Designing a Self-Healing Service System: An Integrative Model

Robert C. Ford
Michael C. Sturman Ph.D.
Cornell University, mcs5@cornell.edu

Follow this and additional works at: https://scholarship.sha.cornell.edu/chrpubs

Part of the Hospitality Administration and Management Commons

Recommended Citation

This Article is brought to you for free and open access by the The Center for Hospitality Research (CHR) at The Scholarly Commons. It has been accepted for inclusion in Center for Hospitality Research Publications by an authorized administrator of The Scholarly Commons. For more information, please contact hotellibrary@cornell.edu.
Designing a Self-Healing Service System: An Integrative Model

Abstract
All service organizations seek to deliver the customer experience they planned. No organization is perfect, though, and so the best of them plan for inevitable failures. Since the experience exists in the minds of customers who individually determine its quality and value, service organizations must not only plan the service delivery system thoroughly, but create ways for it to heal when it breaks. Any delivery system that relies heavily on employees for its success will need to include the means for those employees to find and fix the problems that arise. The process presented here is a systematic approach to assessing customer satisfaction before, during, and after the service experience. Designing the system requires that you study your customers in intimate detail, build a service delivery system that will deliver the experience they expect from your organization, monitor that system closely, create accurate early warning measures for each of the many possible failure points, engage everyone in the organization in watching those measures, and follow up on everything that doesn’t meet your customers’ expectations. The techniques that constitute this process ensure that service organizations both systematically plan for customer satisfaction and ensure that there are ways to heal any part of the service delivery system that is broken. A “self-healing system” allows employees to override the delivery system and fix customer problems when they occur and ensures that the system designers improve it to prevent it from failing again in the same way.

Keywords
customer service, service delivery system, guest experience

Disciplines
Business | Hospitality Administration and Management

Comments
Required Publisher Statement
© Cornell University. This report may not be reproduced or distributed without the express permission of the publisher

This article is available at The Scholarly Commons: https://scholarship.sha.cornell.edu/chrpubs/50
Designing a Self-healing Service System:
An Integrative Model

Cornell Hospitality Report
Vol. 11, No. 15, August 2011

by Robert Ford, Ph.D., and Michael Sturman, Ph.D.
Advisory Board

Niklas Andréen, Group Vice President Global Hospitality & Partner Marketing, Travelport GDS
Ra’anan Ben-Zur, Chief Executive Officer, French Quarter Holdings, Inc.
Scott Berman, Principal, Real Estate Business Advisory Services, Industry Leader, Hospitality & Leisure, PricewaterhouseCoopers
Raymond Bickson, Managing Director and Chief Executive Officer, Taj Group of Hotels, Resorts, and Palaces
Stephen C. Brandman, Co-Owner, Thompson Hotels, Inc.
Raj Chandnani, Vice President, Director of Strategy, WATG
Benjamin J. “Patrick” Denihan, Chief Executive Officer, Denihan Hospitality Group
Brian Ferguson, Vice President, Supply Strategy and Analysis, Expedia North America
Chuck Floyd, Chief Operating Officer–North America, Hyatt
Gregg Gilman, Partner, Co-Chair, Employment Practices, Davis & Gilbert LLP
Tim Gordon, Senior Vice President, Hotels, priceline.com
Susan Helstab, EVP Corporate Marketing, Four Seasons Hotels and Resorts
Jeffrey A. Horwitz, Chair, Lodging + Gaming, and Co-Head, Mergers + Acquisitions, Proskauer
Kevin J. Jacobs, Senior Vice President, Corporate Strategy & Treasurer, Hilton Worldwide
Kenneth Kahn, President/Owner, LRP Publications
Kirk Kinsell, President of Europe, Middle East, and Africa, InterContinental Hotels Group
Radhika Kulkarni, Ph.D., VP of Advanced Analytics R&D, SAS Institute
Gerald Lawless, Executive Chairman, Jumeirah Group
Mark V. Lomanno, CEO, Smith Travel Research
Betsy MacDonald, Managing Director, HVS Global Hospitality Services
David Meltzer, Senior Vice President, Global Business Development, Sabre Hospitality Solutions
William F. Minnock III, Senior Vice President, Global Operations Deployment and Program Management, Marriott International, Inc.
Mike Montanari, VP, Strategic Accounts, Sales - Sales Management, Schneider Electric North America
Shane O’Flaherty, President and CEO, Forbes Travel Guide
Thomas Parham, Senior Vice President and General Manager, Philips Hospitality Americas
Chris Proulx, CEO, eCornell & Executive Education
Carolyn D. Richmond, Partner, Hospitality Practice, Fox Rothschild LLP
Susan Robertson, CAE, EVP of ASAE (501(c)6) & President of the ASAE Foundation (501(c)3), ASAE Foundation
Steve Russell, Chief People Officer, Senior VP, Human Resources, McDonald’s USA
Michele Sarkisian, Senior Vice President, Maritz
Janice L. Schnabel, Managing Director and Gaming Practice Leader, Marsh’s Hospitality and Gaming Practice
Trip Schneck, President and Co-Founder, TIG Global LLC
K. Vijayaraghavan, Chief Executive, Sathguru Management Consultants (P) Ltd.
Adam Weissenberg, Vice Chairman, and U.S. Tourism, Hospitality & Leisure Leader, Deloitte & Touche USA LLP

The Robert A. and Jan M. Beck Center at Cornell University
Back cover photo by permission of The Cornellian and Jeff Wang.

Cornell Hospitality Reports, Vol. 11, No. 15 (August 2011)

© 2011 Cornell University. This report may not be reproduced or distributed without the express permission of the publisher.

Cornell Hospitality Report is produced for the benefit of the hospitality industry by The Center for Hospitality Research at Cornell University

Rohit Verma, Executive Director
Jennifer Macera, Associate Director
Glenn Withiam, Director of Publications

Center for Hospitality Research
Cornell University
School of Hotel Administration
489 Statler Hall
Ithaca, NY 14853

Phone: 607-255-9780
Fax: 607-254-2922
www.chr.cornell.edu
Thank you to our generous Corporate Members

Senior Partners
ASAE Foundation
Carlson Hotels
Hilton Worldwide
McDonald’s USA
Philips Hospitality
SAS
STR
Taj Hotels Resorts and Palaces
TIG Global

Partners
Davis & Gilbert LLP
Deloitte & Touche USA LLP
Denihan Hospitality Group
eCornell & Executive Education
Expedia, Inc.
Forbes Travel Guide
Four Seasons Hotels and Resorts
Fox Rothschild LLP
French Quarter Holdings, Inc.
HVS
Hyatt
InterContinental Hotels Group
Jumeirah Group
LRP Publications
Marriott International, Inc.
Marsh’s Hospitality Practice
Maritz
priceline.com
PricewaterhouseCoopers
Proskauer
Sabre Hospitality Solutions
Sathguru Management Consultants (P) Ltd.
Schneider Electric
Thayer Lodging Group
Thompson Hotels
Travelport
WATG

