

## Research Article

# Two New Gaps for SERVQUAL

Victor Tang<sup>1,2</sup>, Gendao Li<sup>1</sup>

1. Northumbria University, Newcastle upon Tyne, United Kingdom; 2. Massachusetts Institute of Technology, United States

This paper proposes an update to enhance SERVQUAL's capabilities. Service logic stipulates that service is not a unilateral process, but co-created between provider and customer. This principle reveals an omission in SERVQUAL. It overlooks a customer-failure gap, *i.e.* a customer's deficient and flawed co-creation. To address this omission, we propose two additional SERVQUAL gaps. The logic is the theoretical and conceptual premise that service value is the outcome of value co-creation between provider and customer. It is not a unilateral process. By definition, co-creation implies interactions between a provider and a customer; the responsibility of the customer in the co-creation process is not fully addressed as gaps. We propose two additional gaps to SERVQUAL; this is a fresh idea. Our additional gaps close a major theoretical and practical gap in SERVQUAL.

Correspondence: [papers@team.qeios.com](mailto:papers@team.qeios.com) — Qeios will forward to the authors

## Introduction

This paper brings symmetry to the SERVQUAL Gap Model by explicitly addressing an omitted gap, *i.e.* customer co-creation failure remains under-detected. SERVQUAL is a widely used instrument to detect service quality gaps. It detects flaws between the customers' expectations and perceptions that correlate with service quality and tasks associated with satisfactory service delivery to consumers (Parasuraman *et al.* 1985). The gaps are:

- Gap 1: Consumer expectation – management perception gap
- Gap 2: Management perception – service quality specification gap
- Gap 3: Service quality specifications – service delivery gap
- Gap 4: Service delivery – external communication gap
- Gap 5: Expected service – perceived service gap

Gap 5 is influenced by Gaps 1 through 4, which are within a provider's control. Also identified are 10 dimensions that correlate with consumers' evaluation of service quality. The ten dimensions were subsequently compressed into five: tangibles, reliability, responsiveness, assurance, and empathy, assessed by 22 items (Parasuraman *et al.* 1988), and its scale base was further refined by Parasuraman *et al.* (1994a). SERVQUAL is widely adopted in various industries (Ladhari 2009; Seth & Deshmukh 2005) to analyze service strategy, service delivery, and driving customer-driven service innovation (Parasuraman *et al.* 2010). Numbers are convincing; a Google search uncovers 62.8M entries for *SERVQUAL* (SERVQUAL 2021).

Service value co-creation is bidirectional; this is a mutual and reciprocal dependency. A unidirectional and one-sided responsibility and obligation may not be an acute problem for commodity services, as in a shoe shine or haircut. But professional and B2B services co-creation are impossible without interactions for problem-solving, process design, and

implementation (e.g. Spreng *et al.* 2009; Woo & Ennew 2005; Završnik & Jerman 2006). Consider a bank's service to establish secure ATM transactions. The provider will define required new and novel procedures the bank must implement. If the bank implements them loosely and half-heartedly, the service will not satisfy anyone. The bank is responsible for poor service quality. This scenario is not unique; it exists in health care, business consulting, IT outsourcing, legal services, and so on, where a customer fails to implement its share of co-creation. SERVQUAL has no gaps to detect these flaws.

The next section reviews the literature. Then we discuss our proposal for an updated SERVQUAL. We specify two additional gaps that explicitly reveal the customer's failure in value co-creation. We close with a summary and suggestions for follow-on work.

## Literature review

Conceptualizing service quality begins with Grönroos' (1984) technical and functional quality model. He hypothesized that service quality and satisfaction mean that a provider must match the perceived and the expected service for consumer satisfaction. Parasuraman *et al.* (1985) developed the notion of "gaps" between the consumer's expectations and perceptions as drivers of poor quality. The SERVQUAL gap model was created to detect gaps and guide corrective action. The gap model has remained stable (Parasuraman *et al.* 1991, 1994b; Zeithaml *et al.* 2010, Zeithaml & Bitner 2000). SERVQUAL is widely adopted in many service industries (e.g., Brown and Swartz 1989; Buttle 1996; Dehghan 2013; Ghotbabadi *et al.* 2012; Ladhari 2009; Nyeck *et al.*; 2002; Seth & Deshmukh 2005). SERVQUAL has diffused internationally to the UK, China, Cyprus, Korea, South Africa, the Netherlands, and so on.

