CSL Faculty Network

Research Abstracts

Overview

Through its faculty network of 77 members, the Center for Services Leadership (CSL) is focused on conducting cutting-edge service(s) research that delivers significant value to business and academic communities. This unique approach enables the CSL to address leading-edge service(s) opportunities and business challenges while driving thought leadership in the service(s) field.

Through its research, the CSL and its Faculty Network are known as leaders in knowledge development in the services discipline.

The collection of abstracts is representative of current and recently published research being conducted by the CSL Faculty Network. This is not an exhaustive collection of all the research being done. This list will continue to grow and become more dynamic throughout the year as contributions are added.

This collection of abstracts is organized around themes identified in the 'Moving Forward and Making a Difference: Research Priorities for the Science of Service' (*Journal of Service Research,* Feb 2010, and http://wpcarey.asu.edu/research/services-leadership/research-priorities).

These abstracts are available on the CSL website:
https://wpcarey.asu.edu/research/services-leadership/abstracts

All contributions are authored by the CSL's 77 Faculty network members. To view brief bios and contact information for these faculty members please follow the links provided.

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Knowledge Development
Center for Services Leadership
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Transformative Service and Quality of Life 35

AN INTERDISCIPLINARY PERSPECTIVE ON IT SERVICES MANAGEMENT AND SERVICE SCIENCE

Indranil Bardhan, University of Texas at Dallas
* Haluk Demirkan, Arizona State University
P. K. Kannan, University of Maryland
Robert J. Kauffman, Singapore Management University
Ryan Sougstad, Augustana College

The increasing importance of information technology (IT) services in the global economy prompts researchers in the field of information systems (IS) to give special attention to the foundations of managerial and technical knowledge in this emerging arena of knowledge. Already we have seen the computer science (CS) discipline embrace the challenges of finding new directions in design science toward making services-oriented computing approaches more effective, setting the stage for the development of a new science of service science, management, and engineering (SSME). This article addresses the issues from the point of view of service science as a fundamental area for IS research. We propose a robust framework for evaluating the research on service science, and the likely outcomes and new directions that we expect to see in the coming decade. We emphasize the multiple roles of producers and consumers of services- oriented technology innovations, as well as value-adding seller intermediaries and systems integrators, and standards organizations, user groups and regulators as monitors. The analysis is cast in multidisciplinary terms, including CS and IS, economics and finance, marketing, and operations and supply chain management. Evaluating the accomplishments and opportunities for research related to the SSME perspective through a robust framework enables in-depth assessment in the present, as well as an ongoing evaluation of new knowledge in this area, and the advancement of the related management practice capabilities to improve IT services in organizations.

(INDRANIL BARDHAN, HALUK DEMIRKAN, P. K. KANNAN, ROBERT J. KAUFFMAN, RYAN SOUGSTAD)

MOVING FORWARD AND MAKING A DIFFERENCE: RESEARCH PRIORITIES FOR THE SCIENCE OF SERVICE*

Amy L. Ostrom, Arizona State University
Mary Jo Bitner, Arizona State University
Stephen W. Brown, Arizona State University
Kevin A. Burkhard, Arizona State University
Michael Goul, Arizona State University
Vicki Smith-Daniels, Arizona State University
Haluk Demirkan, Arizona State University
Elliot Rabinovich, Arizona State University

Given the significant, sustained growth in services experienced worldwide, Arizona State University's Center for Services Leadership embarked on an 18-month effort to identify and articulate a set of global, interdisciplinary research priorities focused on the science of service. Diverse participation from academics in a variety of disciplines working in institutions around the world—in collaboration with business executives who lead organizations ranging from small startups to Global 1000 companies—formed the basis for development of the priorities. The process led to the identification of 10 overarching research priorities. In addition, for each priority, several important and more specific topic areas for service research emerged from the process. The intent is that the priorities will spur service research by shedding light on the areas of greatest value and potential return to academia, business, and government. Through academic, business, and government collaboration, we can enhance our understanding of service and create new knowledge to help tackle the most important opportunities and challenges we face today.

Research Category: **Service Thought Pieces**

(AMY L. OSTROM, MARY JO BITNER, STEPHEN W. BROWN, KEVIN A. BURKHARD, MICHAEL GOUL, VICKI SMITH-DANIELS, HALUK DEMIRKAN, ELLIOT RABINOVICH)

PARADIGMS IN SERVICE RESERACH

Bård Tronvoll, University of Karlstad
Stephen W. Brown, Arizona State University
Dwayne D. Gremler, Bowling Green State University
Bo Edvardsson, University of Karlstad

Service research has successfully evolved over several decades and is becoming a research discipline of its own. Throughout its development, this research has mainly focused on practical issues related to managerial relevance. There has been little, if any, ontological and epistemological discussions, nor much commentary about the paradigmatic assumptions of the research field. Major dialog about a service dominate logic (SDL) and the movement to create a multidisciplinary service science also suggest some of the limitations of service research to date. Recognizing these shortcomings, this paper assesses to core characteristics of major services articles, examines different epistemological foundations and then proposes a framework to describe and better understand the development and future of service research. The framework offers a guide to paradigmatic and methodological analysis of service research and contributes to discussion about the future of this emerging discipline.

Research category: **Service Thought Pieces**

(BÅRD TRONVOLL, STEPHEN W. BROWN, DWAYNE GREMLER, BO EDVARDSSON)

SERVICE-ORIENTED TECHNOLOGY AND MANAGEMENT: PERSPECTIVES ON RESEARCH AND PRACTICE FOR THE COMING DECADE

* Haluk Demirkan, Arizona State University
Robert J. Kauffman, Singapore Management University
Jamshid A. Vayghan, IBM
Hans-Georg Fill, University of Vienna
Dimitris Karagiannis, University of Vienna
Paul P. Maglio, IBM

Service-oriented technologies and management have gained attention in the past few years, promising a way to create the basis for agility so that companies can deliver new, more flexible business processes that harness the value of the services approach from a customer's perspective. Service-oriented approaches are used for developing software applications and software-as-a-service that can be sourced as virtual hardware resources, including on-demand and utility computing. The driving forces come from the software engineering community and the e-business community. Service-oriented architecture promotes the loose coupling of software components so that interoperability across programming languages and platforms, and dynamic choreography of business processes can be achieved. Nevertheless, one of today's most pervasive and perplexing challenges for senior managers deals with how and when to make a commitment to the new practices. The purpose of this article is to shed light on multiple issues associated with service-oriented technologies and management by examining several interrelated questions: Why is it appropriate now to study the related business problems from the point of view of services research? What new conceptual frameworks and theoretical perspectives are appropriate for studying service-oriented technologies and management? What value will a service science and business process modeling offer to the firms that adopt them? And, how can these approaches be implemented so as to address the major challenges that organizations face with technology, information and strategy? We contribute new knowledge in this area by tying the economics and information technology strategy perspectives to the semantic and design science perspectives for a broader audience. Usually the more technical perspective is offered on a standalone basis, and confined to the systems space – even when the discussion is about business processes. This article also offers insights on these issues from the multiple perspectives of industry and academic thought leaders.

Research Category: **Service Thought Pieces**

* Corresponding Author

(HALUK DEMIRKAN, ROBERT J. KAUFFMAN, JAMSHID A. VAYGHAN, HANS-GEORG FILL, DIMITRIS KARAGIANNIS, PAUL P. MAGLIO)

SYSTEMS THINKING: A SERVICE SCIENCE PERSPECTIVE

Haluk Demirkan, University of Washington Tacoma
Jim Spohrer, IBM Almaden Research Center

Systems thinking is an approach to understanding and modelling complex systems. Service science is the emerging study of service systems, which are an important type of complex systems with capabilities, constraints, rights, and responsibilities. Holistic service systems, such as households, universities, and cities are evolving rapidly within a nested-networked ecology. The challenge of defining progress in relation to improved quality of life is an especially thorny challenge in the context of holistic service systems. While service science is still relatively new, advances in service science can shed light on the future evolution of service thinking.

Research Category: **Service Thought Pieces**

(HALUK DEMIRKAN, JIM SPOHRER)

THE SERVICE IMPERATIVE*

Mary Jo Bitner, Arizona State University
Stephen W. Brown, Arizona State University

This paper captures our thinking regarding what we call the "service imperative" or the compelling global need to focus energy around service research and service innovation.

The service imperative has resulted from the relentless growth of services in economies around the world, combined with a relative lack of investment in service innovation and research by companies, governments and academic institutions. We discuss the resulting need to build a stronger and deeper science of service on a foundation of research and innovation. We also present existing best practices of innovative organizations that focus on their customers and compete effectively through service. We conclude with practical guidance for companies, universities, and governments in support of the service imperative. It is our belief that widespread embracing of the service imperative can lead to improved prosperity for nations, new ways to compete for companies, and improved well being for individuals worldwide.

Research category: **Service Thought Pieces**

(MARY JO BITNER, STEPHEN W. BROWN)

UNDERSTANDING SERVICE SYSTEMS AND OPERATIONS: A CLOSER LOOK AT THE MINORITY REPORTS

James C. Spohrer, IBM
* Haluk Demirkan, Arizona State University

While there is a rapid growth in the number of researchers and practitioners joining the service science community to better understand services, service operations and service innovation, this community has not yet reached consensus on precise answers to two fundamental questions: "What is service?" and "Where is the science (in service science)?" After performing an extensive review, this paper examines possible answers to these two fundamental questions from the traditional economist perspective (intangible product, service sector, prices and productivity), a splinter marketing perspective (service-dominant-logic and value-cocreation) and a splinter systems perspective, closer to ecology (diversity, sustainability and quality of life). Then, it proposes the Abstract-Entity-Interaction-Outcome-Universals (AEIOU) theory to discuss the science of service systems as a new way to describe the understanding and innovation of service-producing entities instead of following traditional "bricks-and-mortar product development processes and platforms," and seeks a formal and universal framework in which to understand entity, interaction, and outcome patterns of service systems. The AEIOU theory defines service separation as customers' absence from service production, which denotes the spatial separation between service production and consumption. Service separation increases customers' perceptions of not only access and benefit conveniences but also performance and psychological risks. Specifically, relative to experience services, for credence services, the effects of separation on service convenience are mitigated, and the effects on perceived risk are magnified.

