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Service Quality: Mind the Gap!

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Abstract

The characteristics of service can be somewhat slippery and difficult to pin down, not least of all because any given service can only be seen through the eyes of its recipient. This is emphasised by Peters (1985) who stated that ‘customers perceive service in their own unique, idiosyncratic, emotional, irrational, end-of-the-day, and totally human terms.’ Furthermore, and as is noted by Deming (1986) compared to a customer’s reaction to the quality of manufactured goods a customer’s reaction to service quality is immediate. However, service quality, whatever it may be, and however complex a phenomena it might also be, cannot be ignored since service quality can be a key competitive differentiating factor. The SERVQUAL scale or gaps model as it has become known is a common method of measuring service quality. This paper will review the gaps model 25 years on, and make a critical evaluation and assessment of whether the model is still as appropriate in view of the current service environment being dynamic and much changed.

Keywords

Service Quality, Customer Satisfaction, Gaps Model

Introduction

Service quality has been identified as being a significant factor for achieving competitive advantage. Specifically, service quality has been linked to creating ‘customer longevity,’ (Kelley et al, 2002), fostering customer loyalty (Heskett et al, 1997), and ultimately impacting upon ‘long-term market share and profitability.’ (Yang and Chen, 1991). Given the importance of service quality, it is hardly surprising that there has been a considerable amount of attention paid by academics and practitioners alike to identifying and analysing key dimensions of service quality and how to measure them. (Buttle, 1996, Lam and Woo, 1997). The gaps model was introduced some twenty five years ago as a means of understanding the nature of service quality, how customers make value judgements in relation to service quality and the link between customer expectations of service quality and their perceptions at the point of delivery. (Parasuraman, Zeithaml and Berry, 1985). This paper will identify what, if anything is missing from the model including how the model may be improved to meet customer needs. A purpose of this paper is to evaluate the gaps model in view of the dynamic nature of service, the service environment and customers, including what, if anything is missing from the model and how the model may be improved upon to meet customer needs.

The Intangible Nature of Service Quality

Key characteristics of service quality can be difficult to define due to the highly subjective nature of service quality. This is underlined by Deming (1986) when he

stated that; 'quality can be defined only in terms of the agent.' In essence, ultimately this means that it is the customer that will form a judgement about the quality of any given service that they receive. A further complexity in trying to understand the service quality is its dynamic nature. Firstly, the speed of a customer's reaction to service quality is immediate, compared, for example, with the speed of reaction to manufactured goods. Additionally, because of the immediacy of the customer's service quality evaluation, attempting to understand a customer's reaction to a future service cannot be ascertained today as customer needs and expectations continually change. Therefore, the relevant characteristics are those which are important to each individual customer at a specific point of time. (Deming, 1986). This is particularly well summarised by Peters (1985) who stated that; 'customers perceive service in their own unique, idiosyncratic, emotional, irrational, end-of-the-day, and totally human terms. Perception is all there is.'

Nonetheless, in spite of the intangible, difficult to pin down nature of service quality, what can be concluded is that a good service experience will depend on the organisation's ability to understand customer needs, wants and expectations, and then to deliver service in a way that meets or exceeds those expectations. A service is essentially made up of a package or 'bundle' of goods and services, the production of which will cut across all the traditional organisational lines. Therefore, the responsibility for success will not only lie with manufacturing, but equally with finance, marketing and operations and indeed all the employees of the organisation. The development of the optimum service delivery methods therefore needs the whole of the organisation to understand both the classification and the characteristics of service and how these relate to their customer offer.

Fitzsimmons and Fitzsimmons (1998) define the service package as a 'bundle of goods and services that is provided in some environment.' They further identify the service package as constituting four features that they describe as follows:

1. Supporting facility. The physical resources that must be in place before a service can be offered.
2. Facilitating goods. The material purchase or consumed by the buyer, or the items provided by the customer.
3. Explicit services. The benefits that are readily observable by the senses and that consist of the essential or intrinsic features of the service.
4. Implicit services. Psychological benefits that the customer may sense only vaguely, or the extrinsic features of the service.

