

# **SERVQUAL and the Quest for New Measures**

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At the third Northumbria International Conference on Performance Measurement in Information Services, Vicki Coleman of the University of Kansas and Colleen Cook and Fred Heath of Texas A&M University presented results of the Texas A&M experience administering SERVQUAL as an assessment tool for library performance in 1995, 1997, and 1999. For a range of services in a given industry, the SERVQUAL instrument measures the difference between customers' minimum expectations and their perceptions of those services as delivered, focusing on five customer-valued "dimensions" of service. The Texas A&M study analyzed perceptions of library service quality from 700 participants representing four different user groups. The results of the study identify performance issues applicable to all academic libraries as well as local strategic issues useful in managerial decision making at the institutional level. To realize its full potential as a library performance measurement tool, however, the SERVQUAL instrument must be modified.

The Texas A&M study revealed that the service dimensions evaluated by SERVQUAL—a tool developed for use in the private sector—need to be adjusted for use in the public sector. In the Texas A&M administration of SERVQUAL, scores were highly reliable but a factor analysis failed to capture the five dimensions prescribed by the protocol's designers: (1) tangibles, i.e., appearance of physical facilities, equipment, personnel, and communication materials; (2) reliability, i.e., ability to perform the promised service dependably and accurately; (3) responsiveness, i.e., willingness to help customers and provide prompt service; (4) assurance, i.e., knowledge and courtesy of employees and their ability to convey trust and confidence; and (5) empathy, i.e., the caring, individualized attention the firm provides its customers.<sup>1</sup> Only three service dimensions were isolated at Texas A&M: (1) tangibles; (2) reliability; and (3) affect of library service, which comprises the more subjective aspects of service, such as responsiveness, assurance, and empathy.<sup>2</sup> Specific issues of strategic interest for local library administrators were considered at the individual question level. Additionally, a specific analytical model, Six Sigma, was evaluated for its applicability for quantifying the gap between service expectations and perceptions.

One of the central questions surrounding the use of the SERVQUAL protocol is whether it is useful for cross-institutional analysis and comparisons over time as well as of strategic and diagnostic utility at the local level. From the Texas A&M perspective, there is no question that the SERVQUAL framework serves as a useful tool for management decision making at the local level. The Texas A&M experience finds the protocol less promising as a quantitative tool for simplistic ranking of cross-institutional library performance. Nevertheless, if the research library community could reach consensus to adopt the instrument as a mechanism for setting normative measures, institutions could be identified that consistently come close to meeting users' service expectations. These exemplary institutions could then be further investigated to identify the best practices that yield such service satisfaction on the part of their users.

Building upon the experiences at Texas A&M, ARL supported at its October Membership Meeting a 24-month pilot project to test the efficacy of SERVQUAL as a best practices tool for research libraries. The project will adapt the SERVQUAL instrument to measure performance across the three library dimensions identified at Texas A&M: (1) affect of service, (2) reliability, and (3) tangibles, while defining and introducing assessment of a fourth important dimension, (4) resources. Pilot libraries will administer the instrument over the Web, have the results scored at Texas A&M, evaluate their own results, and seek among the other participants examples of best practices that may assist with correcting local service deficits.

Six to eight ARL member institutions will be selected to administer to their patrons a common, modified version of the SERVQUAL instrument. The participants will be drawn from among the eighteen member libraries that have expressed an interest in participating in the pilot. In order that the entire ARL membership may assess the applicability of the results to their local context, an effort will be made to construct as diverse a test group as possible.

The Texas A&M design team will develop a web form for collecting data, assist each university in developing its survey sample, and score the results. After the pilot phase, the design will be turned over to ARL. Expectations are that the administration and scoring of future SERVQUAL studies would be conducted on a continuing basis by the ARL Statistics and Measurement Program.

One of the important early steps in this pilot will be the revision of the existing SERVQUAL instrument in order to incorporate a resources dimension, which will measure performance in such areas as collections, journal availability, document delivery, remote access to databases, and the like.<sup>3</sup> Interviews on the campuses of the participating libraries will help establish this dimension.

In the next few months, the Texas A&M design team will meet with participating institutions in order to identify the survey sample at each institution, set up the web forms for data collection, and identify respondents who will be tagged for follow-up longitudinal study. In the spring of 2000, the instrument will be administered at the participating institutions and the data will be collected and scored. Local and aggregate data will be shared with the participants.

At the conclusion of the pilot, a monograph will be issued assessing the cross-institutional data on each of the four library service dimensions and SERVQUAL will be evaluated for its utility as a best practices tool for research libraries. Concurrent with the completion of the monograph, the findings of the pilot project will be disseminated at the fourth Northumbria Conference.

For more information on the ARL pilot project testing the efficacy of SERVQUAL as a tool to identify best practices for library service, contact Colleen Cook at [<ccook@lib-gw.tamu.edu>](mailto:ccook@lib-gw.tamu.edu).

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## Endnotes

1. See A. Parasuraman, Leonard L. Berry, and Valarie A. Zeithaml, "SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality," *Journal of Retailing* 64, no. 1 (spring 1988): 12–40; A. Parasuraman, Leonard L. Berry, and Valarie A. Zeithaml, "Refinement and Reassessment of the SERVQUAL Scale," *Journal of Retailing* 67, no. 4 (winter 1991): 420–450; A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry, "A Conceptual Model of Service Quality and Its Implications for Future Research," *Journal of Marketing* 49, no. 4 (fall 1985): 41–50; A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry, "Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria," *Journal of Retailing* 49, no. 3 (fall 1994): 201–230; and Valarie A. Zeithaml, A. Parasuraman, and Leonard L. Berry, *Delivering Quality Service: Balancing Customer Perceptions and Expectations* (New York: The Free Press, 1990).
2. Colleen Cook and Bruce Thompson, "Reliability and Validity of SERVQUAL Scores Used to Evaluate Perceptions of Library Service Quality" (Manuscript submitted for publication, 1999).
3. Related research on incorporating a resources dimension into SERVQUAL is presented in Peter Herson, Danuta A. Nitecki, and Ellen Altman, "Service Quality and Customer Satisfaction: An Assessment and Future Directions," *The Journal of Academic Librarianship* 25, no. 1 (Jan. 1999): 9–17.

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