(JAMES C. SPOHRER, HALUK DEMIRKAN)

UNDERSTANDING VALUE CO-CREATIONS AND SERVICE INNOVATIONS IN TIME & SPACE COMPLEXITY: THE ABSTRACT-ENTITY-INTERACTION-OUTCOME-UNIVERSALS (AEIOU) THEORY

Haluk Demirkan, University of Washington Tacoma
Jim Spohrer, IBM Almaden Research Center

While there is a rapid growth in the number of researchers and practitioners joining the service science community to better understand services this community has not yet reached consensus on precise answers to two fundamental questions: "What is service?" and "Where is the science (in service science)?" After performing an extensive multidisciplinary review, this paper explores possible answers to these two fundamental questions from the traditional economist perspective (intangible product, service sector, prices and productivity), a splinter marketing perspective (service-dominant-logic and value co-creation) and a splinter systems perspective, closer to ecology (diversity, sustainability and quality of life). Then, it proposes a systematic framework for conceptualizing the evolution of value co-creation interactions between complex adaptive entities – service systems - within an ecology of nested, networked entities as a new way to describe the innovation processes of service-producing entities instead of following traditional "bricks-and-mortar product development processes and platforms," and seeks a formal and universal theory – The Abstract-Entity-Interaction-Outcome-Universals (AEIOU) - in which to understand entity, interaction, and outcome patterns of service systems. AEIOU theory defines service separation as customers' absence from service production, which denotes the spatial separations between service production, distribution, consumption and recycling in time and space complexity. Service separation increases customers' perceptions of not only access and benefit conveniences but also performance and psychological risks. Specifically, relative to experience services, for credence services, the effects of separation on service convenience are mitigated, and the effects on perceived risk are magnified.

Research Category: **Service Thought Pieces**

Spohrer, J. C. and Demirkan, H., "Understanding Service Systems & Innovations in Time-Space Complexity: The Abstract-Entity-Interaction-Outcome-Universals Theory," in-progress.

(HALUK DEMIRKAN, JIM SPOHRER)

PROFITING FROM SERVICES AND SOLUTIONS: WHAT PRODUCT CENTRIC FIRMS NEED TO KNOW (NEW)

Valarie A. Zeithaml, University of North Carolina
Stephen W. Brown, Arizona State University and the Insight Group
Mary Jo Bitner, Arizona State University
Jim Salas, Pepperdine University

Leaders of product-oriented companies – manufacturers, industrial suppliers, technology firms and other vendors of business goods – are coming to understand and realize the benefits of offering services and solutions to their customers. They see services and solutions as a means to financial growth, reduced revenue variability, greater differentiation from the competition, increased share of customer budget, improved customer satisfaction, loyalty and even lock-in. Yet, few executives grasp the extent to which they must change their organizations in order to dramatically grow services and solutions.

How can companies successfully transform their product-centric business models into model services and solutions businesses? How can they steadily shift their revenues from goods sold to services rendered? How can they drive this transition and overcome the challenges they will face? This book addresses those questions and more.

The authors use their novel services infusion continuum to distinguish types of services and solutions and to explain how companies can infuse ever more complex and valuable benefits into their offerings for customers. The book synthesizes the findings of academic research and business publications, draws upon the authors' years of consulting work and features the practical experience of managers in the midst of transforming   product-centric companies into services and solutions businesses.

Research category: **Service Infusion and Growth**

(VALARIE A. ZEITHAML, STEPHEN W. BROWN, MARY JO BITNER, JIM SALAS)

ADOPTING A SERVICE LOGIC IN MANUFACTURING: CONCEPTUAL FOUNDATION AND METRICS FOR MUTUAL VALUE CREATION *

Christian Grönroos, Hanken School of Economics Finland
Pekka Helle, Hanken School of Economics Finland

This article offers an answer to the call for understanding how product manufacturers can move onto a new level of competitive advantage by adopting a service perspective (logic), and for the development of metrics that enhances marketing accountability. The article takes the stance that developing industrial services into a separate business is not enough, but in order to take a *quantum leap* the whole business should be transformed into a service business. In order to make such a transformation process possible and the outcome of it measurable, the article develops a number of constructs:

> Practice matching (enabling the creation of a foundation of service-based business engagement)
> Mutual value creation and value sharing (enabling the understanding of how mutual gains in the engagement can be created and shared between the parties)
> Joint productivity and joint productivity gain (enabling measurement of incremental value reciprocally created between the parties)

Metrics are developed and tested in a longitudinal empirical study.

Research category: **Service Infusion and Growth**

(CHRISTIAN GRÖNROOS, PEKKA HELLE)

ANY WAY GOES: IDENTIFYING VALUE CONSTELLATIONS FOR SERVICE INFUSION IN SMES

Christian Kowalkowski, Hanken School Of Economics
Lars Witell, Linköping University
Anders Gustafsson, Karlstad University

In competitive markets, firms seek new ways to differentiate their business, including an increased focus on service, often referred to as service infusion. Of the studies that seek to understand this phenomenon, most focus on large multinational firms; little is known about service infusion in small and mediumsized enterprises (SMEs). This study adopts an explorative approach to investigate how SMEs construct new value constellations that enable value creation through services. The findings, based on in-depth interviews with key informants from 13 SMEs, suggest that there is no predefined transition process for service infusion in SMEs.

- SMEs seldom have the internal resources to build new organizational units or create new specialties.
- We identify nine generic value constellations that can be used to operationalize different service strategies.
- Many SMEs provide services through multiple value constellations that coexist in the same business network.

Research category: **Service Infusion and Growth**

(CHRISTIAN KOWALKOWSKI, LARS WITELL, ANDERS GUSTAFSSON)

COMPARING THE RELATIVE EFFECTIVENESS OF ADVERTISING CHANNELS: A CASE STUDY OF A MULTIMEDIA BLITZ CAMPAIGN

Tracey Dagger, Monash University
Peter Danaher, Melbourne Business School

In this study we develop an inexpensive method that helps firms to assess the relative effectiveness of multiple advertising media. Specifically, we use a firm's loyalty program database to capture media exposure, via an online media survey, for all the media in which they advertise. In turn, the exposure data are matched with the purchase history for these same individuals, thereby creating single-source data. We illustrate our method for a large retailer that undertook a short-term promotional sale by advertising in television, radio, newspaper, magazines, online display ads, sponsored search, social media, catalogs, direct mail and email. In this case, 7 of the 10 media significantly influence purchase outcomes. Finally, we demonstrate how to use our advertising response model to determine the optimal budget allocation across each advertising media channel.

Research category: **Service Infusion and Growth, Service Branding and Selling**

(PETER DANAHER, TRACEY DAGGER)

MATCH OR MISMATCH: STRATEGY-STRUCTURE CONFIGURATIONS IN THE SERVICE BUSINESS OF MANUFACTURING COMPANIES

Heiko Gebauer, University of St Gallen
Bo Edvardsson. Karlstad University
Anders Gustafsson, Karlstad University
Lars Witell, Karlstad University

A new trend seems to be emerging for multinational manufacturing companies to make a strategic reorientation into becoming service providers. For some companies such as Kone and IBM, the revenues from services are 50% or more of their total sales. Despite the increasing interest in exploring various aspects of the service part of the business in manufacturing companies, existing research has not focused on the interdependencies between different service strategies and organizational designs. This paper studies different service strategies in manufacturing companies and highlights the organizational design necessary for implementing each service strategy. The service strategies explored are after-sales service providers, customer support service providers, outsourcing partners and development partners. Each service strategy is supported by organizational design factors related to the service orientation of corporate culture, the service orientation of human resource management and the service orientation of organizational structures. This research concludes that a specific strategy-structure configuration is needed in order to succeed with a chosen service strategy.

Research category: **Service Infusion and Growth**

Forthcoming in *Journal of Service Research*

(HEIKO GEBAUER, BO EDVARDSSON, ANDERS GUSTAFSSON, LARS WITELL)

RETURN ON RELATIONSHIPS: CONCEPTUAL UNDERSTANDING AND MEASUREMENT OF MUTUAL GAINS FROM RELATIONAL BUSINESS ENGAGEMENTS

Christian Grönroos, Hanken School of Economics Finland
Pekka Helle, Hanken School of Economics Finland

Relationship is based on the idea of creating a win-win situation for parties involved in a business relationship. The purpose of this project is to develop a model of mutual value creation and reciprocal return on relationships assessment which enables calculation of joint and separate gains from a relational business engagement. The empirical part is based on a longitudinal empirical study including several empirical cases.

Following a practice matching process, resulting in mutual innovation and aligning of their processes, resources and competencies, the parties in a business engagement make investments in the relationship. This enables the creation of joint productivity gains. Valuation of joint productivity gains produces an incremental value, which can be shared between the parties through a price mechanism.

Based on this shared value and costs of investments in the relationship, a reciprocal return on the relationship can be assessed and split between the business parties. Thus, the financial outcome of the development of customer relationships as well as an assessment of the return on relationships with customers/suppliers can be established. This forms a basis of further development of marketing metrics and financial contribution of marketing, and of developing financial measures of intangible assets called for by the finance and investor communities.

Research category: **Service Infusion and Growth**

(CHRISTIAN GRÖNROOS, PEKKA HELLE)

SALES ORGANIZATION RECOVERY MANAGEMENT AND RELATIONSHIP SELLING: A CONCEPTUAL MODEL AND EMPIRICAL TEST

Gabriel R. Gonzalez, Thunderbrid School of Global Management
K. Douglas Hoffman, Colorado State University
Thomas N. Ingram, Colorado State University
Raymond W. LaForge, University of Louisville

This paper presents and tests a model of recovery management practices in business-to-business (B2B) sales organizations. The linkages between organic and mechanistic approaches are integrated to provide a more comprehensive conceptualization of sales organization recovery management relationships than currently exists in the literature. Responses from 177 B2B sales managers indicate that maintaining a positive service recovery culture, analyzing service failures, implementing recovery strategies, and monitoring, evaluating, and seeking feedback about recovery efforts are linked with important customer and financial outcomes. Results indicate the importance of proactive integration of service recovery concepts and behaviors into relationship selling efforts.

