the store when the tangible product is purchased, but goes beyond this for as long as the offering lasts.

Along these lines, “delivery” is often the first among the services offered after the sale. Besides installation which follows, poses a distinct and remarkable after-sales service, wherefore Goffin (1999) refers as being one among the seven elements of customer support.

After-sales services and customer satisfaction

It is well known that the margin from after-sales service is much larger than that from the product. That is, after-sales service is considered a key revenue generator in certain categories (Cohen et al., 2006; Cohen and Whang, 1997). Hence, on one hand, offering a large number of extra after-sales service plans to consumers, leads to higher profitability. Recent marketing management focuses on lifetime value of a customer and maintaining long-term relationships with customers (Gupta and Lehmann, 2007).

From this customer-relationship viewpoint, after-sales service is regarded as an important factor that has an impact on establishing good relationships with customers. On the other hand, a default and free basic after-sales service, also plays an important role in attracting more customer attention in a market with severe brand competition (Chien, 2005). Offering adequate after-sales service to customers has become a major generator of revenue, profit, and competency in modern industries (Cohen et al., 2006; Cohen and Kunreuther, 2007). Accepting the claim that returning customers are the most profitable ones, as they require less marketing effort and relationship building, after-sales service acquires a critical role as a means to achieve customer satisfaction and retention (Alexander et al., 2002).

After-sales services and service quality

Quality in services provides a competitive factor for continued consumption, especially when intangibility relations are tightened between quality and services. Service quality plays a notable role as a source of sustainable competitive advantage for the companies.

Several categorizations do exist in the literature regarding the different kinds of service quality. Although there is no conclusive agreement among the academics, nevertheless, all views recognise that the overall service quality is a multi-dimensional construct. One of the pioneers was Gronroos (1978, 1982) who recognized the need and usefulness of developing valid and distinct measures of service quality. Gronroos (1984) categorises service quality in the "technical" service, referring to what service the customers are actually receiving and to the "functional" service, meaning the process of the delivery of the service. The first service quality measurement model was developed by Parasuraman et al. (1988). It was introduced by the name of service quality (SERVQUAL). This particular view treats quality as the construct constituted by different encounter characteristics. Rust and Oliver (1994), among others, claim that service quality is constituted by three broad sub-dimensions; the personnel-related, the tangible offering related and the service-scape-related.

When applying the quality theory to after-sales services,

the authors believe that after-sales services are contributing to the "technical quality" of the overall service, which is, influencing substantially the "what is the customer receiving"? In parallel, influencing the way ("How") the central service is being delivered, playing therefore, a critical role in the "functional" aspect of service quality. If one utilizes as basis not the Nordic model, but the "extended" "three-component model", proposed by Rust and Oliver (1994), again it seems that after-sales services are closely related to both, the "service product" and the "service delivery" dimensions of quality.

With the on going discussion, two of the three main drifts of interests regarding service quality are being touched. The third, regarding evaluation matters of the provided service quality, will be treated under the relation of service quality dimensions with the construct of performance.

The positive perceptions and attitudes of the target customers towards the quality-elements offered by the firm, leads to both attractions of new customers, thanks to word-of-mouth (WOM) communication and recommendations of the existing customers, as well as to enhancement of the relationship of the company with its current customers by making them more loyal and committed.

Word of mouth (WOM) is informal advice passed between consumers. It is usually interactive, swift, and lacking in commercial bias. WOM is a powerful influence on consumer behavior. Keaveney (1995) noted that 50% of service provider replacements were found in this way. WOM may be positive (PWOM), encouraging brand choice, or negative (NWOM), discouraging brand choice. Word-of-mouth is a frequently encountered variable in the service literature. Typically, it is viewed as a component in a satisfaction-profit framework (sometimes also labeled as the service-profit chain; Heskett et al., 1994), in the sense that satisfaction (or other global evaluations, such as perceived service quality) is assumed to affect word of mouth, which in turn is assumed to affect the firm's profitability. Several studies also show that other global evaluation variables, such as perceived service quality and perceived service value, are positively associated with word-of-mouth transmission (Danaher and Rust, 1996; Fullerton and Taylor, 2002; Hartline and Jones, 1996; Sweeney and Soutar, 2001).