Friends
Berkshire Healthcare • Center for Advanced Retail Technology • Cruise Industry News • DK Shifflet & Associates
ehotelier.com • EyeforTravel • 4Hoteliers.com • Gerencia de Hoteles & Restaurantes • Global Hospitality Resources • Hospitality Financial and Technological Professionals • hospitalityinside.com • hospitalitynet.org • Hospitality Technology Magazine • Hotel Asia Pacific • Hotel China • HotelExecutive.com • International CHRIE • International Hotel Conference • International Society of Hospitality Consultants • iPerceptions • JDA Software Group, Inc. • J.D. Power and Associates • The Lodging Conference • Lodging Hospitality • Lodging Magazine • LVA Worldwide, Inc. • Milestone Internet Marketing • MindFolio • Mindshare Technologies • PhoCusWright Inc. • PKF Hospitality Research • Resort and Recreation Magazine • The Resort Trades • RestaurantEdge.com • Shibata Publishing Co. • Synovate • The TravelCom Network • Travel + Hospitality Group • UnFocus • USA Today • WageWatch, Inc. • The Wall Street Journal • WIMH.COM • Wyndham Worldwide
Designing a Self-Healing Service System: An Integrative Model

by Robert Ford and Michael Sturman

Robert Ford, Ph.D., is a professor in the department of management in the College of Business at the University of Central Florida, where he teaches management of service organizations. He joined UCF as the chairman of its hospitality department after serving as the head of management at the University of Alabama at Birmingham. He also served UCF's COBA as the Associate Dean for Graduate and External Programs. Bob has authored or coauthored numerous publications currently focusing on service management in both top research and practitioner journals. He serves on several editorial boards including Cornell Hospitality Quarterly, British Journal of Management, Journal of Leadership and Organizational Studies and is the associate editor of the Journal of Service Management. He has also published several texts, including Managing the Guest Experience in Hospitality, Achieving Service Excellence, Managing Destination Marketing Organizations, and The Fun Minute Manager.

Michael C. Sturman, Ph.D., is a professor and The Kenneth and Marjorie Blanchard Professor of Human Resources at the Cornell University School of Hotel Administration (mcs5@cornell.edu). His research focuses on the prediction of individual job performance over time, the influence of compensation systems, and the impact of human resource management on organizational performance. A Senior Professional of Human Resources as certified by the Society for Human Resource Management, he has published research articles in such journals as the Journal of Applied Psychology, Academy of Management Journal, Personnel Psychology, and Journal of Management. He has also published practitioner papers in the Cornell Hotel and Restaurant Administration Quarterly, International Journal of Hospitality Management, Lodging Magazine, Lodging HR, A.A.H.O.A. Hospitality, HR.Com, and American Compensation Association Journal.
All service organizations seek to deliver the customer experience they planned. No organization is perfect, though, and so the best of them plan for inevitable failures. Since the experience exists in the minds of customers who individually determine its quality and value, service organizations must not only plan the service delivery system thoroughly, but create ways for it to heal when it breaks. Any delivery system that relies heavily on employees for its success will need to include the means for those employees to find and fix the problems that arise. The process presented here is a systematic approach to assessing customer satisfaction before, during, and after the service experience. Designing the system requires that you study your customers in intimate detail, build a service delivery system that will deliver the experience they expect from your organization, monitor that system closely, create accurate early warning measures for each of the many possible failure points, engage everyone in the organization in watching those measures, and follow up on everything that doesn’t meet your customers’ expectations. The techniques that constitute this process ensure that service organizations both systematically plan for customer satisfaction and ensure that there are ways to heal any part of the service delivery system that is broken. A “self-healing system” allows employees to override the delivery system and fix customer problems when they occur and ensures that the system designers improve it to prevent it from failing again in the same way.
Designing a Self-healing Service System: An Integrative Model

by Robert Ford and Michael Sturman

Every organization hopes to deliver its product or service to its customers flawlessly. The challenge for service organizations is to find ways to successfully co-produce experiences with the many different customers they seek to satisfy. Since no one can see, measure, or inspect a service experience, these organizations don’t really know if they did well or failed until the customer actually experiences the service. The subjective uncertainty of delivering a service means that ensuring that customers get what they expect is the result of a careful planning process. Moreover, designing a service delivery system that meets customer expectations is made even more difficult by continuing changes in customer expectations. An organization that has designed a system that delivers exactly what today’s customers want may have to completely redesign that system when those customers expect new experiences that are, for instance, based more on emotional connections and less on economic transactions.¹

Since a service experience exists in the mind of customers, organizations must design service delivery systems that enable them to deliver what their customers expect. Because flawless service is a goal and not always a reality, the purpose of this paper is to present a model that identifies and connects the elements of a flawless service experience, which we call a self-healing system. This model accounts for human fallibility and allows human ingenuity to fix the things that fail to work as designed.

While there is a vast literature on service system design and the individual techniques that help organizations ensure a flawless service experience, there is no comprehensive integrative model that ties these important topics together. The model presented here enables managers to systematically consider all parts of the delivery system as component elements of a customer focused process. This topic is increasingly important to any organization that has a service component to its business model. As Richard Metters and Ann Marucheck maintain, "the urgency for rigorous study to guide service managers in improving the design, competitiveness, efficiency, and effectiveness of service delivery, both at the firm and industry levels, has never been greater."

Too many times managers assume that the employee has made an error when in reality the fault lies in a system that makes it difficult, if not impossible, to deliver the service experience with the excellence that the organization, the employee, and the customer expect. Talk with frontline customer contact employees at hotels, retail stores, or at any service organization, and they will tell how frustrated they become when the service systems are unable to help them do the jobs they are hired and paid to do, and which they really want to do well. When the service delivery system fails, everyone loses. The customer is dissatisfied, the employee is frustrated, and the organization loses a customer and any profits that customer and that customer's friends' future business represents.

We organize this article as follows. First, we will present the model that integrates the components of a self-healing service delivery system, along with its purpose, value, and process. We then review the tools and techniques that allow organizations to design a delivery system that includes planning for and, hopefully, catching any flaws in their customers' service experiences. Finally, we present the logic and methods underlying the creation of a self-healing system.