Many service transactions are based on a mixture of goods and services and the proportion of each will differ relative to the transaction type, the degree of customisation and the amount of labour expended. This means that, Fitzsimmons and Fitzsimmons (1998) four features, are all experienced by the customer and that experience forms part of the evaluation process ending with the customer's perception of the service. The immediacy of personal service and the consequent speed of the satisfied reaction by the customer is one of the key characteristics of service.

Measuring Service Quality

Gronroos (1984) argues that service quality is dependent on the two variables of expected service and perceived service. According to Gronroos (1984) expected service is influenced by previous experiences whereas perceived service is the evaluation of the service received at the time of delivery in relation to those previous expectations. The customer's perception is therefore a crucial outcome of the evaluation process. Additionally, according to Gronroos (1984), the delivery process has two elements and makes a distinction between technical quality, what the customer receives and the functional quality, how the customer receives the technical outcome, or in the words of Gronroos (1984) the 'expressive performance of a service.' To clarify the customer evaluation process, Woodruff and Gardial (1996) introduced the expectancy disconfirmation model. According to Woodruff and Gardial (1996), in determining whether a product or service is satisfying or dissatisfying the customer will compare their perception of performance with their standard of expected performance. This comparison will result in disconfirmation that will be either positive or negative depending on the degree of difference between the perception and expectation. Satisfaction is delivered not by the comparison itself but by the feelings (positive or negative) which flow as a result of the process, the greater the degree of positive disconfirmation the greater the degree of satisfaction.

Whilst several models have been put forward to measure service quality, one of the most well known is the SERVQUAL scale or Gaps Models as it has become known. The Gaps Model was first introduced in 1985 by Parasuraman et al. The model defines service quality in terms of the discrepancy or gap between the customers' expectation and their perception, and puts forwards key factors that influence customer expectations (word of mouth communications, personal needs, past experience and external communications). The original formulation of the model identifies ten general dimensions that customers will use to make a service quality judgement. See Figure 1.0 below.