In this context, customer satisfaction has been the subject of a substantial body of literature (Rust and Oliver, 1994), because of its influence on customer behavioural intentions and attitudes (Anderson and Sullivan, 1993; Cronin and Taylor, 1992). Regarding behavioural intentions, Zeithaml et al. (1996) suggest that favourable behavioural intentions are mostly in the form of customers' referrals and recommendations, customers' willingness for re-purchasing, as well as customers' willingness to spend more money with the particular company or to pay more for the products of this

Table 1. Questions measuring main variables.

Latent variables	Mean
Delivery service quality	
Reliability in delivery times	3.43
Quality of the product packaging when delivered	3.42
Transfer of product to your place	3.33
Quality of the product itself when delivered	3.39
Reception of the proper invoice/delivery papers	3.27
Kindness and friendliness of the delivery personnel	3.57
Appearance of the delivery personnel (uniform, cleanness)	3.47
Installation service quality	
Accurate information about time of installation	3.31
Time elapsed between delivery and installation	3.36
Attentiveness of installation personnel in order to avoid damages	3.16
Flawless of the installation	3.17
Kindness and friendliness of the installation personnel	3.22
Advice and instructions given by the technicians	3.28
Overall satisfaction	
Level of satisfaction from their co-operation with the retailer in the context of the particular purchase	3.51
Re-purchase intention	
Intention to prefer the same retailer in the next purchase of a new home appliance	3.49
Word of mouth	
Intention to recommend the retailer to friends and relatives	3.25

company.

METHODOLOGY

This study attempt to understand affect quality of after-sales services on customer overall satisfaction and on their behavioural intentions to re-purchase and to recommend (Word-of-Mouth). According to the Rigopoulou et al. (2008), we used a behavioural model in which the following latent variables are included:

1) "Delivery" service quality, that this variable is measured as a latent one using seven indicators, including the "reliability in delivery times" (D1), the "quality of the product packaging when delivered" (D2), the "transfer of product" (D3), the "quality of the product itself when delivered" (D4), the "reception of the proper invoice/delivery papers" (D5), the "kindness and friendliness of the delivery personnel" (D6) and the "appearance of the delivery personnel" (D7).

2) "Installation" service quality, that this variable is measured as a latent one using six indicators, including the "accurate information about time of installation" (I1), the "time elapsed between delivery and installation" (I2), the "attentiveness of installation personnel in order to avoid damages" (I3), the "flawless of the installation" (I4), the "kindness and friendliness of the installation personnel" (I5) and

the "advice and instructions given by the technicians" (I6). In the model, the following measurement variables are included:

i. "Overall Satisfaction", which refers to the customers' level of satisfaction from their co-operation with the retailer in the context of the particular purchase.

ii. "Repurchase Intention" which is related to the customers' intention to prefer the same retailer in the next purchase of a new electric appliance.

iii. "Word-of-Mouth" which refers to the customers' intention to recommend the retailer to their friends and relatives.