The Service Delivery System

A service delivery system comprises all aspects of the service experience, including service product, service setting, and service delivery. Obviously, it is critical to develop a service product that meets customers' needs; likewise, to deliver a service product, you must have well-trained, motivated employees serving your customers in a well-designed service environment with the right information and the right tools to provide the exceptional service. But these factors are not sufficient. A key component of a flawless service experience is making sure that the entire service delivery system is designed so that it effectively integrates all the elements of the experience to make it happen the way the customer expects.

Since the goal should be to fail no customer, the importance of planning the entire customer experience (the cycle of service) and seeking to create a flawless delivery system becomes critical—all from the customer's point of view. The process starts before any customer ever enters the bank, registers at a hotel, or buys a sweater at the department store. It continues during the experience to monitor how well the service experience is going for the customers. Finally, it is reviewed with data gathered from customers who were happy or unhappy with the bank's service, hotel stay, or retail experience.

Designing a service delivery system from the customer's point of view requires methodically following these steps: study your customers in intimate detail, build a service delivery system that will deliver the experience they expect from your organization, monitor that system closely, create accurate early warning measures for each of the many possible failure points, engage everyone in the organization in watching those measures, and follow up on everything that doesn't meet your customers' expectations for whatever reason. Customer focused system designers don't try to just fix the symptoms of recurring service problems, they investigate the entire system. The service delivery system should be designed to create a flawless customer experience but, it should also be prepared for failure when it occurs.

Even when service delivery systems are well planned, they nevertheless can still fail from time to time. As a result, system designers must build into their design what former Ritz-Carlton COO Horst Schultz termed a "self-healing system," which allows employees to override the delivery system and fix customer problems when they occur. Beyond that, a self-healing system also ensures that the

4 Testa and Snipe, op.cit.
system designers improve it to prevent it from failing again in the same way. While designers are responsible for planning the most effective customer-focused delivery system, employees are responsible for telling management when and where the system has failed. Together they can fix both the customer problem and the system failure that caused it.

Designing a Flawless Service Delivery System
A self-healing system reflects the concepts of total quality management that were developed in the 1980s. Typically, the quality management process consists of three components, known as Juran’s Trilogy: quality planning, quality control, and quality improvement. Exhibit 1 applies that trilogy to show the when, what, who, and how of a comprehensive service delivery system, across the three phases of planning, measuring, and improving that system. Because the best managers know failure is inevitable, they take the time to plan out the customer experience, monitor it while it is happening, and put processes in place to find and fix the inevitable problems when experiences do not meet customers’ expectations. No one can manage what isn’t measured, so the process described here includes tools that can measure what is supposed to happen, is happening, or has happened.

Since this model is based on the ideas of Juran and the total quality management movement, it offers service leaders several important lessons. First, achieving total quality requires considering the entire system, from initial design to how raw materials and inputs are to be transformed into an output to the finished product. Second, everyone is responsible for delivering and monitoring quality, and everyone is responsible for delivering a quality customer experience. Third, the system must be checked for problems before blaming the people. Managers must use all the tools at their disposal to find the “root causes” of problems and implement solutions to avoid future problems.

Start Planning with the Customer
The starting point for any system design is the customer. A company must have a clear idea of what service product it plans to deliver to meet its targeted customers’ expectations. Of all the planning techniques perhaps the most important are service standards. Planning allows the development of service standards that define in measureable terms how the different aspects of the service experience are supposed to be delivered every time to every customer. While some standards are widely used across the service industry (e.g., answer the phone in three rings, respond to an electronic query within twenty-four hours, no line longer than three people waiting for service), most standards are specific to an organization. Organizations set standards to meet or exceed the expectations of their targeted customers and, often, the competition as well. For example, McDonald’s sets standards for every task that their field inspectors use to evaluate each

---


McDonald’s. Similarly, airlines define how many minutes it should take for bags to get from the stopped aircraft to the baggage claim. Service standards define with specific measures the customer experience an organization seeks to deliver to every customer, every time. Well designed and measureable service standards should at minimum provide customers with “as expected” service experiences. Moreover, they are the cornerstone of a self-healing system, as employees can see for themselves when a standard is unmet and correct the problem.

Measuring the System

The second phase of a self-healing service delivery system involves measuring. This is a special challenge for the service industry because only customers can determine whether service standards actually measure their perceptions of a quality experience. The need for measuring what is happening to the customer in every step of the service delivery system is critical in understanding whether problems exist, where they are, and whether the attempted solutions are actually fixing them.

Here again, service standards play a key role. Clear, fair, logical standards that are completely understood by the employees permit them to monitor their own performance and manage themselves. This principle anchors the quality assurance concept, and is a fundamental premise for W. Edwards Deming’s quality circles. It is also the basis for a self-healing system. If you teach employees what is important to their individual job success and then you train them to measure how they are performing on those critical factors, you have built the foundation for a self-managing workforce and a self-healing system.

Measures for every part of the customer experience are critical to ensure that the service is delivered to the customer as planned. According to quality expert Phil Crosby, the price of not conforming to expected quality can be calculated according to how much it costs to fix errors that result from not meeting the quality standard in the first place. While some may think that determining the cost of (for example) not answering the phone within three rings is impossible, quality experts like Crosby think it can and should be done.

Improving the System

The last step in the analysis is the system’s ability to heal itself. Once the service experience is planned and the measures developed to assess the results of implementing that plan, then both management and employees have the information needed to redesign the system and fix the problems to yield continuing improvement in the customer experience.

The Blurred Lines

Exhibit 1 presents a clear division of the different “phases” of the service experience, as proposed in Juran’s Trilogy of Quality, but the three phases actually overlap in services, as depicted in Exhibit 2. Service planning must take into account these blurred lines of the service process. For example,

---

there are inevitable waits. While the organization sees waits as part of its planning process, the customer perceives the wait as part of the experience.16 Similarly, the idea of service recovery presents a blurred line between what occurs during the service and after the service. If a problem with the service experience occurs, it may be caught and fixed before the service is complete and the customer leaves. Indeed, most believe that during a service the ideal time to find out that you failed, since having the customer still there allows management to make an apology, offer some compensation, and correct the problem appropriately.17 However, the best firms don't stop with trying to catch the unhappy customer before leaving. They also seek to assess the success of a customer’s experience while it is happening to ensure that what is expected actually happens. These managers know that few customers complain when they're unhappy, so they create systematic ways to discover how well they actually delivered the customer experience. They go beyond surveying the customers that came in and also ask the ones in their target market that didn’t.18

**The Cycle Goes On**

For organizations seeking competitive excellence, the cycle of planning, measuring, and improving is continuous. The service delivery system should incorporate all three elements. The plan lays out what you think your delivery system should do for the customer, the control measures tell you if what you planned is in fact happening, and the commitment to improvement focuses everyone’s attention on analyzing the data collected to fix the identified problems and move toward the goal of flawless customer experience for every customer, every time. Although the three service elements or phases are blended, in the following section we detail how this cycle is translated into specific tools and techniques used before, during, and after the delivery of the service experience. Throughout, we note that measurement is essential,19 and although management may isolate individual aspects of the process (and should do so), the customer will see the service interaction as a whole.20

### Before the Customer Experience

As noted earlier, a well-designed service system will include a way to measure every critical part of the customer experience and the entire, overall experience. Even if customers can identify how any one part of the experience influenced their determination of the experience’s value and their sense of satisfaction, most respond to their customer experience as a whole. When a customer is dissatisfied with a dining experience, management needs to analyze the data measuring each step in that customer's experience. Otherwise, management may not identify the actual cause of dissatisfaction. Knowing what the delivery system is supposed to do and then analyzing data collected from the measures should trigger the necessary corrective actions. Planning techniques define what the delivery system is supposed to be able to do before it occurs and provide measures of whether what was planned actually occurred.