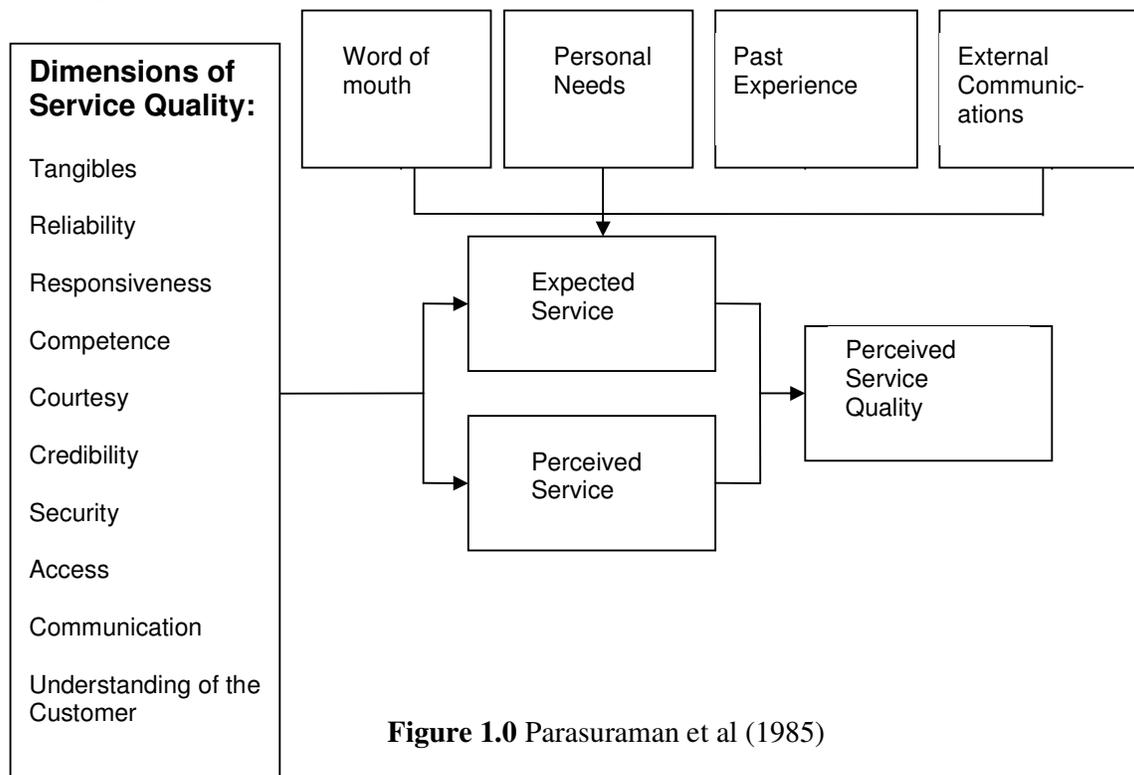


Figure 1.0 Parasuraman et al (1985)

In a later formulation of the model the ten dimensions were reduced to five. Tangibles, reliability and responsiveness remained distinct dimensions, whereas, competence, courtesy, credibility and security are subsumed into assurance, and access, communication and understanding the customer were subsumed into empathy. (Parasuraman's et al 1988). An explanation of the five dimensions can be seen below in Table 1.0.

Dimension	Definition
Tangibles	The appearance of the facilities, equipment, personnel and documents
Reliability	The ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	The knowledge and courtesy of employees and their ability to inspire trust and confidence
Empathy	The level of caring and individualised attention the firm provides to its customers.

Table 1.0 Five dimensions of service quality, Parasuraman's et al (1988)

These five dimensions of service quality are measured through a twenty-two statement-type questionnaire that is administered in two parts. For each statement respondents are asked to score their expectations of service quality and later their perceptions of the service that they have experienced regarding the organisation being assessed. The respondent's assessment of service quality is made against a seven point Linkert scale that ranges from "strongly agrees", to "strongly disagrees."

Importantly, the research conducted by Parasuraman et al (1985) developed the notion of the gap between customers' perception and their expectations of service. They concluded that this gap is the result of the gaps detailed below:

Gap 1 is the difference between customer expectations and management's perception of those expectations.

Gap 2 is the difference between management perceptions of customer expectations and the service quality specifications

Gap 3 is the difference between service quality specifications and the actual service that is delivered by service contact staff on a daily basis.

Gap 4 is the difference between service delivery and promises that are made in an organisation's external communications.

So, Gap 5 is the difference between is the culmination of the previous 4 gaps that leads to the difference between customer expectations and customer perceptions.

See Figure 2.0 below.