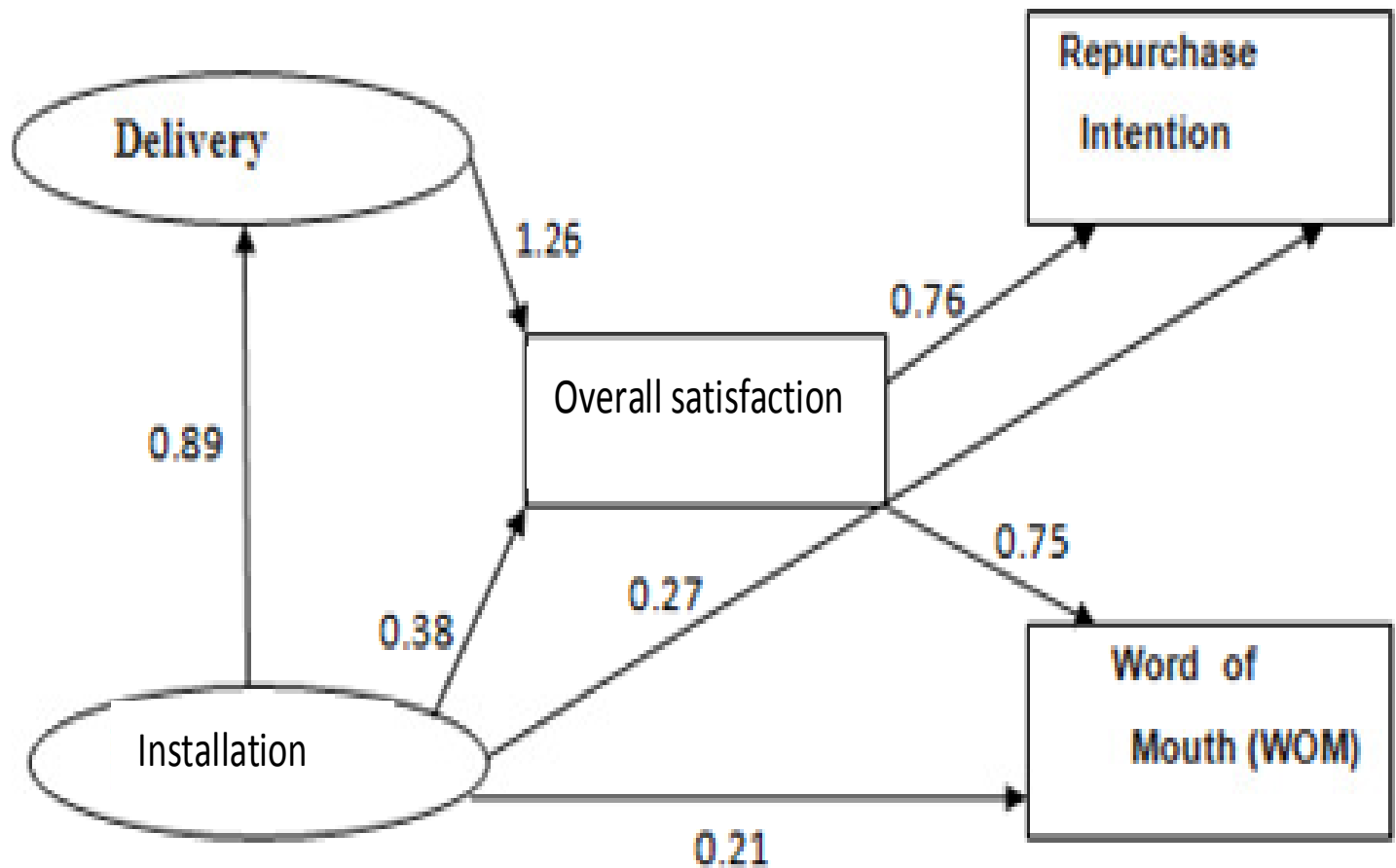
The product category under examination is home appliances in Iran that offer after-sales services to customers. The research conducted was based on questionnaire as a research tool. Overall, a total of 302 usable responses were included in the research conducted. The variables (Table 1) were measured on five-point scales anchored "completely dissatisfied" and "fully satisfied" or "definitely yes" – "definitely no", respectively. The structural equation modelling (SEM) was performed using the "Amos 18" software.

RESULTS

Table 1 show that, respondents feel quite satisfied from

Table 2. Goodness of fit test results for the model.

Variable	χ^2	GFI	AGFI	NFI	TLI	IFI	CFI	RMSEA
Value	96.3	0.963	0.940	0.986	0.997	0.998	0.998	0.022

**Figure 1.** The model.

both after-sales services offered, namely “delivery” and “installation”. The mean score of the satisfaction regarding the “delivery” is 3.45, while the respective score for “installation” is slightly lower (3.25). The vast majority of the specific quality elements of the two services, were judged by the respondents to be quite satisfactorily provided, with mean scores from 3.27 to 3.57 for delivery and 3.16 to 3.36 for installation, Mean scores for “word of mouth” (3.25) and “repurchase intention” (3.49). For the scales reliability analysis, Cronbach α , were calculated for both latent variable measurement scales. Results revealed that both “delivery” ($\alpha_D = 0.972$) and “installation” ($\alpha_I = 0.947$) scales were reliable.