### Forecasting and Managing Demand

One obvious and widely used planning technique is forecasting. Forecasting customer demand allows the service organization to build adequate capacity to minimize waits, staff the proper number of people, and stock the necessary supplies for handling the customers expected. For example, if a statistical prediction of the customer demand for a theme park on a particular day indicates that the park will be full, then management can schedule full staffing, prepare sufficient food supplies, and make available the full capacity of each attraction. Some restaurants require reservations to manage demand during times when it is anticipated to be heavy. When service organizations forecast demand poorly, the inadequate service capacity will lead to people waiting too long, a decline in customers’ perception of overall service-experience quality, and ultimately a service failure.21

If the demand can be forecasted for longer periods of time, more extensive and expensive plans can be implemented.22 If, for example, demand for the next quarter or next year or even longer is expected to increase, new capacity can be acquired, new employees hired and trained, and merchandise stocking levels can be increased. When demand cannot be forecast precisely, organizations can still plan to train employees to cope with the unpredictable demand patterns.23

Just as hospitals run disaster drills to prepare for unexpected needs, service organizations can plan for unexpected customer demands. The result is adequate staffing levels, a reliable service experience, and a commitment to improving the customer’s service experience.

---


19 Testa and Snipe, op.cit.


disasters, so too can service staff be trained to handle the unexpected.

Service Standards
Standards for service organizations are similar to quality-control standards in manufacturing organizations, except that there are no calipers or QC inspectors to precisely measure the intangible aspects of the customer experience. A service standard enables service organizations to catch and fix bad experiences just as the QC inspector catches and discards defective ball bearings.

There are different types of standards. Some are built directly into the design of the service system. If a restaurant's design and service forecasts are closely matched, and its standards accurately reflect what customers expect, a service failure should not occur. Standards should include all aspects of the service experience such as food and beverage storage capacity, food prepared in advance, staffing levels, and amount of silverware to be rolled in napkins. Additional standards might include annual hours of training required of service personnel, number of computer terminals to be purchased to serve anticipated dinners, and number of bathrooms or other facilities available.

Standards can also be set for employee performance in delivering the service experience, such as maximum number of minutes before an arriving guest is greeted and number of times a customer's name is used in a bank transaction. These will be discussed in greater detail below as job performance standards.

Quality Teams
Quality teams can be used as a part of a preventive planning strategy.24 Service organizations can gather together the people who are directly involved in any specific part of the service experience to help identify delivery system flaws and develop strategies that can prevent problems from recurring. Quality teams may also be used after the experience has occurred to analyze delivery system performance in a collaborative discussion with those employees who are part of it.

Training
Without doubt, adequate and appropriate employee training is an essential planning element that can prevent failures and increase the likelihood of flawless service.25 Olive Garden, for example, brings in all of its employees at least ten days before a restaurant opening so they can become familiar with the menu, service protocols, service standards, product offerings, and each other. By the time the restaurant opens, the wait staff knows the products they are serving, the protocols and systems for providing the Olive Garden experience to the customer, and the other members of the restaurant team.

Simulation
Simulation is a key training technique that is intended to anticipate the issues that arise throughout the service delivery system, as well as the service recovery process.26 Once a model is created to represent the customer–server interaction, the delivery process, or the entire customer experience, the manager and the servers can use the model to simulate and analyze a wide variety of different situations that might occur to analyze what impact each might have on the customer. For complex models or where failures can be fatal to organization or people, like landing airplanes in emergencies, simulations are typically computerized. On a simpler level, role plays and structured scenario simulations can be used to help service employees practice for all types of service failures and learn effective recovery strategies.27

During the Service Experience
Once the customers have arrived, you will discover whether the planning process was effective. Here is where measurement is particularly critical, so that you can ascertain whether you are, in fact, delivering great service. One of the most difficult challenges for service organizations is accurately measuring what customers think about their experience while it is in process. Nevertheless, finding out how the customer perceives the service experience as the service unfolds allows the service manager to see where any problems might be, from the customer's perspective. The critical challenge for service managers seeking this information is to identify and implement the best but least obtrusive measurement methods, without interfering with the customer's perception of the quality of that experience. Accurately assessing the service quality while it is being coproduced is the most effective way to find and fix any failures. Measurements gathered after the customer has left are generally too late to enable recovery from failing that customer, though they may be useful in improving the service experience for future customers.28 The techniques for measuring the service delivery system while it is delivering the service experience