Research category: **Service Infusion and Growth, Service Culture, Service Design**

(GABRIEL GONZALEZ, K. DOUGLAS HOFFMAN, THOMAS INGRAM, RAYMOND LAFORGE)

SERVICE DIFFERENTIATION AS A MODERATOR IN RELATIONSHIPS AMONG MARKET TURBULENCE, CUSTOMER CENTRICITY, INNOVATIVENESS AND BUSINESS PERFORMANCE*

Heiko Gebauer, University of St Gallen
Anders Gustafsson, Karlstad University
Lars Witell, Karlstad University

This paper examines the relationship among the complexity of customer needs, customer centricity, innovativeness, service differentiation, and business performance within the context of companies' transitions from being product providers to being service providers. The basis for the empirical investigation is a survey of 332 manufacturing companies. One key finding of the study is that a strong emphasis on service differentiation can lead to a manufacturing firm's strategies for customer centricity being less sensitive to increasingly complex customer needs, and can increase a firm's payoff for customer centricity. In contrast, the payoff from innovativeness appears to be higher if the firm focuses its resources on either product or service innovations, that is, a dual focus does not work well. This finding illustrates the interrelation among customer centricity, innovativeness and service differentiation as a company transitions from being a product provider to a service provider, and therefore has important implications for both managers and researchers.

Research category: **Service Infusion and Growth**

(HEIKO GEBAUER, ANDERS GUSTAFSSON, LARS WITELL)

SERVICE-DRIVEN MANUFACTURING: PROVISION, EVOLUTION AND FINANCIAL IMPACT OF SERVICES IN INDUSTRIAL FIRMS

Heiko Gebauer, Eawag: Swiss Federal Institute of Aquatic Science and Technology
Guang-Jie Ren, IBM Almaden Research Center
Aku Valtakoski, BIT Research Center, Alto University School of Science
Javier Reynoso, EGADE Business School

Competing through service is no longer limited to service companies. Manufacturing companies are also beginning to realize the strategic importance of service in gaining a competitive advantage. The paper contains guidelines for manufacturing managers interested in the evolution from products to services in different industries. It can also be used as a relevant source of ideas and guidance for all those interested in doing research in services strategies in manufacturing.

Research category: **Service Infusion and Growth**

(Heiko Gebauer, Guang-Jie Ren, Aku Valtakoski, Javier Reynoso)

SYNERGISTIC EFFECTS OF RELATIONSHIP MANAGERS' SOCIAL NETWORKS ON SALES PERFORMANCE

Gabriel R. Gonzalez, Thunderbrid School of Global Management
Danny Pimentel Claro, Insper Education and Research Institute
Robert W. Palmatier, University of Washington

This article integrates relationship marketing and social network perspectives to develop and test a model that links the informational and cooperative benefits stemming from relationship managers' social capital structure (brokerage and density) and relations (formal and informal networks) with objective sales performance. The authors demonstrate the effect of cross-network and overlap-network synergies on performance. Data about both formal and informal networks of 464 employees, including 101 relationship managers, demonstrate that relationship managers' performance improves with cross-network synergy when informational benefits from wide-reaching, non-overlapping ties in the informal network combine with the cooperative benefits of a densely interconnected formal network. In addition, the effects of formal and informal social capital structure on performance increase significantly when relationship managers have a high degree of network overlap between their formal and informal networks.

Research category: **Service Infusion and Growth, Service Branding and Selling**

(GABRIEL GONZALEZ, DANNY PIMENTEL CLARO, ROBERT PALMATIER)

THE SALES RECOVERY AUDIT: LEARNING TO WALK THE TALK

Gabriel R. Gonzalez, Thunderbrid School of Global Management
K. Douglas Hoffman, Colorado State University
Thomas N. Ingram, Colorado State University

Little research attention has been devoted to the impact of salesperson failure and recovery management on customer relationship development. This paper develops a theoretically anchored and externally validated sales recovery audit for the purpose of assessing sales organization performance in these matters. Results based on a survey of 177 sales managers indicate that practice of sales recovery efforts lag behind their perceived importance as they relate to organizational success. The sales recovery audit presented here can be a useful tool to continuously evaluate and enhance sales recovery efforts for the purpose of building a stronger relationship selling organization.

Research category: **Service Infusion and Growth, Service Culture, Service Design**

(GABRIEL GONZALEZ, DOUGLAS HOFFMAN, THOMAS INGRAM)

THE TRUSTED ADVISOR IN INTER-FIRM INTERPERSONAL RELATIONSHIPS

Wayne Neu, California State University San Marcos
Gabriel R. Gonzalez, Thunderbrid School of Global Management
Michael W. Pass, Sam Houston State University

This study investigates the trusted advisor in the context of relationships that form between salespeople and inter-firm relationship partners. Fieldwork indicates that salespeople who evolve their role to that of a trusted advisor provide inter-firm relationship partners with information that is characterized on seven dimensions, and they form and activate a decision support network that is described on four dimensions. Findings also highlight the reciprocal process-related way that a trusted advisor–partner relationship forms, how a trusted advisor contributes to the process of value creation for the firm and the customer, and the conditions in which the service activities of a trusted advisor are needed.

Research category: **Service Infusion and Growth, Service Design**

Neu, Wayne, Gabriel R. Gonzalez, and Michael Pass (2011), "The Trusted Advisor in Interfirm Interpersonal Relationships," *Journal of Relationship Marketing*, 10 (4), 238-263.

(WAYNE NEU, GABRIEL GONZALEZ, MICHAEL PASS)

THE SERVICE INFUSION CONTINUUM: GROWING SERVICES IN PRODUCT-DOMINANT COMPANIES

Valarie A. Zeithaml, University of North Carolina
Stephen W. Brown, Arizona State University
Mary Jo Bitner, Arizona State University

Our research examines the question: What do executives of product-dominant companies need to do strategically inside their organizations to successfully grow services? Through a review of existing literature, combined with interviews with executives from five leading product-dominant companies, we develop what we call The Service Infusion Continuum that provides a strategic framework to guide executives in making the transformational changes needed to grow services. The continuum arrays services ranging from traditional entitlement services, or services supporting products, to the higher value, complex services and solutions supporting customers. As firms strive to successfully move across the continuum, we identify and examine six factors that they must change. We refer to these factors as the 6C's – customization, capabilities, company structure, culture, collaboration with customers and challenges. We provide managerial insights for managers who seek to infuse services into their strategies and identify research and practice gaps that remain to be addressed.

Research Category: **Service Infusion and Growth**

(Valarie A. Zeithaml, Stephen W. Brown, Mary Jo Bitner)

TRANSFORMING PRODUCT FIRMS INTO SUCCESSFUL SERVICE PROVIDERS

Stephen W. Brown, Arizona State University
Anders Gustafsson, Karlstad University
Lars Witell, Karlstad University

Many product dominant firms have started to emphasize the service side of their business in order to establish a relationship with their customers throughout the entire life-cycle of their installed product base. There are several reasons for doing this, from increased profits and an improved competitive position to making a radical change in the way they do business. A change from being a manufacturer or product company to being a service provider can be described as an evolutionary transition from pure goods into a more service-oriented mixture of market offerings. Despite the attractiveness and the pitfalls of moving into services, relatively little guidance is available to help firms make such a transition. This work addresses that gap by examining the factors that differentiate traditional manufacturers and product firms from those that are successfully transitioning into services. This research is based on over 20 case studies, a large survey of European-based companies and the authors' personal experiences.

Research category: **Service Infusion and Growth**

(STEPHEN W. BROWN, ANDERS GUSTAFSSON, LARS WITELL)

CUSTOMER EFFORT IN VALUE COCREATION ACTIVITIES: IMPROVING QUALITY OF LIFE AND BEHAVIORAL INTENTIONS OF HEALTH CARE CUSTOMERS (NEW)

Tracey Danaher, University of Queensland
Janet McColl-Kennedy, University of Queensland
Jill C. Sweeney, University of Western Australia

Transformative service research is particularly relevant in health care where the firm and customer can contribute to individual as well as societal well-being. This article explores customer value co-creation in health care, identifying a hierarchy of activities representing varying levels of customer effort from complying with basic requirements (less effort, easier tasks) to extensive decision making (more effort, more difficult tasks). We define customer Effort in Value Cocreation Activities (EVCA) as the degree of effort that customers exert to integrate resources, through a range of activities of varying levels of perceived difficulty. Our findings underscore the importance of viewing health care service as taking place within the customer's service network which extends well beyond the customer-firm dyad to include other market-facing as well as public and private resources. Moreover, we demonstrate the transformative potential of customer EVCA linking customer EVCA to quality of life, satisfaction with service and behavioral intentions. We do so across three prevalent chronic diseases - cancer, heart disease and diabetes. Our findings highlight how an integrated care model has benefits for both customers and providers and can enhance customer EVCA.

Research Category: **Transformative Service and Quality of Life**

Forthcoming in *Journal of Service Research*

(TRACEY DANAHER, JANET MCCOLL-KENNEDY, JILL C. SWEENEY)

LEARNING FROM SOCIALLY DRIVEN SERVICE INNOVATION IN EMERGING ECONOMIES (NEW)

Javier Reynoso, EGADE Business School – Monterrey Institute of Technology
Jay Kandampully, Ohio State University
Xiucheng Fan, Fudan University
Hanna Paulose, Ohio State University

The article provides insights into indigenous, solution-based business models and their relevance for inclusive service innovation within specific social contexts in emerging economies. It emphasizes the importance of a solution orientation as a competitive business model to gain customer engagement. It can be used by researchers and practitioners in both emerging and advanced economies in their efforts to build sustainable business cultures and to improve the well-being of society. It proposes an innovative switch from a traditional strategy of selling services toward a proactive approach that involves low-income customers as active resources to co-create social and business value.

Research Category: **Transformative Service and Quality of Life**

Forthcoming in *Journal of Service Management*

(JAVIER REYNOSO, JAY KANDAMPULLY, XIUCHENG FAN, HANNA PAULOSE)

TRANSFORMATIVE SERVICE RESEARCH: AN AGENDA FOR THE FUTURE (NEW)

Laurel Anderson, Arizona State University
Amy L. Ostrom, Arizona State University
Canan Corus, Pace University
Raymond P. Fisk, Texas State University
Andrew S. Gallan, DePaul University
Mario Giraldo Oliveros, University of Surrey
Martin Mende, Florida State University
Mark Mulder, Pacific Lutheran University
Steven W. Rayburn, Texas State University
Mark S. Rosenbaum, Northern Illinois University
Kunio Shirahada, Japan Advanced Institute of Science and Technology
Jerome D. Williams, Rutgers, The State University of New Jersey

This article conceptualizes and presents a research agenda for the emerging area of transformative service research, which lies at the intersection of service research and transformative consumer research and focuses on well-being outcomes related to service and services. A conceptual framework provides a big-picture view of how the interaction between service entities (e.g., individual service employees, service processes or offerings, organizations) and consumer entities (e.g., individuals, collectives such as families or communities, the ecosystem) influences the well-being outcomes of both. Research questions derived from the framework in the context of financial services, health care, and social services help catalyze new research in the transformative service research domain.