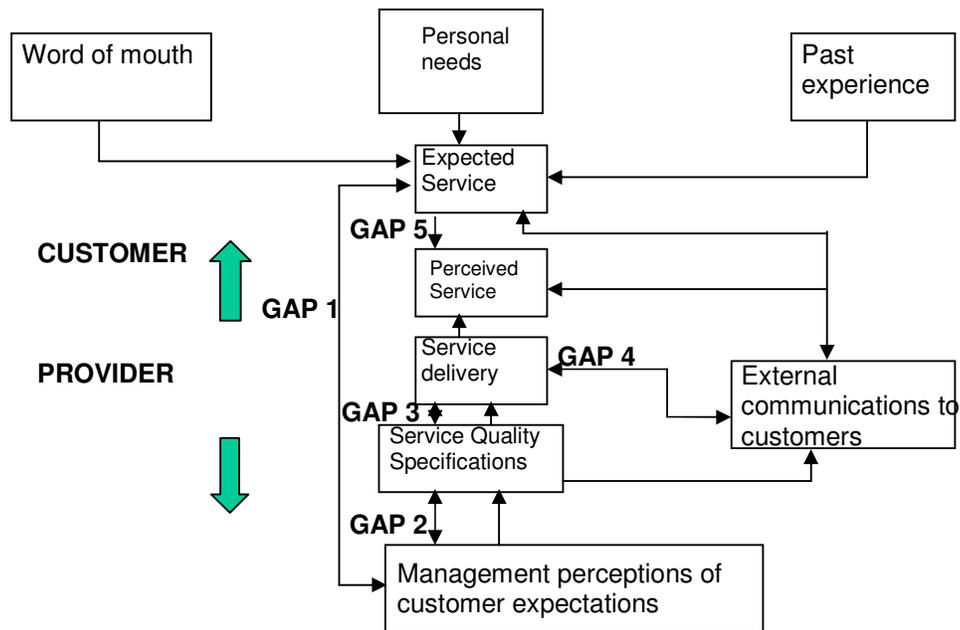


Figure 2.0 Customer Assessment of Service Quality, Parasuraman et al (1990)

Debates Around the Model

The model has been in existence for over two decades, is considered to be significant and has received much attention from academics and practitioners. This is also acknowledged in a recent paper by Ladhari (2009) who conducts an extensive review of SERVQUAL research from 1988 – 2008. Ladhari (2009) lists a wide variety of public and private service sector organisations in which SERVQUAL has been applied including; health care, (Carman, 1990; Headley and Miller, 1993; Lam, 1997; and Kilbourne et al, 2004); banking (Mels et al, 1997; Lam, 2002; Zhou et al, 2002), fast food (Lee and Ulgado, 1997), telecommunications (van der Wal et al, 2002), retail chains (Parasuraman et al, 1994), information systems (Jiang et al, 2000), library services (Cook and Thompson, 2000). The model has also been used on a global basis and these countries are identified in Ladhari's paper (2009) as including; the US (Pitt et al, 1995, Jian et al, 2000, Kilbourne et al, 2004, Lai, 2006, Landrum et al, 2007, China (Zhou et al 2002, Australia (Baldwin and Sohal, 2003), Cyprus (Arasli et al, 2005), Hong Kong (Kettinger et al, 1995, Lam 1997), Korea (Kettinger et al, 1995), South Africa (Mels et al, 1997, Pitt et al, 1995, van der Wal et al, 2002), The Netherlands (Kettinger et al, 1995) and the UK (Pitt et al, 1995, Kilbourne et al, 2004, Lai, 2006).

Given the model's relative longevity, its popularity, and its widespread use it is hardly surprising that a number of criticisms have been put forward. Ladhari (2009) lists these criticisms or 'debates' as including the following;

- The use of difference scores

- The reliability of the model
- Its convergent validity
- Its discriminant validity
- The predictive validity of the instrument
- Its emphasis on process (rather than outcome)
- The hierarchical nature of service-quality constructs
- The use of reflective (rather than formative) scales
- The applicability of a generic scale for measuring service quality in all service settings
- The applicability of SERVQUAL to the online environment and
- The applicability of SERVQUAL in different cultural contexts.

For a more in-depth discussion of each of the above see Ladhari (2009). For the purposes of this paper, the authors will focus on.....

The Public Service Dimension – An Added Complexity

Originally, the model was tested in a private sector context in the four US service environments of retail banking, credit card services, securities brokerage, and product repair and maintenance. (Parasuraman, et al 1985). These companies were all in the private sector. (Donnelly et al, 1995). Subsequently, however, the model has also been applied to public sector organisations. Specifically in the context of the UK public sector service applications include healthcare (Youseff et al, 1996; Sewell, 1997; Pagouni, 1997; Curry and Stark, 2000), higher education, (Smith et al, 2007; Broady-Preston and Preston, 1999; Hill, 1995; and Galloway, 1998) and local authority services (Donnelly et al, 1995) to name but a few.