25 Cranage, op.cit.
<table>
<thead>
<tr>
<th>Technique</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job-performance standards</td>
<td>• Translate service standards into behaviors that can be measured</td>
<td>• Can’t cover all aspects of every service encounter</td>
</tr>
<tr>
<td></td>
<td>• Provide objective criteria for rewarding employees for doing what the standards require</td>
<td>• May discourage innovative solutions to customer requests falling outside of service standards and prescribed behaviors</td>
</tr>
<tr>
<td></td>
<td>• Allow easy monitoring by supervisors and self-monitoring by employees of what they should be doing</td>
<td></td>
</tr>
<tr>
<td>Managerial observation (MBWA)</td>
<td>• Management knows business, policies, procedures, and service standards</td>
<td>• Management presence may influence service providers</td>
</tr>
<tr>
<td></td>
<td>• No technology or up-front costs required</td>
<td>• Lacks statistical validity and reliability</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to recover from service failure</td>
<td>• Objective observation requires specialized training</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to collect direct, specific customer feedback</td>
<td>• Management may not know enough about situation to gather all the facts</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to identify service problems</td>
<td>• Takes management time away from other duties</td>
</tr>
<tr>
<td></td>
<td>• Opportunity for immediate coaching or reinforcing of service-providing employees</td>
<td></td>
</tr>
<tr>
<td>Employee observation</td>
<td>• Employees have first-hand knowledge of service delivery system obstacles</td>
<td>• Objective observation requires specialized training</td>
</tr>
<tr>
<td></td>
<td>• Customers volunteer service-quality feedback to employees</td>
<td>• Employees disinclined to report problems they created</td>
</tr>
<tr>
<td></td>
<td>• No inconvenience to customers</td>
<td>• Lacks statistical validity and reliability</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to find and fix service failures immediately</td>
<td>• Employee trust of management will influence what feedback is shared</td>
</tr>
<tr>
<td></td>
<td>• Employee empowerment improves morale</td>
<td>• Organizational system for collecting and analyzing customer feedback is required</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to collect detailed customer feedback</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Minimal cost for data gathering and documentation</td>
<td></td>
</tr>
<tr>
<td>Service guarantees</td>
<td>• Allow customers to see service standards and monitor them</td>
<td>• Employees try to avoid mentioning them or honoring them when invoked</td>
</tr>
<tr>
<td></td>
<td>• Send employees strong message about organizational commitment to service quality</td>
<td>• Typical guarantee out of touch with actual service experience, not taken seriously</td>
</tr>
<tr>
<td></td>
<td>• Document service failures</td>
<td>• Managers may hide guarantee data to avoid negative performance implications</td>
</tr>
<tr>
<td></td>
<td>• Enhance likelihood of customer complaining to allow fixing service failures</td>
<td></td>
</tr>
<tr>
<td>On-site personal interviews and encounters</td>
<td>• Opportunity to collect detailed customer feedback</td>
<td>• Require a significant investment in training and time</td>
</tr>
<tr>
<td></td>
<td>• Ability to gather representative and valid sample of targeted customers</td>
<td>• May not be representative sample of customers</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to recover from service failure</td>
<td>• Difficult and expensive to collect a large sample of respondents</td>
</tr>
<tr>
<td></td>
<td>• Suggest that company is interested in customer opinions of service quality</td>
<td>• Recollection of specific service experience details may be lost</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Memory of other service experiences may bias responses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Respondents tend to give socially desirable responses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inconvenience makes incentives for participants necessary</td>
</tr>
</tbody>
</table>

can be generally categorized as follows: process strategies, job performance standards, service guarantees, and customer queries, as shown in Exhibit 3.

**Process Strategies**

Process strategies include all the various ways in which organizations can avoid service failures by monitoring the de-
livery while it is taking place. A process strategy is a means of comparing what is happening against what is supposed to happen, usually expressed as a measurable service standard. Some process strategies are not formally defined and, consequently, are less easily measured. In those cases, finding and fixing service failures may rely heavily on the experience and training that managers and employees have in delivering the high-quality service experience that the organization says it wants customers to have. The idea behind process strategies is to design mechanisms into the delivery system that will not only affirm success but more importantly catch and fix failures before they can affect the quality of the customer’s memory of the experience.

The “best” mistake is one that never happens because the organization planned thoroughly to ensure that each part of the experience is flawless. Failing that, the organization needs to have measures in place that will identify the mistakes as soon as possible—hopefully before the customer leaves the service setting to give the organization a chance to recover from the failure. Moreover, the sooner the information is collected from the customer, the more likely it is that the customer will remember enough details about it to provide helpful feedback.

Two in-process methods of assessing a service’s quality while it is happening are managerial observation, sometimes called management by walking around (MBWA), and employee observation. A supervisor can monitor customer service calls, while a server can check the food order against what is on the plate. Properly operated, a machine can control the frying time of French fries to get them perfect every time. Process controls require the company to devote the resources to create and maintain the error-prevention system.

Hard Rock Café, for example, hires a person to stand at the end of the food preparation line to match the order with the food on the plate, and thereby to catch discrepancies before the customer ever sees the order. Even though the traditional job description for wait staff includes this checking responsibility, having this checker reduces the possibility of error even further. The Opryland Hotel in Nashville cross-trains some of its employees so that they can be called upon in peak demand times when the front desk is extra busy. If line lengths threaten to exceed the service standard, this “swat team” staffs extra computers to reduce the wait for the incoming or departing customers.

Thus, for a self-healing service system, we need to continuously compare the performance of organizational members against pre-established service standards. This checking allows organizations to assess quality while service is being provided to ensure the success of individual service experiences, and plan for likely customer expectation levels by establishing a range of standards before and during the entire experience. Now we need techniques and methods to assess how those plans work out in practice. Again, a summary of measurement techniques that can be used during the service experience is presented in Exhibit 3.

Job Performance Standards

Specific job performance standards are most effective when they include measurable signals. These standards for specific jobs, derived from the service standards, provide employees with clear and specific performance expectations for each major duty associated with their jobs. Let’s take the example of a standard set by Emeril Lagasse, famed chef, restaurateur, and television personality. His service standard is that waiters must take a cocktail order within 15 seconds of the customer being seated. The indicator is the salt and pepper shakers on the table. The shakers are usually set together on the table. The person seating the customer subtly separates them, meaning that this drink order has not yet been taken. When servers take drink orders, they put the shakers back together. This simple cue lets everyone see that the drink order has been taken, and the restaurant can measure whether the standard has been met. One additional benefit of setting and monitoring standards is that they can encourage innovative solutions by employees seeking to meet or beat the standards.

All of this means that the performance standards must be carefully set. Most managers repeatedly emphasize the importance of complying with performance standards, so employees may be reluctant to deviate from them if customers make unusual requests. However, the benefits of standards far outweigh the disadvantages. Performance standards make supervision easier (the manager can see whether the employee is performing according to standards) and also facilitate self-management by employees (employees can see the organization’s performance expectations in clear terms).

The key to the use of job performance standards is that (1) the standards must be clearly relevant to the service being delivered, and (2) employees must know what they need to do, are able to do what they need to do, and know what the standards are. Then, by measuring the extent to which employees meet the standards, the organization will have a good indication of how well employees are providing the service. Service standards that can be applied while the service is in process also provide employees with objective