Research Category: **Transformative Service and Quality of Life**

(LAUREL ANDERSON, AMY L. OSTROM, CANAN CORUS, RAYMOND P. FISK, ANDREW S. GALLAN, MARIO GIRALDO OLIVEROS, MARTIN MENDE, MARK MULDER, STEVEN W. RAYBURN, MARK S. ROSENBAUM, KUNIO SHIRAHADA, AND JEROME D. WILLIAMS)

A CONCEPTUAL FRAMEWORK OF THE DOMAIN OF EVIDENCE-BASED DESIGN*

Roger S. Ulrich, Texas A&M University
Leonard L. Berry, Texas A&M University
Xiaobo Quan, Center for Health Design
Janet Turner Parish, Texas A&M University

The physical facilities in which healthcare services are performed play an important role in the healing process. Evidence-based design in healthcare is a developing field of study and holds great promise for benefiting key stakeholders: patients, families, physicians, nurses, other staff, and healthcare organizations. In this paper, we present and discuss a conceptual framework intended to capture the current domain of evidence-based design in healthcare. In our framework, the built environment is represented by nine design variable categories: audio environment, visual environment, safety enhancement, wayfinding system, sustainability, patient room, family support spaces, staff support spaces, and physician support spaces. Further, we present a series of matrices that indicate knowledge gaps concerning the relationship between specific healthcare facility design variable categories and participant and organizational outcomes. From this analysis, we identify fertile research opportunities from the perspectives of key stakeholders.

Research Category: **Transformative Service and Quality of Life**

(ROGER S. ULRICH, LEONARD L. BERRY, XIAOBO QUAN, JANET TURNER PARISH)

A HIERARCHICAL MODEL OF HEALTH SERVICE QUALITY: SCALE DEVELOPMENT AND INVESTIGATION OF AN INTEGRATED MODEL

Tracey Dagger, University of Queensland
Jill C. Sweeney, University of Western Australia
Lester Johnson, Melbourne Business School

This research develops and tests a multidimensional hierarchical scale for measuring health service quality; further, the ability of the scale to predict satisfaction and intentions was examined. Data were collected from three field studies in two different health care contexts, oncology clinics (n=1118) and a general medical practice (n=215). Service quality was found to comprise four primary dimensions and multiple sub-dimensions:

Interpersonal quality comprised interaction and relationship Technical quality comprised outcome and expertise, Environment quality comprised atmosphere and tangibles; and Administrative quality comprised timeliness, operation and support.

The research provides managers with an understanding of the dimensions on which quality is assessed. Mangers can use this knowledge to monitor, improve and benchmark service quality perceptions. As service quality has an impact on satisfaction and behavioral intentions this is critical to all service providers.

Research Category: **Transformative Service and Quality of Life**

(Tracey Dagger, Jill C. Sweeney, Lester Johnson)

A SOCIO-COGNITIVE APPROACH TO CUSTOMER ADHERENCE IN HEALTH CARE

Lan Snell, Charles Sturt University
Lesley White, Charles Sturt University
Tracey Dagger, Monash University

Purpose: Adherence is a critical factor for success for both the health of the customer and the financial outcomes of the firm. Central to the success of adherence behavior is the co-productive role of the customer which is determined by service perceptions as well as individual attributes. Based on social cognition theory, this paper examines the factors that influence past adherence behavior and whether past adherence behavior predicts future intentions.

Design/methodology/approach: We tested our model using structured equation modeling on a sample of 771 weight loss customers.
Findings: The authors show how service quality influences role clarity which leads to increases in self-efficacy. The study also demonstrates the role of emotional intelligence (EI) in increasing efficacious beliefs. Past adherence behavior was found to predict future intentions.

Research limitations/implications: This study was undertaken with a single service industry and based on data which was collected at a single point in time.

Practical Implications: Our findings suggest that interventions to promote health outcomes should target customer skills in service consumption. By providing quality interactions, providers can increase customer role clarity which produces efficacious beliefs. Interventions should also address EI training in customers given its role in influencing self-efficacy.

Originality/value: The simultaneous examination of traditional service factors and socio-cognitive factors contributes to theory by considering the individual health and organizational outcomes of these factors. The finding of a direct path between past adherence behavior and future intentions provides a unique insight into the prediction and control of behavior in a number of domains.

Relevant Category: **Transformative Service and Quality of Life, Service Experience and Co-creation**

(LAN SNELL, LESLEY WHITE, TRACEY DAGGER)

COMMUNITY ACTION RESEARCH*

Julie Ozanne, Virginia Tech
Laurel Anderson, Arizona State University

This article describes a research and action method that has proven useful for both service innovation and design and for transformative services impact. Community action research is an alternative research method that uses the community as the unit of analysis. This approach seeks to forge alliances with relevant stakeholders in the community to explore and develop solutions to local problems. Co-creation occurs at all points in the process. The broad research approach is explained and the principles that guide this methodology are explored. In particular, the focus of this paper is on the complexities and dilemmas of doing community action research and findings from a field study focused on health and health services that are used to illustrate these issues. The field research occurred in a community with a high rate of diabetes. The ultimate goal of this research method is to develop sustainable community-based solutions and services to pressing consumer health and social problems.

Research Category: **Transformative Service and Quality of Life**

(Julie Ozanne, Laurel Anderson)

FABLE HOSPITAL 2.0: THE BUSINESS CASE FOR BUILDING BETTER HEALTH CARE FACILITIES*

Blair L. Sadler
Leonard L. Berry
Robin Guenther
D. Kirk Hamilton
Frederick A. Hessler
Clayton Merritt
Derek Parker

Despite deep and vocal disagreements over health care reform, virtually everyone believes that the current system is not economically sustainable. We are spending too much and getting too little in return. This recognition has spurred health care leaders to examine every aspect of hospital operations. But what about the health care building itself, the physical environment within which patient care occurs? Too often, cost-cutting discussions have overlooked the hospital structure. Changes in the physical facility provide real opportunities for improving patient and worker safety and quality while reducing operating costs.

Research Category: **Transformative Service and Quality of Life**

(BLAIR L. SADLER, LEONARD L. BERRY, ROBIN GUENTHER, D. KIRK HAMILTON, FREDERICK A. HESSLER, CLAYTON MERRITT, DEREK PARKER)

INNOVATIVE HEALTHCARE DELIVERY

Ann M. Mirabito, Baylor University
Leonard L. Berry, Texas A&M University

Critics of the American healthcare system recite a long list of problems: rising out-of-pocket costs, inconvenient access, overuse of emergency departments, uncoordinated medical records, and declining numbers of primary care doctors. To address these issues, some new venues have evolved, such as retail and urgent care clinics, but the emergency department has become the only service provider available to all patients on a 24/7 basis. It is time to reinvent the system. The concept of patient-centered medical homes offers a structure for integrating innovations that can transform the delivery of healthcare. In this model, each patient develops an ongoing relationship with a primary care physician supported by a team of caregivers. An integral feature is the electronic medical record, which facilitates coordinated communication and decisions. Access expands beyond the traditional physician office visit to satellite services tailored to individual needs. Services center on whole-person care, including wellness and preventive counseling as well as acute and chronic care. Adoption of the patient-centered medical home transforms healthcare delivery into a system that benefits everyone.

Research Category: **Transformative Service and Quality of Life**

(Leonard L. Berry, Ann M. Mirabito)

LESSONS PATIENT-CENTERED MEDICAL HOMES CAN LEARN FROM HEALTH MAINTENANCE ORGANIZATIONS' MISTAKES

Ann M. Mirabito, Baylor University
Leonard L. Berry, Texas A&M University

Patient-centered medical homes (PCMHs) have been endorsed by primary and specialty care medical associations, payers and patient groups as an innovative structure for transforming healthcare delivery. The cornerstone principle of the PCMH is the primary care physician's coordination of a patient's use of healthcare services, including visits to specialists, to improve effectiveness and efficiency. This principle aligns with the vision behind the creation of health maintenance organizations (HMOs), managed care organizations that were once embraced by physicians, patients and policy analysts but have since lost much of their luster. Many patients and physicians rejected HMOs as too restrictive, objecting particularly to the concept of gatekeeping. This paper reviews the HMO experience and identifies lessons applicable to PCMHs that build on HMO strengths and avoid HMO mistakes.

Research Category: **Transformative Service and Quality of Life**

(Leonard L. Berry, Ann M. Mirabito)

PEOPLE AS VIRTUAL PRODUCTS: ANALYZING HUMAN EXCHANGES ON CRAIGSLIST AND GUMTREE.COM

Mark S. Rosenbaum, Northern Illinois University*
Kate L. Daunt (Reynolds), Cardiff Business School

This article examines marketing as exchange in the context of online personal advertisements that appear on U.S.-based Craigslist and U.K.-based Gumtree.com. Building on the person-as-product paradigm, we put forth a resource exchange framework that details 13 product, or human, characteristics that people offer and seek in free, online personal advertisements. In addition, we reveal differences between heterosexual and homosexual Internet users in their use of photographs and personal descriptions in their advertisements. The results reveal the extent to which online classified sites are changing American society, as people are engaging in physical, service, and informational exchanges in ways that are not available in print advertisements. We discuss health implications regarding the use of personal advertisements on Craigslist, as the site is being used by groups of consumers who seek and provide sexual activities and those who desire discrete relationships with others.

Research Category: **Transformative Service and Quality of Life**

* Corresponding Author

(MARK S. ROSENBAUM, KATE L. DAUNT)

REJECTED, SHACKLED, AND ALONE: THE IMPACT OF SYSTEMIC RESTRICTED CONSUMER CHOICE ON MINORITY CONSUMERS' CONSTRUCTION OF SELF

Sterling A. Bone, Utah State University
Glenn L. Christensen, Brigham Young University
Jerome D. Williams, Rutgers University

This article investigates the experience of systemic restricted choice and its impact on self-construction among racial and ethnic minority consumers seeking loans. Encountering restricted choice at a subordinate level of the goal/choice hierarchy limits minorities' ability to make desired choices, requiring a reworking of the supporting choice hierarchy. Across three studies, we demonstrate that minority consumers face barriers beyond their control that circumscribe their ability to make marketplace choices and thus lead to debilitating outcomes to the self. While both white and minority respondents describe their goal of obtaining access to capital as a journey, minority respondents describe it as an uphill battle with systemic restrictions, in which they frame the self as fettered, imprisoned, and slavelike. Conversely, white respondents describe a difficult journey, but with likely success and without systemic impediments, and frame the self with feelings of enhanced autonomy and self-esteem. Minorities also describe the experience of felt discrimination, with perceptions of systemic restrictions attributed to race.