At the same time, however, and in the words of Smith et al (2007) ‘...some research has added a note of caution to SERVQUAL’s use in the public sector.’ Smith et al, (2007) go on in more detail as follows; ‘One study (Orwig et al, 1997) concluded that service quality may be perceived differently in the public sector. More specifically, Finn and Lamb (1991) found that although the scale was reliable, the service quality dimensions identified in the public sector research did not match well with the five dimensions identified by the SERVQUAL model...’ On a positive note, however, other authors, Curry and Herbert, (1998) and Curry, (1999) conclude that if the model is tailored to the public service sector context and the customer is clearly defined, then SERVQUAL can be applied in the public sector.

There can be no doubt that the public service sector is somewhat different from private sector service in terms of; ethos, funding, and complexities concerning the definition and identification of the ‘customer’ and subsequent competing ‘stakeholder’ priorities. This is particularly the case in local government. Local government is complex in terms of funding, their operations and relationships with customers, stakeholders and specifically the relationship between local elected members and officers. In the UK elected members are ultimately accountable to constituents through the ballot box. Officers are paid employees of a local authority whose responsibilities include providing and administering services to direct and non-direct customers and providing support to elected members. Elected members and

officers interpretations of competing customer groups and their service requirements can differ. In an early conceptual paper on the application of SERVQUAL to local government in the UK Donnelly et al (1995) allude to the complex relationship between elected members and officers, however, this is not discussed or explored in any great depth. In a later paper Brysland and Curry (2001) apply SERVQUAL to catering services and grounds maintenance that are provided by North Lanarkshire Council. A conclusion that is drawn from this research is that ‘...SERVQUAL does present certain difficulties in the public sector context...’. ‘Apart from the obvious need to tailor both the wording and distribution of statements according to the service being evaluated, there are areas of public service concern that SERVQUAL has not been designed to tackle.’ Specifically Brysland and Curry (2001) state that value for money, price and environmental impact statements needed to be added to the respective survey instruments. At the same time, however, Brysland and Curry’s research (2001) gets around the slippery issue of defining the customer by limiting the research to internal customers and does not touch upon the complex relationship between elected members and officers.

The Dynamic Nature of Service Quality

As outlined earlier in this paper, the model was originally formulated for a traditional, and somewhat static service context. However, the service environment, or service context has changed considerably over the past two decades. The service context today is dynamic. Dynamic in terms of fluctuating customer expectations and in terms of online service delivery where information is crucial. In terms of online service delivery, Ladhari (2009) briefly considers the issue of SERVQUAL’s applicability to the online environment. A general finding from Ladhari’s (2009) review of research conducted to date in this context is that the SERVQUAL quality dimensions ‘...do not fit the data adequately.’ Whilst Parasuraman et al (2005), Zeithaml (2000), Zeithaml (2002) and Zeithaml et al (2002) propose an adapted version of the model for online service encounters, online service delivery has moved on and in line with this, other researchers have proposed other formulations of the model. More recent research (Hongxiu, 2009) proposes the following eight dimensions for measuring what is referred to as ‘e-service quality.’ These are; website design, reliability, fulfilment, security, responsiveness, personalisation, information and empathy.

In terms of changing customer expectations, today customer expectations are not stationary, they change incrementally over a period of time or rapidly in response to market and economic trends. A consequence of this is that gaps in service delivery can oscillate. The model as it was originally formulated does not allow for the changing interrelationship between the variables in the model. However, given the dynamic nature or fluidity of customer expectations, organisations do need to adapt their services accordingly. An obvious solution would be to use the SERVQUAL model several times a year to identify gaps. However, this might be time consuming and costly for organisations.

Concluding Comments

SERVQUAL remains one of the most well known models for measuring service quality. It has been used prolifically throughout a portfolio of organisational sectors both in the private and public sectors and throughout a number of countries. At the same time, however, there is no doubt that the service environment has changed over the past twenty five years since the original formulation of the model. To that end, the authors of this paper propose a more systems oriented interpretation of the model and this will be presented in future work.

