Health care organizations are under intense pressure to improve the efficiency and effectiveness of care delivery and, increasingly, they are using quality improvement teams to identify and target projects to improve performance outcomes. This raises the question of what factors actually drive the performance of these projects in a health care environment. Using data from a survey of health care professionals acting as informants for 244 patient care, clinical-administrative, and nonclinical administrative quality improvement project types in 93 health care organizations, we focus on 2 factors—goal setting and quality training—as potential drivers of quality improvement project performance. We find that project-level goals and quality training have positive associations with process quality, while organizational-level goals have no impact. In addition, the relationship between project-level goals and process quality is stronger for patient care projects than for administrative projects. This indicates that the motivational and cognitive effects of goal setting are greater for projects that involve interactions with clinicians than for ones that involve interactions with other staff. Although project-level goal setting is beneficial for improving process quality overall, our findings suggest the importance of being especially attentive to goal setting for projects that impact direct patient care.

Research category: Service Design


(JOY FIELD, JANELLE HEINEKE, JAMES LANGABEER, JAMI DELLIFRaine)
Customer experience has become increasingly important for service organizations that see it as a source of sustainable competitive advantage, and for service designers, who consider it fundamental to any service design project.

Integrating contributions from different fields, Customer Experience Modelling (CEM) was conceptually developed to represent the different aspects of customer experience in a holistic diagrammatic representation. CEM was further developed with an application to a multimedia service. To further develop and build CEM's models, 17 customers of a multimedia service provider were interviewed and the data were analyzed using Grounded Theory methodology.

Combining multidisciplinary contributions to represent customer experience elements enables the systematization of its complex information. The application to a multimedia service highlights how CEM can facilitate the work of multidisciplinary design teams by providing more insightful inputs to service design.

CEM supports the holistic nature of customer experience, providing a systematic portrayal of its context and shifting the focus from single experience elements to their orchestration.

Research category: Service Design

Today’s service companies operate in a technology-oriented and knowledge-intensive environment while recruiting and training individuals from an increasingly diverse population. One of the resulting challenges is ensuring strategic alignment between their two key resources – technology and workforce – through the resource planning and allocation processes. The traditional hierarchical decision approach to resource planning and allocation considers only technology planning as a strategic-level decision, with workforce recruiting and training planning as a subsequent tactical-level decision. However, two other decision approaches – joint and integrated - elevate workforce planning to the same strategic level as technology planning. Thus, we investigate the impact of strategically aligning technology and workforce decisions through the comparison of joint and integrated models to each other and to a baseline hierarchical model in terms of total cost. Numerical experiments are conducted to characterize key features of solutions provided by these approaches under conditions typically found in this type of service company. Our results show that the integrated model is lowest cost across all conditions. This is because the integrated approach maintains a small but skilled workforce that can operate new and more advanced technology with higher capacity. However, the cost performance of the joint model is very close to the integrated model under a number of conditions and is easier to implement computationally and managerially, making it a good choice in many environments. Managerial insights derived from this study can serve as a valuable guide for choosing the proper decision approach for technology-oriented and knowledge-intensive service companies.

Research category: Service Design

An information processing view of organizational design strategy is used to develop a conceptual model that addresses six theory-based operational constructs of retail store design strategy. Salient retail store design constructs pertain to 1) managing the customer’s in-store shopping task uncertainty (i.e., factors associated with the difficulty of product use by the end customers, the service production complexity, and the product turnover); 2) design choices for managing customer encounters (i.e., factors associated with design for self-service and employee task empowerment); and 3) customer service encounter information requirements, which is proposed to be the integrating mechanism driving retail store design strategy.

Contributions of this paper are:
- A new organizational framework to understand and manage retail store design strategies.
- A validated measurement instrument to use in evaluating and monitoring strategic store design choices.
- A series of future store design applications for the measures and framework.

Research Category: Service Design

* This article is a working paper which is currently under journal review as of December 31, 2009.

(Jeff Shockley, Aleda V. Roth, Lawrence D. Fredendall)
This paper subjects to rigorous empirical scrutiny the influence of retail store design responsiveness on firm ROA performance. We posit that on average, retail store systems, which are adjusted dynamically to be responsive to changes in product line gross margin, will improve retail firm performance (ROA). We employ an econometric model to tests our theory using company panel data collected from Compustat, 10-K, and S&P industry reports for “bricks and mortar” store retailers for the period 1994 – 2006.

The study findings/contributions include:

- On average, store capital and labor are not managed as efficiently as might be expected.
- Store system capital investment must be responsive to product line gross margin shifts to expand firm profits.
- The financial benefits of being design responsive are only realized in the short-term (within one year); and therefore, dynamic adjustments are needed.

Research Category: **Service Design**

* This is a working paper that will be presented at an invited Retail Operations track at the POMS 21st Annual Conference.

(JEFF SHOCKLEY, LAWRENCE A. PLUMMER, ALEDA V. ROTH, LAWRENCE D. FREDENDALL)
The proliferation of complex service systems raises new challenges for service design and requires new methods. Multilevel Service Design (MSD) is presented as a new interdisciplinary method for designing complex service systems. MSD synthesizes contributions from new service development, interaction design and the emerging field of service design. MSD enables integrated development of service offerings at three hierarchical levels: (1) Designing the firm’s service concept with the customer value constellation of service offerings for the value constellation experience; (2) Designing the firm’s service system, comprising its architecture and navigation, for the service experience; and (3) Designing each service encounter with the service experience blueprint for the service encounter experience. Applications of the MSD method are described for designing a new retail grocery service and redesigning a bank service. MSD contributes an interdisciplinary method to service design that accommodates the cocreative nature of customer experiences and enables experience integration from the design of the service concept through the design of the service system and service encounter.
PHYSICAL DISTRIBUTION SERVICE PERFORMANCE AND INTERNET RETAILER MARGINS: THE DROP-SHIPPING CONTEXT*