Notwithstanding SERVQUAL's extensive use and research, it is not without its critics (e.g. Ladhari 2009). The criticisms fall into two groups, theoretical and operational (Buttle 1996). Theoretical criticisms include paradigmatic objections, process orientations, and dimensionality issues. Operational criticisms include expectations, item composition, moments of truth, polarity, and scale points. Ladhari (2009) summarizes criticisms in the literature, e.g. measurement (scores, scale types), model reliability and validity, emphasis on process (rather than outcomes), hierarchy of service-quality constructs, and cultural contexts. SERVQUAL's applicability to B2B service settings is also challenged. Woo & Ennew (2005) point out that service quality research is dominated by consumer services applications. Alternative measures have been proposed for B2B service quality; e.g. Gounaris' (2005) five-dimensional INDSEV instrument, Woo's & Ennew's (2005) six-dimensional model for professional services' quality, Janita's & Miranda's (2013) key dimensions in the e-marketplace. Notwithstanding critics, SERVQUAL has served scholars and practitioners very well.

## Updated Gap Model

Figure 1 shows SERVQUAL with two additional Gaps, 6 and 7, to detect customers' failure to fulfill their responsibilities. Table 1 is a summary of all seven gaps. We concentrate on Gaps 6 and 7. The other gaps are well known, and their discussion is omitted.

The architecture of Figure 1 is nearly identical to SERVQUAL (Parasuraman, 1984). Gaps 1 to 5 are identical to SERVQUAL. As in the original model, the customer perceived service quality shortfall is identified as Gap 5. Service logic stipulates that service value is co-created (Grönroos 2008, Grönroos & Gummerus 2014), and that value co-creation antecedents to Gap 5 are the inputs  $\alpha$  and  $\beta$  as shown in Figure 1. The input  $\alpha$  is the client value co-creation, and  $\beta$  is the provider value co-creation. The non-complementarity of unilateral co-creation is Gap 7, "value co-creation fails" in Table 1.

What are the conceptual factors that contribute to Gap 7? SERVQUAL's original specification identified Gap 4 ( $\delta$  in Figure 1) and explained it as “provider promises do not match delivery” (Table 1) (Parasuraman *et al.* 1988). However, to remain consistent with the value co-creation premise of service logic, factor  $\gamma$  (Figure 1) must be explicitly specified. This is Gap 6, identified as “client promises do not match delivery” in Table 1.