References

- Arasili, H., Mehtap-Smadi, S.A., and Katircioglu S.T. (2005), "Customer service quality in the Greek Cypriot banking industry", *Managing Service Quality*, Vol. 15 No. 1, pp. 41-56.
- Baldwin, A. and Sohal, A. (2003), "Service quality factors and outcomes in dental care", *Managing Service Quality*, vol. 13 No. 3, pp. 207-16.
- Broadly-Preston, J., and Preston, H. (1999), "Demonstrating quality in academic libraries", *New Library World*, Vol 100 No 3, pp. 124-9.
- Bryceland, A. and Curry, A. (2001), "Service improvements in public services using SERVQUAL.", *Managing Service Quality*, Vol. 11 Iss: 6, pp. 389-401.
- Carman, J.M. (1990), "Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions", *Journal of Retailing*, Vol.66 No.1, pp. 33-55.
- Cook, C. and Thompson, B. (2000), "Reliability e-service quality in e-retailing", *Journal of Service Research*, Vol. 8 No. 3, pp. 260-75.
- Curry, A.C., (1999), "Innovation in public service management", *Managing Service Quality*, Vol. 9 No. 3, pp180 – 90.
- Curry, A.C., and Stark, S. (2000), "Quality of service in nursing homes", *Health Services Management Research*, Vol 13 No 4, pp.205-15.
- Deming, W.E., (1986), *Out of the Crisis*, Cambridge, MIT.
- Donnelly, M., Wisniewski, M., Dalrmpole, J.F., and Curry, A.C., (1995), "Measuring service quality in local government: the SERVQUAL approach." *International Journal of Public Sector Management*, Vol 8 No.7, pp.15-20.
- Finn, D.W., and Lamb, D.W., "An evaluation of the SERVQUAL scales in a retail setting", in Holman, R.H., Solomon, M. (Eds), *Advances in Consumer Research*, Association for Consumer Research, Valdosta, GA, Vol 18, pp 483-90.
- Galloway, L., (1998) "Quality perceptions of internal and external customers: a case study in educational administration", *The TQM Magazine*, Vol 10 No 1, pp.10-25.
- Gronroos, C., (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, Vol. 18 No.4, pp.36-44.
- Headley, D.E. and Miller, S.J. (1993), "Measuring service quality and its relationship to future consumer behaviour", *Journal of Health Care Marketing*, Vol 13 No.4, pp32-1.
- Heskett, J.L., and Sasser, W.E., (1997), *The Service Profit Chain*, Free Press.
- Hill, F.M., ((1995), "Managing service quality in higher education, the role of the student as primary consumer", *Sloan Management Review*, No Summer, pp.93-104.
- Hongxiu, L., (2009), "A proposed scale for measuring E-service quality", *International Journal of u-and e-Service, Science and Technology*, Vol. 2, No. 1.
- Jiang, J.J., Klein, G. and Crampton, S.M. (2000), "A note on SERVQUAL, reliability and validity in information system service quality measurement," *Decision Sciences*, Vol 31, No. 3, pp.725-44.
- Kelley, L., Davies, S., and Kangis, P. (2002), "Service quality for customer retention in the UK steel industry: old dogs or new tricks?", *European Business Review*, Vol 14, Iss: 4, pp. 276-286.
- Kettinger, W.J. and Lee, C.C. (1995), "Perceived quality and user satisfaction with the information services function.", *Decision Sciences*, Vol. 26 No.5, pp.569-88.
- Kilbourne, W.E., Duffy, J.A., Duffy, M and Giarchi, G. (2004), "The applicability of SERVQUAL in cross-national measurements of health-care quality", *Journal of Services Marketing*, Vol. 18 Nos6/7, pp. 524-33.