Elliot Rabinovich, Arizona State University
Timothy Laseter, University of Virginia
Manus Rungtusanatham, University of Minnesota

We investigate the relationship between Internet retailer margins and retailer promises regarding product distribution service. We focus particularly on a drop-ship context, to provide a purer separation of these activities and the related costs. We examine a sample of retail transactions with customers and find that product margins and the margins on shipping and handling are inversely proportional. We also find a direct relationship between promised product distribution service performance and shipping and handling margins even after key product characteristics known to influence the cost side of the margin equation are controlled for. These results confirm an intuitively logical view of the relationships among pricing and promised product distribution service performance. The study also offers insights for practitioners regarding the opportunity to enhance performance in this domain and demonstrates the benefit and power of employing objective measures drawn from the vast array of information captured via online transactions.

Research Category: Service Design

*Journal of Operations Management 26, No. 6, pp. 767-780

(Elliot Rabinovich, Timothy Laseter, Manus Rungtusanatham)
This article describes one technique—service blueprinting—that has proven useful for service innovation. Service blueprinting is securely grounded in the customer’s experience and it allows the clear visualization dynamic service processes. The technique is described in detail in the paper including real case examples that illustrate the value and breadth of its applications.

The cases illustrate how service blueprinting can be successfully applied for the following purposes:

- Providing a platform for innovation
- Recognizing interdependencies among people and functions in delivering service
- Facilitating both strategic and tactical innovations
- Designing moments of truth
- Visualizing and understanding the customer’s experience
- Transferring and storing innovation knowledge
- Creating ideal experiences

Clarifying competitive positioning
Guidelines for a service blueprinting workshop based on Arizona State University’s Center for Services Leadership programs are provided along with detailed insights for managers and academics.

Research Category: **Service Design**

*This article is based on workshops and case studies with CSL member firms and others. The paper appeared in *California Management Review, Spring 2008, 66-94.*

(MARY JO BITNER, AMY L. OSTROM, FELICIA N. MORGAN)
In this study we determine how work should be allocated between the consultant and the client and the corresponding pricing under different contractual relationships that occur in this industry. We find that, with a pricing schedule that relates the fee adjustment to the self-service level and one party's ownership of the residual right to specify the workload allocation, the client underinvests her efforts in the service coproduction process, whereas the consultant overinvests his efforts, resulting in an inefficient process. In addition, to improve overall process efficiency, we show that the more productive party should own the residual right to respecify the self-service level when the final service need emerges. Our results, as well as interview data from experienced consultants, provide insights into the causes of inefficient service delivery processes and offer direction for achieving better efficiency through contract design and pricing schedules.

Research Category: Service Design

This research builds on servicescape research but focuses on the neglected area of public/collective services. In this multi-sited ethnographic research, we explore the ways in which active consumers develop meanings about the consumption of a public good, public space. We document four main ideologies of public space consumption resulting from dwellers’ and street artists’ conflict as well as common intent. We show how public space can be contested as private and commercialized by companies and artists, left untended as a liminal zone, or offered back as a collective good, where sense of belonging and dialogue restore it to a meaningful place. In so doing, we advance the understanding of agency while exploring the virtually neglected realm of public goods consumption, and space in particular. We show how the common nature of this public service stimulates dialectical and dialogical exchanges across stakeholders, and fuels forms of layered co-creation and agency. The most difficult question with public services is who makes the decisions: consumers, public agencies, private “experts”?

Research Category: Service Design

This paper has been conditionally accepted at the Journal of Consumer Research.

(LUCA VISCONTI, JOHN SHERRY, STEFANIA BORGHINI, LAUREL ANDERSON)
Service companies spend vast amounts of money to remodel their establishments. However, little is known about the longitudinal effects of such store makeovers and the differential impact on customers' psychological responses or actual purchase behavior. In this study a natural experiment in the fast-food industry is used to examine the short- and long-term effects of store remodeling on psychological measures (cognitions, affect, and behavioral intentions) and actual customer behavior (average customer spending and store traffic). In the short term, customers' cognitions and behavioral intentions improve significantly, as does customer spending, but not store traffic. In the long term, the positive short-term effects diminish. Adaptation-level theory suggests that customers' initial experiences may lose strength over time as the remodeled store environment becomes the new frame of reference. The findings imply that relying solely on customers' psychological responses or ignoring the time-variant character of remodeling effects may lead to inappropriate managerial decisions.
UNDERSTANDING THE MECHANISMS BEHIND THE INFLUENCE OF SERVICE GUARANTEES*

Jens Hogreve, University of Paderborn
Dwayne D. Gremler, Bowling Green State University

Although service guarantees have received increasing attention in literature, surprisingly little is known about the extent to which they influence consumer behavior and even less about how they generate such effects. Economic theory suggests guarantees can have as many as four objectives incorporated in their design; they can be a quality signal, insure against losses, reduce search costs, and provide an incentive to coproduce the service adequately. In Study 1 all four warranty objectives are found to be frequently used in practice and Study 2 examines the extent to which these objectives have an impact on consumers. The objectives signal of quality and insurance against losses are found to be the primary service guarantee mechanisms affecting consumer behavior. Moreover, the objectives can be controlled by varying the amount of compensation or the ease of invoking the guarantee. The results provide insights how to design and manage service guarantees effectively.

Research Category: Service Design

* This is currently a working paper.

(JENS HOGREVE, DWAYNE D. GREMLER)