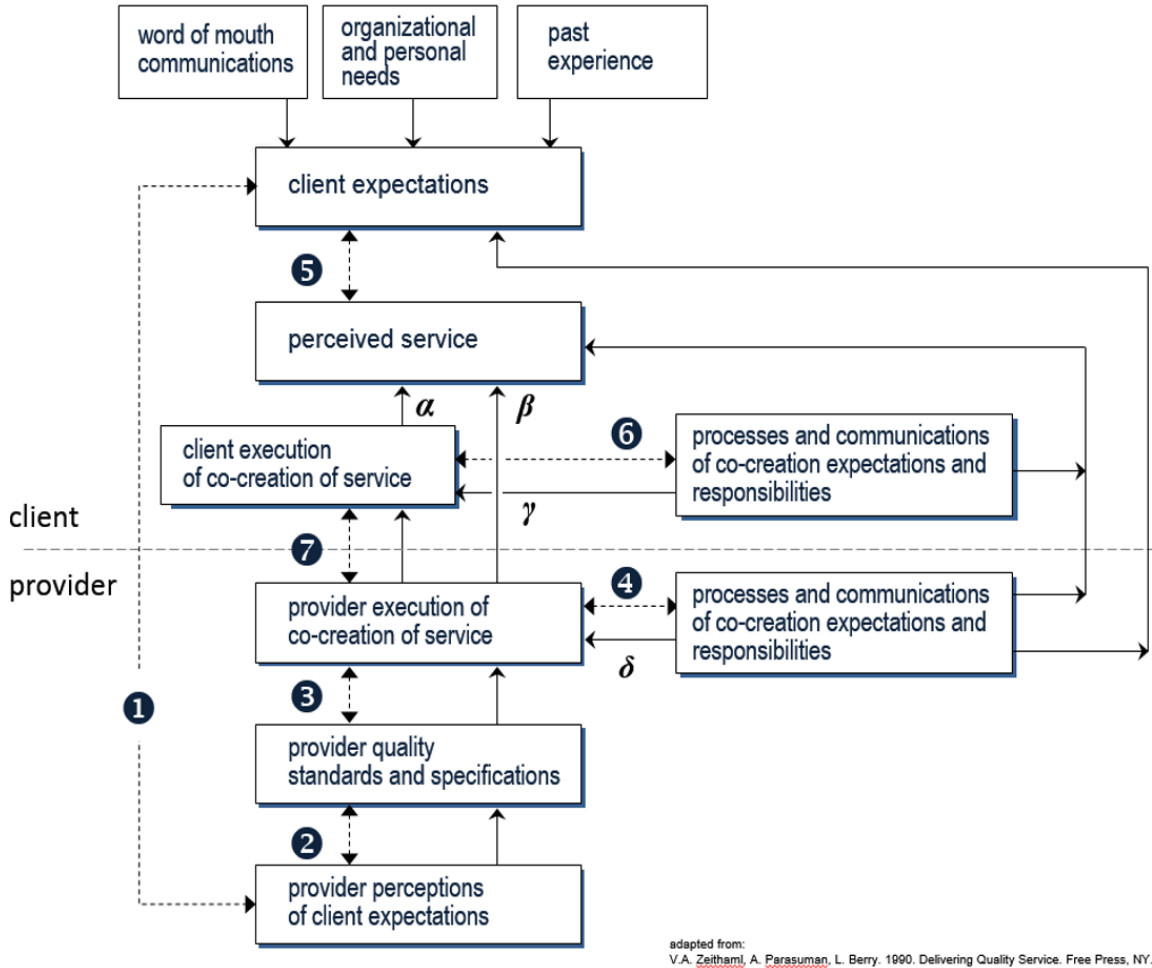


Figure 1. Updated SERVQUAL Gap Model.

Gap Number	Explanation
<b>1 not knowing what clients expect</b>  client expectations from provider $\neq$ provider perceptions of client expectations	<b>provider:</b> lack of understanding of client's needs and wants unable to translate client's needs into quality service lack of commitment <b>customer</b> inability to communicate needs and wants
<b>2 wrong service-quality standards</b>  provider perceptions of client expectations $\neq$ provider standards and specifications	<b>provider's:</b> inadequate commitment to service quality flawed standards on client's needs and wants
<b>3 provider service co-creation performance gap</b>  provider performance standards $\neq$ provider actual delivery performance	<b>provider :</b> <b>co-creation</b> fails its own standards of quality lack of will, systems, processes, skills, other
<b>4 provider promises do not match delivery</b>  provider execution of co-creation $\neq$ provider communications of reciprocal expectations and responsibilities	<b>provider</b> lack of internal/external communications on: their own responsibilities of service co-production client's responsibilities of service co-production
<b>5 service quality</b>  client expectations $\neq$ client perceived service	<b>service failure</b> system effect of the gaps
<b>6 client promises do not match delivery</b>  client execution of co-creation $\neq$ client communications of reciprocal expectations and responsibilities	<b>customer</b> lack of internal/external communications on: their own responsibilities of service co-production provider's responsibilities of service co-production
<b>7 value co-creation fails</b>  client execution of co-creation $\neq$ provider execution of co-creation	<b>co-creation</b> fails, <b>not</b> reciprocally effective lack of communications, flawed process design
Table 1. The SERVQUAL gaps explained, including Gaps 6 and 7.	

Taktchronicity is a first principle in services (Tang and Zhou, 2009). The principle states that value co-creation between provider and customer must maintain a rhythm that sustains a mutual synchronism between the needs of the provider and customer.

## Closing Remarks

Upon close examination of the SERVQUAL Gap Model, we uncover an omission in the model, which is deduced from the co-creation premises of service logic. We propose two additional gaps to update and enhance SERVQUAL's gap detection capabilities.

## References

- Bitner, M. J., W.T. Faranda, A.R. Hubbert, & V.A. Zeithaml, V. A. 1997. Customer Contributions and Roles in Service Delivery. *International Journal of Service Industry Management*, 8(3), 193-205.
- Brown, S. W., and T.A. Swartz. (1989). A gap analysis of professional service quality. *Journal of Marketing*, 53(2), 92-98.
- Buttle, F. 1996. SERVQUAL: Review, Critique, Research Agenda. *European Journal of Marketing*, 30(1), 8-32.
- Dehghan, A. (2013). Service quality and loyalty: a review. *Modern Management Science & Engineering*, 1(2), 197-208.