According to the results, as presented in Table 2, all the important indicators of the model fit, as suggested by Hoyle (1995), have accepted values. For this reason, this

model is considered as an acceptable one (Figure 1).

As (Figure 1) indicated:

1. “Delivery” and “installation” service quality positively affect customers’ overall satisfaction.
2. “Delivery” and “installation” service quality positively affect customer’s intention for recommendations.
3. “Delivery” and “installation” service quality positively affect customers re-purchase intentions.
4. Overall, satisfaction positively affects customers’ intentions to recommend the retailer to friends and relatives.
5. Overall, satisfaction positively affects customers’ re-purchase intentions.

Conclusion

Customer satisfaction has been studied and recognized

as an important factor in the management literature for the past few decades. Studies indicate that there are links among customer satisfaction, customer loyalty, and profitability. Companies frequently concentrate on new customers, as they assume that current customers are satisfied. However, this is not necessarily the case. Several researchers argue that investing in existing customers is viable because of the lifetime value of the customer and because many customers need after-purchase reassurance.

Our study examines the relationship between after-sales services, customer satisfaction and customers' behavioural intentions. Based on the main findings of the literature review in the retailing context, it comes out that after-sales service quality affect satisfaction, which in turn affects behavioural intentions. Our results confirm findings of the Rigopoulou et al. (2008), and these results stated that after-sales services affect the perceived value by the customer and thus, the quality of the relationship between buyers and sellers. It became clear that the importance of quality of after-sales services for customer satisfaction could be crucial; furthermore, customer satisfaction was measurable.

Therefore, the importance of the quality of after-sales services and customer satisfaction were highlighted in the present study. After-sales improvements can only take place with a realization that customer satisfaction would be strongly influenced by the quality of the after-sales delivery. After-sales presents differentiation potential that producers can use to strengthen their operations. However, the difference between the existence of potential and the actual achievement of competitive advantage must be taken into consideration. Potential can only be converted to competitive advantage if the organization is able to persuade customers to place equal subjective value on that aspect of the organization's offerings.