---

### Techniques for assessing quality after the service experience

<table>
<thead>
<tr>
<th>Technique</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comment cards</strong></td>
<td>• Communicate company interest in customer opinions of service quality&lt;br&gt;• Signed cards are an opportunity to recover from service failure&lt;br&gt;• Low to moderate start-up cost&lt;br&gt;• Minimal cost for data gathering and documentation&lt;br&gt;• If printed in house, can be changed easily and often to evaluate needs or new service products</td>
<td>• Self-selected sample of customers not statistically representative&lt;br&gt;• Comments generally reflect extreme customer dissatisfaction or extreme satisfaction&lt;br&gt;• Limited information provided&lt;br&gt;• Employees can influence results&lt;br&gt;• Time lag between filling out and reading of card&lt;br&gt;• Lack of specifics may make it difficult to use information to find real problem</td>
</tr>
<tr>
<td><strong>Toll-free numbers</strong></td>
<td>• Permit potential and prior customers to ask questions, volunteer opinions on service&lt;br&gt;• Opportunity to recover from service failure&lt;br&gt;• No cost to callers</td>
<td>• Self-selected sample of customers not statistically representative&lt;br&gt;• Comments generally reflect extreme customer dissatisfaction or extreme satisfaction&lt;br&gt;• Time lag between experience and making phone call may cause important feedback to get lost in memory</td>
</tr>
<tr>
<td><strong>Surveys: mail &amp; web, phone, critical incidents</strong></td>
<td>• Gather info from potentially representative samples of targeted customers&lt;br&gt;• Opportunity to recover from service failure&lt;br&gt;• Allow follow-up discussion to probe into potential problems and opportunities in all parts of service experience&lt;br&gt;• Send message that company cares enough about its service quality to spend money to ask customers what they think about it</td>
<td>• Recollection of details of a specific service experience can be inexact&lt;br&gt;• Other service experiences may bias or confuse responses because of time lag&lt;br&gt;• Inconvenience of participation makes offering incentives to participants necessary&lt;br&gt;• Cost to construct questionnaire and gather and analyze data from representative sample can be great&lt;br&gt;• Still risks potential for only highly satisfied or dissatisfied customers to respond</td>
</tr>
<tr>
<td><strong>Focus groups</strong></td>
<td>• Permit potential and prior customers to ask questions, volunteer opinions on service&lt;br&gt;• Gather info from potentially representative samples of targeted customers&lt;br&gt;• Send message that company cares enough about its service quality to spend money to ask customers what they think about it&lt;br&gt;• Allow follow-up discussion of potential problems and opportunities identified by group</td>
<td>• Are very expensive&lt;br&gt;• Rely on facilitator skill to enable group participation and focus discussion&lt;br&gt;• Small sample can lead to misidentification of important or overemphasis on unimportant opportunities and challenges in total service experience</td>
</tr>
</tbody>
</table>
| **Mystery shoppers**       | • Unannounced observation by seemingly typical customers allows sampling of typical experience, not "dressed up"
|                           | • Can be scheduled to observe and test specific training outcomes, times of day, or problem areas
|                           | • Can be used to observe competing organizations
|                           | • Provide more detailed data on all elements of service experience
|                           | • Can be very accurate on objectively measured elements of experience
|                           | • Are more accurate than customer feedback on subjective aspects of experience
|                           | • Employees see shopper feedback as less subjective than manager's performance review                                                         | • Are expensive<br>• May not be used often enough to gather statistically accurate data<br>• Shopper biases, other experiences, and preferences can over- or underemphasize quality assessments |
measures against which to concurrently monitor their own job performance.

Before the customer departs, several techniques can be used to gather service quality feedback. These offer important ways to not only learn about your customers’ experience but also ensure that your organization has the opportunity for recovery with dissatisfied customers. Among the most widely used are service guarantees, employee and manager queries of departing customers, and surveys that customers are asked to fill out before they leave your premises.

The Service Guarantee
To make their service standards clear to customers, companies can offer service guarantees. They may be expressed in simple statements like “Satisfaction guaranteed or your money back; no questions asked” or in complex documents resembling contracts. A service guarantee is a publicly expressed promise, usually written, either to satisfy customers or to compensate them for any failure in part or all of the service. If both customers and employees know the service standards expressed in the guarantee, both parties can measure quality levels against them as service is being delivered.

Asking Customers the Right Questions
One of the best ways to find something out is simply to ask. Two additional in-process methods for acquiring the opinions of customers before they leave the service setting are personal interviews with customers, individually or in focus groups, and less formal encounters between employees and customers.

Some organizations have formalized the interview process by structuring customer intercepts. They either use consultants skilled in customer intercepts or they ask employees to act informally as “lobby lizards” to ask randomly selected customers their opinions on key service issues. At theme parks and similar attractions, teams of skilled interviewers roam the parks seeking customer responses. These conversations not only gather useful information about the customers’ assessment of service quality but also enable the identification of any service failures that can be corrected while customers are still on the property. Many hotels station managers at the entry to both greet arriving customers and ask departing customers if everything went well.

New Technologies for Gathering Feedback
Improved technology has given companies the chance to solicit more representative feedback, get better response rates, and to use customer information more effectively. For example, Marriott’s Fairfield Inns developed their Fairfield Inns Scorecard program as a means to get greater customer participation than typically found with comment cards, toll-free numbers, or websites. At checkout, customers are asked to answer several brief questions on a computer touch screen while the receptionist is processing the bill. Most customers are willing to share their opinions about the quality of their hotel stay in this way while the experience is fresh in their minds, instead of the usual scenario of comment cards being returned only by those who are either very happy or very unhappy.

After the Service Experience
Although in-process information is important, organizations also need to ensure that they have processes in place to collect data directly from customers after the experience, to identify the areas needing improvement for satisfying returning customers and attracting new ones. As seen in Exhibit 4, these methods include such diverse techniques as comment cards; toll-free numbers; mail, telephone, and web surveys using a variety of techniques; and customer focus groups. Mystery shopping is an additional widely used approach for gathering data about the quality of a service experience.

Comment Cards
Other than informally questioning customers before they leave, comment cards are the cheapest and easiest to use of all formal data collection methods. If properly designed, they are easy to tally and analyze. These advantages make them attractive for gathering customer-satisfaction data, especially for smaller organizations that cannot afford a quality assessment staff or consultants. Although they are used widely throughout the service industry, comment cards’ great weakness is that they rely on voluntary customer participation. Since these volunteers may be motivated by extremely good or extremely bad service, they are not likely to be a random sample of the customer population.

In spite of this weakness, companies use them anyway and are increasingly using the internet to replace the paper versions of them. This is accomplished by publicizing web addresses in visibly prominent areas on their printed material such as credit card receipts and bill copies, advertisements, coupons, and any other place their customers might see a URL. Most organizations also offer an easily found “contact us” link on their website portal pages that may bring up an email form, but also provides a mailing address for those customers who prefer to write a letter and contact names for those who wish to direct their comments to a specific person or functional area. Many paper comment cards include a web address so that customers can complete the card online rather than on paper. Some companies such as Marriott and Olive Garden have completely eliminated paper comment cards in favor of virtual “cards.” Needless to say, internet collection makes it easier to collect, monitor, sort, and analyze data, and the technology usually offers a way for the company to respond to customer comments.
Comment cards provide an indication of whether the organization is meeting the general expectations of the customers who take the time to fill them out. Written comments about long waits for food, lines at the front desk, or housekeeping problems reveal the strengths and weaknesses of the service delivery system, the personnel and their training, and the service product itself. Positive comments provide management with the opportunity to recognize employee excellence. This recognition reinforces the behaviors that lead to good customer service and creates role models and stories about how to provide outstanding service that other employees can use in shaping their own behavior in their jobs. Negative comments can be used for individual coaching, departmental training to illustrate behaviors that caused negative customer experiences (without mentioning specific employees), and as input for reviewing employee training programs. Using comment cards in these ways allows managers to coach and train employees about how to provide excellent customer service through the voices of the customers themselves.