Relevant Category: **Transformative Service and Quality of Life**

REPAY NOW OR REPAY LATER: EXAMINING THE EFFECTS OF INFORMATION DISCLOSURE ON CONSUMER DEBT REPAYMENT DECISIONS

Linda C. Salisbury, Boston College
Katherine N. Lemon, Boston College

Consumers are repaying debt more slowly than ever before. Experts argue that disclosing more information to credit consumers will enable them to reduce debt more effectively. We examine this within the context of credit card debt repayment, seeking to understand how information disclosure influences consumer repayment behavior. We examine effects of minimum required payment (MRP) and supplemental interest cost information on debt repayment decisions. We examine differential effects of "time" versus "money" information and temporal framing of cost information. Results reveal a strong negative effect of MRP information on repayment amount. This effect is attenuated by disclosing interest cost and time-to-payoff information. Temporal framing of information, consumer temporal orientation and financial knowledge moderate these effects. We provide insights into types of information ("time" versus "money") that should be provided to consumers to improve debt repayment and specific marketing approaches that might reduce the firm's credit risk by reducing default rates.

Research Category: **Transformative Service and Quality of Life**

(LINDA C. SALISBURY, KATHERINE N. LEMON)

SURROUNDED BY SERVICES: A NEW LENS FOR EXAMINING THE INFLUENCE OF SERVICES ON CONSUMER WELLBEING

Laurie Anderson, Arizona State University
Amy Ostrom, Arizona State University
Daniele Mathras, Arizona State University
Mary Jo Bitner, Arizona State University

We advance a new research lens for examining the well-being of consumers by recognizing that services are so pervasive that to a large extent they structure the world within which consumers live. We call this new lens Transformative Service Research and define it as "*Service research that centers on creating uplifting changes and improvements in the well-being of both individuals (consumers and employees) and communities.*" In our efforts to develop theory regarding consumer well-being, we create a novel conceptual framework of consumers embedded in a system of services systems, influenced by services as structures and going between their own cultural world and the cultural worlds of services. An impetus for this framework was a four-year ethnographic study in a subsistence community. Findings from this study are used to illustrate the conceptualization.

Research Category: **Transformative Service and Quality of Life**

(Laurie Anderson, Amy Ostrom, Daniele Mathras , Mary Jo Bitner)

THE EFFECT OF INSTANT MESSAGING SERVICES ON SOCIETY'S MENTAL HEALTH

Mark S. Rosenbaum, Northern Illinois University*
Ipkin Anthony Wong, Institute for Tourism Studies, Macau

This article shows how instant-messaging (IM) service providers are helping and hindering societal mental health among young adults. IM services provide users with an ability to obtain instantaneous and inexpensive support in their time of need. However, excessive Internet usage may place IM users at risk for experiencing symptoms associated with Internet addiction and Adult Attention Deficit Hyperactivity Disorder (ADHD).

A framework obtained from coding qualitative data is proposed. The framework is tested with structural equation methodology and latent mean analysis from data collected from younger-aged Chinese and American IM users.

The findings show that IM users in both China and America are obtaining social support from their virtual networks. However, both groups of IM users are showing signs of elevated levels of Internet addiction and of being at-risk for ADHD. This research highlights that excessive IM/Internet usage may be hindering mental health among young adults and the problem is likely to grow in the future.

Research Category: **Transformative Service and Quality of Life**

* Corresponding Author

(MARK S. ROSENBAUM, IPKIN ANTHONY WONG)

THE EFFECT OF SERVICE EVALUATIONS ON BEHAVIORAL INTENTIONS AND QUALITY-OF-LIFE

Tracey Dagger, University of Queensland
Jill C. Sweeney, University of Western Australia

Understanding the contribution of marketing to economic and social outcomes is fundamental to broadening the focus of marketing. The authors develop a model that integrates the impact of service quality and satisfaction on both economic and societal outcomes. The model is validated using two random samples (n=778, n=340) involving intensive health services. The results indicate that technical and functional service quality influence service satisfaction, and that these constructs, in turn, have a significant impact on behavioral intentions. Importantly, technical and functional service quality, and service satisfaction have a significant influence on the quality-of-life perceptions of customers. These are important findings given the movement towards recognising social and environmental outcomes, such as emphasised through triple bottom line reporting. The findings have important implications for improving the quality-of-life of customers and for enhancing customers' behavioral intentions towards the organization.

Research Category: **Transformative Service and Quality of Life**

(TRACEY DAGGER, JILL C. SWEENEY)

THE RESTORATIVE QUALITIES OF AN ACTIVITY-BASED, THIRD PLACE CAFÉ FOR SENIORS: RESTORATION, SOCIAL SUPPORT, AND PLACE ATTACHMENT AT MATHER'S—MORE THAN A CAFÉ*

Mark S. Rosenbaum, Northern Illinois University
Jill C. Sweeney, University of Western Australia
Carla Windhorst, Mather's Foundation

This article highlights the restorative qualities of an actual café that represents a "hybrid third place." Similar to third places, the café studied in this work offers its customers food, beverages, and opportunities to participate in social activities. By drawing upon attention restoration theory (ART), the authors show that the café's built environment, or servicescape, features the three stimuli that are required to facilitate personal restoration and promote relief from symptoms associated with mental fatigue. The authors also explore how social activities and social integration promote customer restoration and investigate how perceived restorativeness is related to commercial social support, place attachment, and customer health.

Research Category: **Transformative Service and Quality of Life**

* Corresponding Author

(MARK S. ROSENBAUM, JILL C. SWEENEY, CARLA WINDHORST)

THE ROLE OF 'THIRD PLACE' SOCIAL SUPPORT IN CANCER PATIENTS' QUALITY OF LIFE*

Mark S. Rosenbaum, Northern Illinois University
Jill Smallwood, Living Well Cancer Resource Center

To date, cancer centers have operated under the premise that they were offering cancer patients and survivors healthful benefits by offering them an array of courses and activities. This work reveals that a cancer center's courses and activities per se do not influence a patron's quality of life. Indeed, a center's courses and activities serve as a natural forum for nurturing employee-patron social support, which significantly improves a cancer patient's perceived emotional, social, and cognitive well-being. Rather than permit employee-patron social support to emerge perchance and inconsistently among its patrons, Living Well Cancer Resource Center has altered its practices. Living Well is now strategically managing in-house social support by sending its employees to oncology practices to meet with cancer patients at the point of their initial cancer diagnosis. Hence, newly diagnosed cancer patients may receive immediate dosages of therapeutic medical procedures (i.e., surgery, chemotherapy, and radiation) and social support, which together represents a "complete" solution to cancer health care and to a cancer patient's health and well-being.

Research Category: **Transformative Service and Quality of Life**

(MARK S. ROSENBAUM, JILL SMALLWOOD)

UNEXPECTED BENEFITS OF SERVICE IMPROVEMENT AT THE CUSTOMER-EMPLOYEE INTERFACE: A FIELD EXPERIMENT IN THE HEALTHCARE INDUSTRY

Tracey Dagger, University of Queensland
Peter Danaher, Melbourne Business School
Jill C. Sweeney, University of Western Australia
Janet McColl-Kennedy, University of Queensland

This study examines whether customer service training of frontline staff not only improves interpersonal quality perceptions but also improves evaluations of other more difficult-to-evaluate attributes. We term this a "selective halo" effect. A field experiment (n=772) is used to examine this effect in a health care environment. Findings indicate that customer ratings of interpersonal quality are significantly higher for frontline staff receiving customer service training than for the control group. Moreover, the ratings of some attributes not manipulated in the experiment were also significantly higher than for the control group, namely, atmosphere, operational processes, technical expertise, and outcome perceptions. This supports our selective halo effect and indicates that there are unexpected benefits resulting from improving the interpersonal quality of frontline staff. Namely, that perceptions of difficult-to-evaluate attributes also increase, thereby enhancing the overall service experience. Perceptions of easy-to-evaluate attributes did not improve as a result of customer service training.

Research Category: **Transformative Service and Quality of Life**

(Tracey Dagger, Peter Danaher, Jill C. Sweeney, Janet McColl-Kennedy)

VALUES-BASED SERVICE FOR SUSTAINABLE BUSINESS: LESSONS FROM IKEA

Bo Edvardsson, Karlstad University
Bo Enquist, Karlstad University

This book is the first to examine the role of values in developing and managing sustainable service organisations. The focus is on the role of values in creating customer and shareholder value. The first chapter describes and defines values-based service and sustainable business. The chapter also introduces IKEA and the company's business model. Chapter 2 provides an overview of the history of IKEA and the social and environmental perspectives. In Chapter 3, the concept of customer value is discussed. In Chapters 4–6, values-based service thinking is developed within the areas of service experience, service brand, and service leadership. Finally in Chapter 7, IKEA is compared with Starbucks, H&M, and Body Shop and we present five principles for a sustainable, values-based service business.

Research Category: **Transformative Service and Quality of Life**

(BO EDVARDSSON, BO ENQUIST)

WHAT'S THE HARD RETURN ON EMPLOYEE WELNESS PROGRAMS?*

Leonard L. Berry, Texas A&M University
Ann M. Mirabito, Baylor University
William B. Baun, MD Anderson Cancer Center, Houston

Employee wellness programs have often been viewed as a nice extra, not a strategic imperative. But the data demonstrate otherwise, according to Berry, of Texas A&M University; Mirabito, of Baylor University; and Baun, of the University of Texas MD Anderson Cancer Center. Their research shows that the ROI on comprehensive, well-run employee wellness programs is impressive, sometimes as high as six to one. To achieve those kinds of results, employers cannot merely offer workers a few passes to a fitness center and nutrition information in the cafeteria. The most successful wellness programs are supported by six essential pillars: engaged leadership at multiple levels; strategic alignment with the company's identity and aspirations; a design that is broad in scope and high in relevance and quality; broad accessibility; internal and external partnerships; and effective communications. Companies in a variety of industries—including Johnson & Johnson, Lowe's, H-E-B, and Healthwise—have built their employee wellness programs on all six pillars and have reaped big rewards in the form of lower costs, greater productivity, and higher morale. Those benefits are not easy to achieve, and verifiable paybacks are never a certainty. But the track record inspires emulation, especially when you see the numbers."