REFERENCES

- Agnihotri S, Sivasubramanian N, Simmons D (2002). Leveraging technology to improve field service. *Int. J. Serv. Ind. Manage.*, 13 (1): 47-68.
- Anderson EW, Sullivan MW (1993). The antecedents and consequences of customer satisfaction for firms. *Mark. Sci.*, 12(2): 125-43.
- Alexander WL, Alexander S, Dayal JJ, Dempsey JD, Vander Ark (2002). The secret life of factory service centres. *McKinsey Q.*, (3): 106-115.
- Armistead C, Clark G (1992). *Customer Service Support Implementing Effective Strategies*. FT Books, Pitman Publishing, London.
- Barber CS, Tietje BC (2004). A distribution services approach for developing effective competitive strategies against 'big box' retailers. *J. Retail. Consum. Serv.*, 11(2): 95-107.
- Betancourt RR, Gautschi DA (1988). The economics of retail firms. *Manage. Decis. Econ.*, 9: 133-44.
- Betancourt RR, Gautschi DA (1988). The economics of retail firms. *Manage. Decis. Econ.*, 9: 133-44.
- Bundschuh RG, Dezvane TM (2003). How to make after sale services pay off. *McKinsey Q.*, 4: 116-127.
- Chien YH (2005). Determining optimal warranty periods from the seller's perspective and optimal out-of-warranty replacement age from the buyer's perspective. *Int. J. Syst. Sci.*, 36 (10): 631-637.
- Cronin JJ, Taylor SA (1992). Measuring service quality: a re-examination and extension. *J. Mark.*, 56(3): 55-68.
- Cohen MA, Whang S (1997). Competing in product and service: a product life-cycle model. *Manage. Sci.*, 43(4): 535-45.
- Cohen MA, Agrawal N, Agrawal V (2006). Winning in the aftermarket. *Harv. Bus. Rev.*, 84(5): 129-138.
- Cohen MA, Kunreuther H (2007). Operations risk management: overview of Paul Kleindorfer's contributions. *Prod. Oper. Manage.*, 6(5): 525-541.
- Danaher PJ, Rust RT (1996). Indirect financial benefits from service quality. *Qual. Manage. J.* 3(2): 63-75.
- Fullerton G, Taylor S (2002). Mediating, interactive, and non-linear effects in service quality and satisfaction research. *Canadian J. Adm. Sci.*, 19(2): 124-136.
- Gallagher T, Mitchke MD, Rogers MC (2005). Profiting from spare parts. *McKinsey Q.*
- Goffin K (1999). Customer support: a cross-industry study of distribution channels and strategies. *Int. J. Phys. Distrib. Log. Manage.*, 29(6): 374-97.
- Groonroos C (1978). A Service Oriented Approach to Marketing of Service. *Eur. J. Mark.*, 5: 588-601.
- Groonroos C (1984). A service quality model and its marketing implications. *Eur. J. Mark.*, 18(4): 36-44.
- Gupta S, Lehmann DR (2007). *Managing Customers as Investments: The Strategic Value of Customers in the Long Run*. Pearson Education as Wharton School Publishing, Upper Saddle River, NJ.
- Hartline MD, Jones KC (1996). Employee performance cues in a hotel service environment: influence on perceived service quality, value, and word-of-mouth intentions. *J. Bus. Res.*, 35: 205-217.
- Heskett JL, Jones TO, Loveman GW, Sasser WE, Schlesinger LA (1994). Putting the Service-Profit Chain to Work *Harvard Business Review March-April*: pp. 164-174.
- Keaveney SM (1995). Customer switching behavior in service industries: An exploratory study. *J. Mark.*, 59(2): 71-82.
- Kotler PH, Keler K, Ang S, Leong S, Tang CH (2009). *Marketing Management: An Asian Perspective*, prentice Hall.
- Lele M (1997). After-sales service—necessary evil or strategic opportunity? Full Text via CrossRef. *Manag. Serv. Qual.*, 7(3): 141-145.
- Lele MM, Karmarkar US (1983). Good product support is smart marketing. *Harv. Bus. Rev.*, 61(6): 124-32.
- Levitt T (1983). After the sale is over..., *Harv. Bus. Rev.*, 61(5): 87-93.
- Oliva R, Kallenberg R (2003). Managing the transition from products to services. *Int. J. Serv. Ind. Manage.*, 14(2): 160-72.
- Parasuraman A, Zeithaml V, Berry L (1988). SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality. *J. Retail.*, 12-40.
- Peterson RA, Balasubramanian S (2002). Retailing in the 21st century: reflections and prologue to research. *J. Retail.*, 78(1): 9-16.
- Rigopoulou I, Chaniotakis I, Lympieropoulos C, Siomkos G (2008). After-sales service quality as an antecedent of customer satisfaction. The case of electronic appliances. *Manag. Serv. Qual.*, 18: 512-527.
- Rust RT, Oliver RL (1994). Service quality: insights and managerial implications from the frontier. in Rust RT, Oliver R (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, Thousand Oaks, CA.
- Shostack GL (1977). Breaking free from product marketing. *J. Mark.*, 41(2): 73-80.
- Simmons DE (2001). Field service management: a classification scheme and study of server flexibility. unpublished PhD thesis, School of Management, Binghamton University, State University of New York, Binghamton, NY.
- Sweeney JC, Soutar GN (2001). Consumer perceived value: The development of a multiple item scale. *J. Retail.* 77: 203-220.
- Thoben KD, Jagdev H, Eschenbaecher J (2001). Extended products: evolving traditional product concepts, Proceedings of the 7th International Conference on Concurrent Enterprising: Engineering the Knowledge Economy through Co-operation Bremen, Germany, June 27-29: 429-439.
- Vitasek K (2005). *Supply Chain and Logistics Terms and Glossary*,

Supply Chain Vision, Belevue, WA.

Wise R, Baumgartner P (1999). Go downstream—the new profit imperative in manufacturing. *Harv. Bus. Rev.*, 77: 133–141.

Zeithaml VA, Berry LL, Parasuraman A (1996). The behavioural consequences of service quality. *J. Mark.*, 60: 30-46.