Comments accumulated from cards may be categorized and plotted as numerical values on bar graphs and charts that display how customers perceived their experience. A time series of graph plots will suggest whether service failures are occurring occasionally and randomly, or whether overall service quality might be deteriorating.

Toll-Free Numbers
Another way of measuring the quality of service is the toll-free customer-service telephone number, which allows customers to speak their mind at any time. Like the customer comment cards, the usefulness of the toll-free number depends on the willingness of the customers to respond, and even the convenience of this method does not guarantee a representative response from all types of customers. Some companies also offer incentives such as coupons to encourage customers to call the toll-free numbers. Others enter the caller into a lottery to win cash prizes.

Mail or Web Surveys
Well-developed mail or web-based surveys work best when they are sent to an appropriate and willing sample. Brinker International, the parent company of Chili’s, On the Border Mexican Grill and Cantina, and Maggiano’s Little Italy, has developed a variation that combines the mail survey and the frequent-diner card program. Once Brinker obtains basic customer demographic information on an application form for the frequent-diner card, it follows up with mailed surveys.

Telephone Surveys
Telephone interviews are a more direct way of hearing customer feedback. Often used by car dealerships, for example, phone surveys are also used by some tour operators to obtain feedback about a recent vacation experience while paving the way for subsequent travel arrangements. Telephone surveys and interviews are easy to conduct and can be inexpensive, if the company’s own employees can make the calls in their slack times. In that case, the only costs are for setting up a well designed interview or questionnaire and devising a calling strategy or protocol that will yield the best possible statistical results.

SERVQUAL
SERVQUAL is perhaps the best known of the many service quality measures that have been developed. Developed by A. Parasuraman and his associates, SERVQUAL (short for “service quality”) has been extensively researched to validate its psychometric properties. It measures the way customers perceive the quality of service experiences in five categories: reliability (the organization’s ability to perform the desired service dependably, accurately, and consistently), responsiveness (its willingness to provide prompt service and help customers), assurance (employee knowledge, courtesy, and ability to convey trust), empathy (providing caring, individualized attention to customers), and tangibles (the physical facilities, equipment, and appearance of personnel). In each area SERVQUAL asks customers what they expected and what they actually experienced, to identify service gaps to which organizations should direct attention. SERVQUAL also asks respondents to rate the relative importance of the five areas, so organizations can make sure they understand what matters most to customers.

Focus Groups
Focus groups provide in-depth information on how customers view the service they receive. Many service organizations routinely invite current or former customers to participate in focus groups to discover their feelings about and perceptions of existing or potential service experiences. Current customers are especially valuable because they can share their reactions and insights before they leave the premises and forget the details of what they just experienced. Customers invited to focus groups are usually impressed that the company cares enough about their reactions to ask about them, and they appreciate the free return admission, complimentary

dinner, or other expression of appreciation that compensates them for their time.

Customers Evaluating Service on Their Own
With the internet facilitating the spread of information, customers often don’t wait for the company to ask them what they think. Individuals post comments on blogs and company websites, provide reviews on websites like TripAdvisor.com, express their opinions on discussion boards, and send in unsolicited letters and e-mails. When researching where to stay or eat, many people look for these unsolicited reviews with the hope of finding useful information about the quality of various service products.

Mystery Shoppers
Mystery shoppers or secret shoppers provide management with an objective snapshot of the customer experience from which they develop a systematic and detailed report. Shopper reports generally include numerical ratings of their observations so that assessments of the customer experience can be compared over time and with other organizations. While employees usually know that their organization uses a mystery-shopper program, they don’t know who the shoppers are or when they will shop. Owners of smaller organizations, such as those with independent restaurants or retail shops, may hire an individual consultant or ask a personal friend or university class to conduct a mystery-shopper program. Larger organizations and national chains may employ a commercial service or use their own staff as shoppers.

Studying Service Failures for Improvement
The concept that we started with, the self-healing system, is based on the idea of creating a signal to the employee and organization that something has gone wrong in the customer’s service experience and, sometimes, even how to “heal” it on the spot. The best way to improve the delivery system is to collect data on and study service failures to learn what went wrong and why. This information can then be referred back to the system planners so they can “heal” the system. A service failure indicates a problem in the service system. Finding and fixing service failures involves identifying that problem and then building proactive or preventive strategies into the service system to eliminate or diminish the likelihood of the problem recurring.

Service Recovery Systems Analysis
An overall strategy for failure analysis will help prevent any customer from being disappointed by unmet expectations. The first step in crafting such a strategy is to identify the failures and put them into categories for further analysis. This requires organizations to be on watch for service failures and to have a system in place to document and track any errors that occur. The second step is to assign reasons for each type of failure, attributing them to who was in charge, how often they happen, and whether those in charge could have controlled what happened. This step is not designed to focus on finding someone to blame or punish, but rather to identify why the problems occurred so that the system can be changed, the employee involved can be trained, or whatever changes are necessary can be made.

The third step is to create an appropriate recovery strategy for each type of failure. Strategies can range from no response at all or a simple apology to some level of compensation. During the planning phase, companies must consider the types of failure that might occur and prepare appropriate responses for them. The fourth step is the implementation of the recovery. The success of this step is usually grounded in how fair (or appropriate) customers perceive the recovery to be. The final step is monitoring the recovery efforts to see whether they were successful. The organization should include assessment of the extent to which the employees involved in attempting recovery performed appropriately and whether the details of the failure have been recorded and retained in the company data base for future use and further study of failure causes.

A final critical component of a monitoring system is feedback. Information obtained from each part of the process should be shared throughout the organization to help correct problems, prevent similar problems, and to help teach other employees how to handle problems. For a system to “heal itself” it must be able to “learn from its mistakes.”