Research Category: **Transformative Service and Quality of Life**

(LEONARD L. BERRY, ANN M. MIRABITO, WILLIAM B. BAUN)

WILL THE "REAL" ADOLESCENT PLEASE SIGN IN? SELF-SOCIALIZATION ON THE INTERNET

Laurel Anderson, Arizona State University
Deborah McCabe, Arizona State University

This paper examines the ubiquitous internet as a service that is a context for socialization for both younger and older adolescents. Our research finds that the internet adds dimensions to and takes away elements in the socialization process that have not been manifest in the same way in the past. The lack of the usual adult socialization agents in this service context challenges the more traditional view of adolescent socialization. Instead, our research finds a transcendent theme of self-socialization. Without the more traditional structured socialization contexts that include parents and other adult socialization agents, "self-socialization" occurs as adolescent gain even more independence and agency than has traditionally been the case and with peers are co-constructing their own environment and socialization on the internet. In particular, we see an impact on such norms as deception, privacy and "realness." We also examine the carryover of this socialization to the offline world.

Research Category: **Transformative Service and Quality of Life**

(LAUREL ANDERSON, DEBORAH MCCABE)

SERVICE INNOVATION

AN AGENDA FOR SERVICE RESEARCH AT THE BASE OF THE PYRAMID

Heiko Gebauer, Eawag: Swiss Federal Institute of Aquatic Science and Technology
Javier Reynoso, EGADE Business School, Monterrey Institute of Technology

Understanding the need to explore BoP activities is fundamental to working with a huge segment of society, not only as passive consumers, but also as genuine entrepreneurs capable of creating and managing "inclusive" innovations. The article aims to combine research priorities in the service domain with the emerging topic of service management for the base of the pyramid (BoP). This combination allows us to construct an agenda for service research at the BoP. This agenda can guide service researchers in the selection of feasible empirical fields, support them in finding appropriate research designs, and finally, help them to develop suitable theoretical perspectives.

Research category: **Service Innovation / Transformative Service and Quality of Life**

(HEIKO GEBAUER, JAVIER REYNOSO)

A PRACTICAL GUIDE TO COMBINING PRODUCTS AND SERVICES*

Venkatesh Shankar, Texas A&M University
Leonard L. Berry, Texas A&M University
Thomas Dotzel, McGill University

Hybrid solutions – goods and services combined into innovative offerings – can help firms attract new customers and increase demand from existing customers. This article presents four potential hybrid combinations with guidelines for determining which is most appropriate and most likely to be successful.

Research Category: **Service Innovation**

(VENKATESH SHANKAR, LEONARD L. BERRY, THOMAS DOTZEL)

A THEORY FOR ENGAGING STRANGERS IN REQUIREMENTS ENGINEERING

Tuure Tuunanen, University of Auckland
Ken Peffers, University of Nevada
Charles Gengler, City University of New York

This paper motivates the need for a theory for engaging strangers in requirements engineering (RE), reviews four literatures that speak to the information requirements of the RE process, uses elements from the four literatures to design a theory, demonstrates use of the theory in a major system development project, and evaluates that use. Strangers are people, including organizational outsiders, those who are remote from RE activities, culturally distant participants, and the disabled, for whom engagement in RE activities require special consideration. We develop an applicable theory to address the problem that can serve as the basis for designed RE methods, using existing or designed techniques, to accommodate particular target RE participant populations that include strangers. The paper demonstrates and evaluates the use of the new theory, in a major RE effort done with Helsingin Sanomat, one of the biggest daily newspapers in Scandinavia.

Research Category: **Service Innovation**

(TUURE TUUNANEN, KEN PEFFERS, CHARLES GENGLER)

CUSTOMER-TO-CUSTOMER INTERACTIONS: BROADENING THE SCOPE OF WORD OF MOUTH RESEARCH

Ruth Bolton
Marnix S. Bugel
Oliver Gotz
Barak Libai
Hans Riselada
Ko de Ruyter
Andrew T. Stephen

The increasing emphasis on understanding the antecedents and consequences of customer-to-customer (C2C) interactions is one of the essential developments of customer management in recent years. This interest is driven much by new online environments that enable customers to be connected in numerous new ways, and also supply researchers' access to rich C2C data. These developments present an opportunity and a challenge for firms and researchers who need to identify the aspects of C2C research on which to focus, as well as develop research methods that take advantage of these new data. Our aim here is to take a broad view of C2C interactions and their effects, and to highlight areas of significant research interest in this domain. We look at four main areas: The different dimensions of C2C interactions, social system issues related to individuals and to online communities, C2C context issues including product, channel, relational and market characteristics; and the identification, modeling and assessing the business outcomes of C2C interactions.

Research Category: **Service Innovation**

(RUTH BOLTON, MARNIX S. BUGEL, OLIVER GOTZ, BARAK LIBAI, HANS RISELADA, KO DE RUYTER, ANDREW T. STEPHEN)

INCLUSIVE SERVICE INNOVATION THROUGH SOLUTION-BASED BUSINESS MODELS AT THE BASE OF THE PYRAMID

Javier Reynoso, EGADE Business School – Monterrey Institute of Technology
Jay Kandampully, Ohio State University
Xiucheng Fan, Fudan University
Hanna Paulose, Ohio State University

This article illustrates research pertaining to India, Latin America, and China to show peculiar characteristics and existing challenges in emerging economies and thereby increase understanding of the progress made and the challenges that remain for managing both informal and formal service activities. This study emphasizes the relevance of indigenous, solution-based models as the basis for inclusive innovations, with a particular emphasis on the role of culture and technology.

Research Category: **Service Innovation, Transformative Service and Quality of Life**

This paper is currently under journal review.

(JAVIER REYNOSO, JAY KANDAMPULLY, XIUCHENG FAN, HANNA PAULOSE)

OPPORTUNITIES FOR INNOVATION IN THE DELIVERY OF RETAIL INTERACTIVE SERVICES

Leonard L. Berry, Texas A&M University
Ruth N. Bolton, Marketing Science Institute
Cheryl H. Bridges, Texas A&M University
Jeffrey Meyer, Bowling Green State University
A. Parasuraman, University of Miami
Kathleen Seiders, Boston College

In today's volatile economy, innovation in providing interactive services to consumers through a variety of channels is critical in retailing. Interactive service innovations offer opportunities for retailers by creating new markets or offering new benefits in existing markets. They also pose threats as existing customers encounter new alternatives offered by competitors. This article explores some of the most promising opportunities in interactive retail services; namely, the increasing power of consumers, channel synergies, pre- and post-transaction service, optimal use of resources, and consumer heterogeneity. In discussing these areas of opportunity we identify knowledge gaps and suggest research questions relevant to these gaps that warrant attention. Collectively, these questions offer a research agenda for the topic of interactive retail service innovation.

Research Category: **Service Innovation**

(Leonard L. Berry, Ruth N. Bolton, Cheryl H. Bridges, Jeffrey Meyer, A. Parasuraman, Kathleen Seiders)

PRIVACY AND VALUE CO-CREATION FOR IT-ENABLED SERVICE SYSTEMS: CUI BONO?

Ellen Chan, Portland State University
Robert R. Harmon, Portland State University
* Haluk Demirkan, Arizona State University

Almost all IT enabled service systems such as Google, Facebook, Apple, Microsoft, Skype are facing criticisms on their use of customer data and their failure to protect customer privacy. These service companies rely on customers to participate actively in the co-creation of value by providing personal information, data and preferences. Such important resources and assets, if mishandled by companies, can cause harm to customers. Misuse and poor privacy protection for customer information can create ethical, legal, and business consequences, diminish trust and inhibit relationship building between customers and service providers, and affect future value co-creation. This paper identifies the different facets of privacy, explores the intersection of privacy and co-creation of value, and offers suggestions for future research regarding how businesses and customers can benefit from the service while ensuring privacy is protected.

Research Category: **Service Innovation**

* Corresponding Author

(ELLEN CHAN, ROBERT R. HARMON, HALUK DEMIRKAN)

SERVICE INNOVATION: A SERVICE-DOMINANT (S-D) LOGIC PERSPECTIVE

Robert F. Lusch, University of Arizona
Satish Nambisan, University of Wisconsin-Milwaukee

We offer a broadened view of service innovation—one grounded in service-dominant logic—that transcends the tangible–intangible and producer–consumer divides that have plagued extant research in this area. Such a broadened conceptualization of service innovation emphasizes (1) innovation as a collaborative process occurring in an actor-to-actor (A2A) network, (2) service as the application of specialized competences for the benefit of another actor or the self and as the basis of all exchange, (3) the generativity unleashed by increasing resource liquefaction and resource density, and (4) resource integration as the fundamental way to innovate. Building on these core themes, we offer a tripartite framework of service innovation: (1) service ecosystems, as emergent A2A structures actors create and recreate through their effectual actions and which offer an organizing logic for the actors to exchange service and co-create value; (2) service platforms, which enhance the efficiency and effectiveness of service exchange by liquefying resources and increasing resource density (facilitating easy access to appropriate resource bundles) and thereby serve as the venue for innovation; and (3) value co-creation, which views value as co-created by the service offer(er) and the service beneficiary (e.g., customer) through resource integration and indicate the need for mechanisms to support the underlying roles and processes.

Research Category: **Service Innovation**

(ROBERT F. LUSCH, SATISH NAMBISAN)

SERVICE INNOVATION AND CUSTOMER CO-CREATION PROCESS

Laurel Anderson, Arizona State University
Andrea Ordanini, Bocconi University, Italy
Mary Jo Bitner, Arizona State University
Antonella Caru, Bocconi University, Italy
Emma Qiu, Fudan University, China
Andrew S. Gallan, Case Western Reserve University

This international research project examines customer-focused service innovation and customer co-creation processes in the healthcare industry in three different countries: US, Italy, and China. We seek to understand different styles and processes of co-creation and innovation, looking at leading and innovative hospitals across these three country contexts. To explore the phenomenon, we have used interpretive methodologies to gain an in-depth and holistic understanding of co-creation and customer-focused innovation styles, processes and meanings. We have conducted interviews with CEOs and other high-level hospital executives to explore processes, metaphors, and critical incidents in service co-creation and innovation. Our major contribution will be to better understand the theoretical and managerial development of service innovations specifically through the identification of co-creation processes and styles, cultural differences and similarities, and leader vs. innovator differences and similarities in processes/ styles. We will also reveal the negotiated meaning of co-created and customer-focused service innovation within the healthcare industry.