- Ghotbabadi, A. R., R. Baharun, and S. Feiz. 2012. A Review of Service Quality Models. Paper presented at the *2nd International Conference on Management*, Langkawi Kedah, Malaysia.
- Gounaris, S. 2005. Measuring Service Quality in b2b Services: an Evaluation of the SERVQUAL Scale vis-a-vis the INDSERV Scale. *Journal of Services Marketing*, 19(6), 421-435. doi: 10.1108/08876040510620193
- Grönroos, C. 2008. Adopting a Service Business Logic in Relational Business-To-Business Marketing: Value Creation, Interaction and Joint Value Co-Creation. *Otago Forum 2 - Academic Papers* Paper no: 15
- Grönroos, C. 1984. A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, 18(4), 36-44.
- Grönroos, C., and J. Gummerus, J. (2014). The service revolution and its marketing implications: service logic vs service dominant logic. *Managing Service Quality*, 24(3), 206-229. doi: 10.1108/MSQ-03-2014-0042.10.1108/IJOPM-02-2011-0053
- Janita, M. S., and F.J. Miranda. (2013). Exploring service quality dimensions in b2b e-marketplaces. *Journal of Electronic Commerce Research*, 14(4), 363-386.
- Ladhari, R. 2009. A Review of Twenty Years of SERVQUAL research. *International Journal of Quality and Service Sciences*, 1(2), 172-198.
- Nyeck, S., M. Morales, R. Ladhari, and F. Pons, F. 2002. 10 Years of Service Quality Measurement Reviewing the Use of the SERVQUAL Instrument. *Cuadernos de Diffusion*, 7(13), 101-107.
- Parasuraman, A., L.L. Berry, and V.A. Zeithaml. 1991. Refinement and Reassessment of the SERVQUAL Scale. *Journal of Retailing*, 67(4), 420-450.
- Parasuraman, A., V.A. Zeithaml, and L.L. Berry. 1985. A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., V.A. Zeithaml, and L.L. Berry. 1988. SERVQUAL- A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., V.A. Zeithaml, and L.L. Berry. 1994a. Alternative Scales for Measuring Service Quality- A Comparative Assessment Based on Psychometric and Diagnostic Criteria. *Journal of Retailing*, 70(3), 201-230.
- Parasuraman, A., V.A. Zeithaml, and L.L. Berry. 1994b. Reassessment of Expectations as a Comparison Standard in Measuring Service Quality- Implications of Future Research. *Journal of Marketing*, 58, 111-124.
- SERVQUAL. 2021. [https://www.google.com/search?q=servqual&rlz=1C1GCEA\\_enUS946US946&oq=SERVQUAL&aqs=chrome.69j0j512l8.4873j0j15&sourceid=chrome&ie=UTF-8#cobssid=s](https://www.google.com/search?q=servqual&rlz=1C1GCEA_enUS946US946&oq=SERVQUAL&aqs=chrome.69j0j512l8.4873j0j15&sourceid=chrome&ie=UTF-8#cobssid=s)
- Seth, N., and S.G. Deshmukh. (2005). Service quality models: a review. *International Journal of Quality & Reliability Management*, 22(9), 913-949. doi: 10.1108/02656710510625211
- Spreng, R. A., L.H. Shi, and T.J. Page. (2009). Service quality and satisfaction in business to business services. *Journal of Business & Industrial Marketing*, 24(8), 537-548. doi: 10.1108/08858620910999411
- Tang, V., and R. Zhou. 2009. First-principles for Services and Product-Service Systems: an R&D Agenda. Presented at the International Conference on Engineering Design, Stanford, USA.
- Vargo, S. L., P.P. Maglio, and M.A. Akaka. 2008. On Value and Value Cocreation: a Service Systems and Service Logic Perspective. *European Management Journal*, 26, 145-152.
- Woo, K.S., and C.T. Ennew. (2005). Measuring business to business professional service quality and its consequences. *Journal of Business Research*, 58, 1178-1185. doi: 10.1016/j.jbusres.2004.05.003

- Završnik, B., and D. Jerman. 2006. The Importance of Logistics Service Quality in a Business to Business Market. *Management*, 11(1), 1-16.
- Zeithaml, V. A., M.J. Bitner, and D.D. Gremler. 2010. Services marketing strategy. In R. A. Peterson & R. A. Kerin (Eds.), *Wiley International Encyclopedia of Marketing: Marketing Strategy*, 1, 208-218. Chichester, UK: John Wiley & Sons.
- Zeithaml, V. A., and M.J. Bitner. 2000. *Services marketing strategy: Integrating customer focus across the firm*. Irwin McGraw-Hill.

## Declarations

**Funding:** No specific funding was received for this work.

**Potential competing interests:** No potential competing interests to declare.