Building a Self-healing Service Delivery System
When the systems for identifying service failures and delivery system flaws have been put in place, when the data that they have generated have been collected systematically, and when the customers who were the source of complaints have been contacted and offered restitution, the organization’s leadership should now use all of this information to revisit the service planning process.35 Knowing what has failed, and even what has not failed, provides the knowledge to reassess all aspects of the service experience. Where the organization has not met customer expectations, it can plan to do so in the future; where it has only met expectations, it might find new ways to exceed them; and where it has exceeded expectations, it can learn why in order to extend the features that led to success to other parts of the experience. A key element in the continuous-improvement philosophy—which the best organizations use to drive continual reassessment of services.


what they do—is to learn from their history to improve their future. The tools and techniques discussed above and summarized in the exhibits are the means by which they gather the information to drive continuous improvement. Using these tools and techniques consistently and effectively is how the best stay the best. Service organizations should choose the techniques that best fit their particular mission and objectives. Likewise, the organization must determine who should collect data: customer contact employees, managers, consultants, or a professional survey research organization. Customer contact employees or managers are the least expensive alternatives, but they also have the least expertise in research and communication skills. Consultants and survey organizations cost more, but they may be better able to gather and interpret more detailed statistical data using more sophisticated techniques.

As we have outlined above, the timing of when to request feedback is critical. In fact, the best companies do not limit themselves to a single time frame. Instead they collect information both during the service experience and afterward. This multiple time frame approach enables service recovery on the spot, as well as for gathering data needed to conduct the detailed analysis that leads to a self-healing system.

Your Best Evaluators: Your Customers

Regardless of the evaluation technique or the individuals selected to measure service quality, one thing is certain: customers evaluate service every time it is delivered, forming distinct opinions about its quality and value.36 The customer decides what the experience was worth, whether it was worth returning for, whether to tell friends and neighbors that it was great or poor, and whether the overall experience was satisfactory or not. All service organizations that aspire to excellence must constantly assess the quality of their customer experience through their customers’ eyes throughout the process. Although customers will usually offer an unsolicited opinion only if they are very satisfied or dissatisfied, most customers are happy to offer an opinion if they are asked in the right way at the right time.37 Managers striving for excellence need to use the right methods to ask the right customers the right questions at the right time to obtain the information necessary to ensure a service experience that meets and, hopefully, exceeds customer expectations.


Advancing Business and Personal Success

Explore, develop and apply ideas with global hospitality leaders and expert Cornell professors.

Professionals from around the world are invited to attend 3-day, 10-day or online courses at the world’s leading institute for hospitality management education in:

- Strategic Leadership
- Finance
- Foodservice
- Human Resources
- Marketing
- Operations
- Real Estate

Visit our website to apply.

The Executive Path
Hospitality Leadership Through Learning

Complete program information and applications available online: www.hotelschool.cornell.edu/execed

Phone + 1 607 255 4919 Email exec_ed_hotel@cornell.edu
Vol. 10, No. 12 Cases in Innovative Practices in Hospitality and Related Services, Set 4, by Cathy A. Enz, Ph.D., Rohit Verma, Ph.D., Kate Walsh, Ph.D., Sheryl E. Kimes, Ph.D., and Judy A. Siguaw, D.B.A.

Vol. 10, No. 11 Who’s Next? An Analysis of Lodging Industry Acquisitions, by Qingzhong Ma, Ph.D. and Peng Liu, Ph.D.


Vol. 10, No. 9 Building Customer Loyalty: Ten Principles for Designing an Effective Customer Reward Program, by Michael McCall, Ph.D., Clay Voorhees, Ph.D., and Roger Calantone, Ph.D.

Vol. 10, No. 8 Developing Measures for Environmental Sustainability in Hotels: An Exploratory Study, by Jie J. Zhang, Nitin Joglekar, Ph.D., and Rohit Verma, Ph.D.

Vol. 10, No. 7 Successful Tactics for Surviving an Economic Downturn: Results of an International Study, by Sheryl E. Kimes, Ph.D.

Vol. 10, No. 6 Integrating Self-service Kiosks in a Customer-service System, by Tsz-Wai (Iris) Lui, Ph.D., and Gabriele Piccoli, Ph.D.

Vol. 10, No. 5 Strategic Pricing in European Hotels, 2006–2009, by Cathy A. Enz, Ph.D., Linda Canina, Ph.D., and Mark Lomanno

Vol. 10, No. 4 Cases in Innovative Practices in Hospitality and Related Services, Set 2: Brewerks, ComfortDelgro Taxi, DinnerBroker.com, Iggy’s, Jumbo Seafood, OpenTable.com, PriceYourMeal.com, Sakae Sushi, Shangri-La Singapore, and Stevens Pass, by Sheryl E. Kimes, Ph.D., Cathy A. Enz, Ph.D., Judy A. Siguaw, D.B.A., Rohit Verma, Ph.D., and Kate Walsh, Ph.D.

Vol. 10, No. 3 Customer Preferences for Restaurant Brands, Cuisine, and Food Court Configurations in Shopping Centers, by Wayne J. Taylor and Rohit Verma, Ph.D.

Vol. 10, No. 2 How Hotel Guests Perceive the Fairness of Differential Room Pricing, by Wayne J. Taylor and Sheryl E. Kimes, Ph.D.

Vol. 10, No. 1 Compendium 2010

2010 Roundtable Retrospectives


2010 Industry Perspectives

No. 6 The Future of Meetings: The Case for Face-to-Face, by Christine Duffy and Mary Beth McEuen

No. 5 Making Customer Satisfaction Pay: Connecting Survey Data to Financial Outcomes in the Hotel Industry, by Gina Pingitore, Ph.D., Dan Seldin, Ph.D., and Arianne Walker, Ph.D.

No. 4 Hospitality Business Models Confront the Future of Meetings, by Howard Lock and James Macauly

2009 Reports

Vol. 9, No. 18 Hospitality Managers and Communication Technologies: Challenges and Solutions, by Judi Brownell, Ph.D., and Amy Newman


Vol. 9 No 16 The Billboard Effect: Online Travel Agent Impact on Non-OTA Reservation Volume, by Chris K. Anderson, Ph.D.

Vol. 9 No 15 Operational Hedging and Exchange Rate Risk: A Cross-sectional Examination of Canada’s Hotel Industry, by Charles Chang, Ph.D., and Liya Ma

Vol. 9 No 14 Product Tiers and ADR Clusters: Integrating Two Methods for Determining Hotel Competitive Sets, by Jin-Young Kim and Linda Canina, Ph.D.

Vol. 9, No. 13 Safety and Security in U.S. Hotels, by Cathy A. Enz, Ph.D.

Vol. 9, No. 12 Hotel Revenue Management in an Economic Downturn: Results of an International Study, by Sheryl E. Kimes, Ph.D.

Vol. 9, No. 11 Wine-list Characteristics Associated with Greater Wine Sales, by Sybil S. Yang and Michael Lynn, Ph.D.