Research Categories: **Service Innovation, Service Experience and Co-Creation**

(Laurel Anderson, Andrea Ordanini, Mary Jo Bitner, Antonella Caru, Emma Qiu, Andrew S. Gallan)

SERVICE INNOVATION IS DIFFERENT

Steve Markham, North Carolina State University
Thomas Hollmann, North Carolina State University

The differences between goods and services are well known. A substantial body of knowledge exists about how goods are developed, however, we know very little about the practice of service development. Drawing on the Best Practices data from the Product Development and Management Association this research project compares and contrasts different development methods, processes, tools, organizational structures and managerial practices used to develop goods and services. We find that services innovation practices differ in fundamental ways from goods innovation, such that service innovators focus more strongly on the front-end and back-end of innovation while goods innovators focus predominantly on the middle phase in the stage gate process. The contrast in product development techniques leads to management tools to help innovation mangers apply the appropriate tools and techniques to services development. In addition, a number of service practices are applicable to goods development with a significant reduction on development time and costs.

Research Category: **Service Innovation**

(STEVE MARKHAM, THOMAS HOLLMANN)

SHAPING, ORGANIZING, AND RETHINKING SERVICE INNOVATION: A MULTIDIMENSIONAL FRAMEWORK

Luis Rubalcaba, University of Alcala
Stefan Michel, IMD International
Jon Sundbo, Roskilde University
Stephen W. Brown, Arizona State University
Javier Reynoso, EGADE Business School – Monterrey Institute of Technology

The complex field of service innovation represents a cross-roads for various research interests from different academic disciplines that explore multiple dimensions, follow unique approaches, build varied conceptual and analytical frameworks, and adopt distinct perspectives. This complexity continues to produce new trends, such that service innovation is no longer relevant only for service organizations. This article contains guidelines and real-world examples to help practitioners and policy makers develop service innovation strategies through the consideration of different levels, organizations, and perspectives.

SIGNS AND PRACTICES AS RESOURCES IN IT-RELATED SERVICE INNOVATION

Helge Lobler, University of Leipzig
Robert Lusch, University of Arizona

Emerging from the rapid growth of information technology in a digital world is the explosion and rapid ascendance of information technology–related service innovation occurring around the globe. All successful service innovation in a digital world consists of two main abstract domains: signs, because only signs can be digitized, and practices. Signs are perceivable, but practices are not. Signs are commonly understood as resources in the digital world, while practices are understood as providing context, not as resources. This article proposes a change in this perspective: According to service-dominant logic, both signs and practices can become resources for service and value cocreation. They become resources if they are integrated in a service offering. The authors illustrate how recent digital service innovations can be explained with this perspective and how it can be used to distinguish incremental from radical innovation. It also suggests, using this perspective, that marketers and innovation specialists can productively develop ideas and concepts, for future service innovation. From the practices framework presented, directions for further research are discussed.

Research Category: **Service Innovation**

Forthcoming in *MIS Quarterly*

(HELGE LOBLER, ROBERT LUSCH)

THE CHANGING ROLE OF EMPLOYEES IN SERVICE THEORY AND PRACTICE: AN INTERDISCIPLINARY VIEW (NEW)

David E. Bowen, Thunderbird at Arizona State University

The changing role of employees in service theory and practice over the last few decades is overviewed from the perspectives of the management and marketing disciplines. The criticality of employees, particularly front-line employees, in driving customer service outcomes was emphasized in both fields in the 80s and 90s. The rise of *services* marketing highlighted the role of employees in dyadic service encounters with customers. In management, the implications of the customer interface for employee and organization were developed. In the 2000s, the status of the employee's role appeared to diminish as service marketing theory shifted from a provider to a consumer perspective on customer value creation, and as technology substituting for employees grew in practice. In management, new theory and research directions on service employees essentially plateaued. Going forward in evolving service contexts, employees will fill roles as "Innovators"; "Differentiators"; "Enablers" and "Coordinators". Suggestions are offered for what management can learn from *services* marketing in the pursuit of interdisciplinary research.

Research Category: **Service Culture**

(DAVID E. BOWEN)

A CROSS-NATIONAL AND CROSS-CULTURAL APPROACH TO GLOBAL MARKET SEGMENTATION: AN APPLICATION USING CONSUMERS' PERCEIVED SERVICE QUALITY

James Agarwal
Ruth Bolton
Naresh K. Malhotra

International service is the fastest growing sector of the world economy, but few studies have examined global market segmentation strategies for services. This study shows that consumer perceived service quality (PSQ) differs across cultures and countries and these differences yield meaningful market segments. It focuses on culture-based differences in PSQ that arise from people's life experiences, based on prior conceptual work that links individualism-collectivism at the level of the individual consumer (rather than based on nationality) to independent versus interdependent self-construal. It analyzes survey data describing banking services in India and the USA. Thus, the paper provides a theory-based, empirically supported tool for the measurement, management and customization of PSQ in global settings. This tool can be used to derive managerial insights into vertical and horizontal market segments for global services, guiding the development of global marketing strategies for services and improving business performance. We illustrate its use for banking services.

Research Category: **Service Culture**

(JAMES AGARWAL, RUTH BOLTON, NARESH K. MALHOTRA)

DELIVERING BAD NEWS TO CUSTOMERS: THE ROLES OF EMPLOYEE EMOTIONAL AND TECHNICAL COMPETENCIES IN EMOTIONALLY CHARGED SERVICE ENCOUNTERS*

Cécile Delcourt, University of Liege, Belgium
Dwayne D. Gremler, Bowling Green State University
Allard C. R. van Riel, Radboud University, The Netherlands
Marcel van Birgelen, Radboud University, The Netherlands

Service encounters can be emotionally charged for customers, such as when employees deliver bad news to them. Yet current research provides little insight into which employee competencies customers value, or the extent of their value, in emotionally charged circumstances. This study examines the effects of two influential employee competencies—employee emotional competence (EEC) and employee technical competence (ETC)—on negative customer emotions, rapport, and encounter satisfaction in emotionally charged service encounters. The results of the experiment suggest that EEC moderates the effect of ETC on customer outcomes, such as negative emotions, rapport, and encounter satisfaction. The findings encourage managers to provide employees with training to improve their emotional competence, which strengthens the impact of ETC on customer experiences in emotionally charged service encounters, and to screen potential employees on these competencies when hiring new staff.

Research Category: **Service Culture**

(Cécile Delcourt, Dwayne D. Gremler, Allard C. R. van Riel, Marcel van Birgelen)

EMPLOYEE EMOTIONAL COMPETENCE: CONSTRUCT CONCEPTUALIZATION AND VALIDATION OF A CUSTOMER- BASED MEASURE*

Cécile Delcourt, University of Liege, Belgium
Allard C. R. van Riel, Radboud University, The Netherlands
Marcel van Birgelen, Radboud University, The Netherlands
Dwayne D. Gremler, Bowling Green State University

When customers experience intense emotions during service encounters, they are attentive to how well employees perceive, understand, and regulate these emotions—that is, the extent to which employees display emotional competence. This paper examines employee emotional competence (EEC) from a customer perspective in a service encounter context. Using this specific conceptualization of the topic, the authors develop a short, valid, and reliable measure of EEC that consists of customer perceptions of employee ability in terms of perceiving, understanding, and regulating customer emotions. The measure is strongly correlated with customer evaluations of the service encounter. This scale can be used by scholars to further explore the role of EEC in service contexts and by managers to observe and assess EEC in service encounters, determine the correlation of EEC with outcomes of interest, and use EEC in recruitment and hiring processes.

Research Category: **Service Culture**

(CÉCILE DELCOURT, ALLARD C. R. VAN RIEL, MARCEL VAN BIRGELEN, DWAYNE D. GREMLER)

THE IMPACT OF MISSION FULFILLMENT ON THE INTERNAL AUDIENCE: PSYCHOLOGICAL JOB OUTCOMES IN A SERVICE SETTING*

Taewon Suh, Texas State University
Mark B. Houston, Texas Christian University
Steven M. Barney, SSM Health Care
Ik-Whan G. Kwon, Saint Louis University

The way a firm fulfills (or fails to fulfill) its mission statement may play a role in internal marketing and affect its most committed employees. Our model suggests that mission fulfillment influences an employee's motivation (i.e., employee engagement), social identity (organizational identification), and emotional resources (emotional exhaustion). These psychological states in turn drive affective commitment and turnover intentions, two variables of continued interest to researchers and managers. We find empirical support for this model using data from 3999 employees of a healthcare service system. For managers, our results imply the importance of aligning an organization's actions with its stated mission, given that employees are attuned to and affected by such an alignment. Further, managers should actively communicate to employees the organization's efforts and accomplishments in fulfilling its mission.

Research Category: **Service Culture**

(TAEWON SUH, MARK B. HOUSTON, STEVEN M. BARNEY, IK-WHAN G. KWON)

BUILDING THE CASE FOR QUALITY IMPROVEMENT IN THE HEALTH CARE INDUSTRY: A FOCUS ON GOALS AND TRAINING (NEW)

Joy Field, Boston College
Janelle Heineke, Boston University
James Langabeer, University of Texas – Houston
Jami DelliFraine, Virginia Commonwealth University

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 MODELING: FROM CUSTOMER EXPERIENCE TO SERVICE DESIGN (NEW)

Jorge Teixeira, University of Madeira
Lia Patrício, University of Porto
Nuno J. Nunes, University of Madeira
Leonel Nóbrega, University of Madeira
Raymond P. Fisk, Texas State University
Larry Constantine, University of Madeira

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**

(JORGE TEIXEIRA, LIA PATRÍCIO, NUNO J. NUNES, LEONEL NÓBREGA, RAYMOND P. FISK, LARRY CONSTANTINE)

DECISION MODELS FOR WORKFORCE AND TECHNOLOGY PLANNING IN SERVICES* (NEW)

Gang Li, Bentley University
Joy Field, Boston College
Hongxun Jiang, Renmin University of China
Tian He, Renmin University of China
Youming Pang, Renmin University of China

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**

(GANG LI, JOY FIELD, HONGXUN JIANG, TIAN HE, YOUMING PANG)

A STRUCTURED APPROACH TO ASSESSING RETAIL STORE OPERATIONS STRATEGY: THEORY, CONSTRUCT DEVELOPMENT AND MEASUREMENT*

Jeff Shockley, Radford University
Aleda V. Roth, Clemson University
Lawrence D. Fredendall, Clemson University

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**

(Jeff Shockley, Aleda V. Roth, Lawrence D. Fredendall)

EVALUATING STORE DESIGN RESPONSIVENESS TO PRODUCT LINE MARGIN CHANGES: AN EMPIRICAL ANALYSIS OF U.S. PUBLIC RETAILERS*

Jeff Shockley, Radford University
Lawrence A. Plummer, University of Oklahoma
Aleda V. Roth, Clemson University
Lawrence D. Fredendall, Clemson University

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**

(JEFF SHOCKLEY, LAWRENCE A. PLUMMER, ALEDA V. ROTH, LAWRENCE D. FREDENDALL)

MULTILEVEL SERVICE DESIGN: FROM CUSTOMER VALUE CONSTELLATION TO SERVICE EXPERIENCE BLUEPRINTING

Lia Patrício, University of Porto
Raymond P. Fisk, Texas State University-San Marcos
João Falcão e Cunha, University of Porto
Larry Constantine, University of Madeira

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.