- Ladhari, R., (2009), "A review of twenty years of SERVQUAL research", *International Journal of Quality and Service Sciences*, Vol 1, No. 2, pp 172 – 198.
- Lai, J.Y. (2006), "Assessment of employees' perceptions of service quality and satisfaction with e-business", *Managing Service Quality*, Vol. 18 Nos 6/7, pp. 524-33.
- Landrum, H., Prybutok, V.R., and Zhang, X. (2007), "A comparison of Magail's service quality instrument with SERVPERF", *Information & Management*, Vol. 44 No.1, pp. 104-13.
- Lam, S.S.K. (1997), "SERVQUAL: a tool for measuring patients' opinions of hospital service quality in Hong Kong", *Total Quality Management*, Vol. 8 No.4, pp.145-52.
- Lam, T.K.P., (2002), "Making sense of SERVQUAL's dimensions to the Chinese customers in Macau", *Journal of Market-Focused Management*, Vol. 5 No. 10, pp.43-58.
- Lee, M. and Ulgado, F.M. (1997), "Consumer evaluations of fast-food services: a cross-national comparison", *Journal of Services Marketing*, Vol. 11 no.1, p.39-50.
- Mels, G., Boshoff, C. and Nel, D. (1997) "The dimensions of service quality: the original European perspective revisited", *Service Industries Journal*, Vol. 17 No. 1, pp173-89.
- Orwig, R.A., Pearson, J., and Cochran, D. (1997), "An empirical investigation into the validity of SERVQUAL in the public sector", *Public Administration Quarterly*, Vol 21 No1, pp.54-68.
- Pagouni, E. (1997), "Measuring the service quality of an out-patient department at the Astley Ainslie Hospital – using the SERVQUAL model", MSc Quality Management, University of Stirling, Stirling.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985) "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49 No.4, pp. 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol 64 No. 1, pp. 12-40.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1991) "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol 67 No. 4, pp. 420 – 50.
- Parasuraman, A., Zeithaml, V.A., and Malhotra, A. (2005), "E-S.QUAL: A multiple-item scale for assessing electronic service quality", *Journal of Service Research*, Vol. 7, No. 3, pp. 213-234.
- Peters, T.J., (1987), *Thriving on Chaos*, London Guild Publishing.
- Pitt, L.F., Watson, R.T. and Kavan, C.B. (1996), "Service quality: a measure of information systems effectiveness", *MIS Quarterly*, Vol. 19 No.2, pp.173-87.
- Sewell, N. (1997), "Continuous quality improvements in acute healthcare: creating a holistic and integrated approach", *International Journal of Health Care Quality Assurance*, Vol 10 No 1, pp.20-26.
- Smith. G. Smith, A. and Clarke, A., (2007), "Evaluating service quality in universities: a service department perspective", *Quality Assurance in Higher Education*, Vol 15, No 3, pp.334-351.
- Van der Wal, R.W.E., Pampalis, A. And Bond, C. (2002), "Service quality in a cellular telecommunications company: a South African experience", *Managing Service Quality*, Vol. 12 No. 5, pp. 323-35.

- Youseff, F.N., Nel, D., and Bovaird, T. (1996). "Healthcare quality in NHS hospitals", *International Journal of Health Care & Quality Assurance*, Vol 9 No1, pp. 15-28
- Zeithaml, V.A., (2000), "Service quality, profitability and the economic worth of Customers: What we know and what we need to learn", *Journal of the Academy of Marketing Science*, Vol. 28 No. 1, pp. 67-85.
- Zeithaml, V.A., (2002), "Service excellence in electronic channels", *Managing Service Quality*, Vol. 12, No. 3, pp. 135-138.
- Zeithaml, V.A., Parasuraman, A and Malhotra, A., (2002), "A conceptual framework for understanding e-service quality: Implications for future research and managerial practice", *MSI Working Paper Service No. 00-115*, Cambridge MA, pp. 1-49.
- Zeithaml, V.A., Parasuraman, A., and Malhotra, A., (2002), "Service quality delivery through web sites: A critical review of extant knowledge", *Journal of the Academy of Marketing Science*, Vol. 30, No. 4, pp. 362-375.
- Zhou, L., Zhang, Y. and Xu, J. (2002), "A critical assessment of SERVQUAL's Applicability in the banking context of China", *Asia Pacific Advances in Consumer Research*, Valdosta, GA, pp.14-21.