Research Category: **Service Design**

(LIA PATRÍCIO, RAYMOND P. FISK, JOÃO FALCÃO E CUNHA, LARRY CONSTANTINE)

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**

(ELLIOT RABINOVICH, TIMOTHY LASETER, MANUS RUNGTUSANATHAM)

SERVICE BLUEPRINTING: A PRACTICAL TECHNIQUE FOR SERVICE INNOVATION*

Mary Jo Bitner, Arizona State University
Amy L. Ostrom, Arizona State University
Felicia N. Morgan, University of West Florida

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**

(Mary Jo Bitner, Amy L. Ostrom, Felicia N. Morgan)

SERVICE COPRODUCTION WITH INFORMATION STICKINESS AND INCOMPLETE CONTRACTS: IMPLICATIONS FOR CONSULTING SERVICE DESIGN*

Mei Xue, Boston College
Joy M. Field, Boston College

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**

(Mei Xue, Joy M. Field)

STREET ART, SWEET ART? RECLAIMING THE "PUBLIC" IN PUBLIC PLACE

Luca Visconti, Bocconi University
John Sherry, University of Notre Dame
Stefania Borghini, Bocconi University
Laurel Anderson, Arizona State University

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**

(LUCA VISCONTI, JOHN SHERRY, STEFANIA BORGHINI, LAUREL ANDERSON)

THE SHORT- AND LONG-TERM EFFECTS OF A REMODELED SERVICESCAPE

Elisabeth Brüggen, Maastricht University
Bram Foubert, Maastricht University
Dwayne D. Gremler, Bowling Green State University

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.

Research Category: **Service Design**

(ELISABETH BRÜGGEN, BRAM FOUBERT, DWAYNE D. GREMLER)

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)

A MULTIDISCIPLINARY DESIGN MODEL FOR NEW SERVICE OFFERING TRANSFERS AND INTERNAL INTEGRATION IN RETAIL CHAIN SERVICES: A RESEARCH AGENDA*

Aleda V. Roth, Clemson University
Jeff Shockley, Radford University

This article examines the question: *how can retail service chains instantiate new service offerings throughout their organizational design systems?* We address a central theme in new service innovation research: new service offerings and concepts will often require sticky information transfer of new knowledge gained externally from customers and competitors and internally from intra-firm employees, systems, and business entities. We develop a multidisciplinary, strategic design model that is useful for integrating and sharing knowledge across retail chain stores (RCS).

Illustrate effective new service offering transfer for effective execution at the store level.

Introduce the 3S's for service effectiveness measurement: 1) standards; 2) systems and 3) sensing mechanisms.

Conclude with research agenda for advancing scholarly research in retail chain services.

Research Category: **Service Networks and Value Chains**

(ALEDA V. ROTH, JEFF SHOCKLEY)

ASSESSING MARKUPS, SERVICE QUALITY, AND PRODUCT ATTRIBUTES IN MUSIC CDS' INTERNET RETAILING*

Elliot Rabinovich, Arizona State University
Arnold Maltz, Arizona State University
Rajiv Sinha, Arizona State University

We investigate the links among markups, service quality, and product attributes across customer, Internet-retailer, and wholesaler echelons. Little is known about how retail markups, in particular, are related to service quality and product attributes. To examine this issue, we developed a model of Internet retail profitability that separates revenues and costs related to sales transactions from other profit sources. This framework led us to synthesize studies that have focused on service quality dimensions in the Internet retailing space. Subsequently, we developed a critical-event study based on a profit model and the synthesis of service-quality dimensions in order to delineate service aspects that retailers need to address buyers' utility. Finally, we collected data from purchases across retailers in order to isolate markup-service quality relationships along our delineated service characteristics. We find that high markups are associated with superior performance by Internet retailers across several service quality dimensions (a service premium effect).

Research Categories: **Service Networks and Value Chains**

(ELLIOT RABINOVICH, ARNOLD MALTZ, RAJIV SINHA)

COORDINATION STRATEGIES IN A SAAS SUPPLY CHAIN

* Haluk Demirkan Arizona State University
Hsing K. Cheng, University of Florida
Subhajyoti Bandyopadhyay, University of Florida

The computing industry is gradually evolving to cater to the demand for software-as-a-service (SaaS). Two core competencies that have emerged over the past few years are that of the ASP and the AIP. The arrangements between them result in system dynamics that is typical in supply chain networks. We examine the performance of a SaaS setup under different coordination strategies between these two players. Our analysis indicates that coordination between the monopoly ASP and the AIP can result in an outcome with the same overall surplus as that can be achieved by a central planner. Even though the players have an incentive to deviate, it is possible to create the right incentives so that the economically efficient outcome is also the Nash equilibrium. The results of the analysis have significant implications for the coordination strategies for providers in the burgeoning business model of delivering software services over the Internet.

Research Category: **Service Networks and Value Chains**

* Corresponding Author

(Haluk Demirkan, Hsing K. Cheng, Subhajyoti Bandyopadhyay)

CUSTOMER USE OF VIRTUAL CHANNELS IN MULTICHANNEL SERVICES: DOES TYPE OF ACTIVITY MATTER?

Rui Sousa, Catholic University of Portugal
Marlene Amorim, University of Aveiro
Elliot Rabinovich, Arizona State University
Anníbal C. Sodero*, University of Arkansas

Many firms have recently adopted virtual channels, based most notably on the Internet and the phone, to complement the delivery of services to their customers by their existing physical facilities. The success of such multichannel (MC) strategies relies on the alignment of service design decisions – namely those concerning the allocation of service activities to virtual channels – with customers' MC behavior. While prior studies have looked at the intensity with which customers use virtual channels, they have not addressed virtual channel use for different types of service activities.

In our study, we investigate whether customers' use of virtual channels for MC services varies with the type of service activities they engage in, and if so, in what way. In doing so, we address two objectives. First, we investigate the impact of accessibility to the physical channel on the degree of use of virtual channels (Internet and phone, aggregated) for different types of activities. Second, we look at channel preferences (Internet vs. phone) for different types of activities when customers do resort to virtual channels to conduct activities.

To address our objectives, we develop and test hypotheses regarding customers' use of virtual channels based on the match between activity attributes (complexity and volume) and channel attributes (access efficiency, interface efficiency, interface richness). Using data from a MC bank, we find that the impact of accessibility to physical channels (specifically, customer distance) on customers' use of virtual channels, as well as the relative use of Internet versus phone, depend on the type of activities.

Research Category: **Service Networks and Value Chains, Service Experience and Co-creation, Service and Technology**

(RUI SOUSA, MARLENE AMORIM, ELLIOT RABINOVICH, ANNÍBAL C. SODERO)

DRIVERS AND OUTCOMES OF ADOPTION OF OPEN STANDARDS INFORMATION SYSTEMS IN HIGH-TECHNOLOGY SUPPLY CHAINS

Anníbal C. Sodero*, University of Arkansas
Elliot Rabinovich, Arizona State University
Rajiv K. Sinha, Arizona State University

In recent years, firms in high-technology supply chains have established internet-based electronic linkages with their trading partners. As a result, they have improved their ability to coordinate and synchronize shared business processes by using more complete, accurate, and timely information. These electronic linkages are based on open-standard interorganizational information systems (OSIOS), which are fundamentally different from traditional electronic data interchanges. OSIOS capture not only the technical specifications for data interchange but also the sequential steps for the execution of shared business processes. Because OSIOS are still at an early diffusion stage, it remains unclear why firms would assimilate such an innovation and whether assimilation provides firms any benefits. In this research, we develop a framework grounded on the economics of standards, institutional theory, and strategic interorganizational information systems literatures to investigate the drivers and outcomes of OSIOS assimilation in a focused context. In order to test our hypotheses based on this framework, we used data from a high-technology supply chain and employed econometrics techniques. We found that both competition asymmetry across supply chain echelons and OSIOS assimilation within supply chain echelons predict individual firms' OSIOS assimilation. The results also suggest that firms' supply chain dominance is both a driver and an outcome of OSIOS assimilation, highlighting a mutually reinforcing process. In addition, our study reveals boundary conditions of the hypothesized relationships. The use of multiple theoretical perspectives, a unique dataset, and innovative statistical techniques to investigate OSIOS assimilation in high-technology supply chains contributes to the body of knowledge in both the supply chain management and management of information systems disciplines.

Research Category: **Service Networks and Value Chains, Service and Technology**

(ANNÍBAL SODERO, ELLIOT RABINOVICH, RAJIV SINHA)

INVESTIGATING THE EFFECTS OF DAILY INVENTORY RECORD INACCURACY IN MULTICHANNEL RETAILING

Thomas J. Kull, Arizona State University
Mark Barratt, Marquette University
Anníbal C. Sodero*, University of Arkansas
Elliot Rabinovich, Arizona State University

Inventory record inaccuracy (IRI) challenges multichannel retailers in fulfilling both brick-and-mortar and direct channel demands from their distribution centers. The nature and damaging effects of IRI largely go unnoticed because retailers assume daily IRI remains stable over time within the replenishment cycle. In reality, levels of IRI can change every day. This research uses data collected daily from a multichannel retailer to ground a discrete-event simulation that tests how daily IRI variation impacts operational performance. Our empirical data challenges extant assumptions regarding the characteristics of IRI. In addition, our simulation results reveal that daily IRI variation has a paradoxical effect: it increases inventory levels while decreasing service levels. We also reveal important aspects of this problem — that channels are impacted differently and that inventory policies can exacerbate the problem. Our findings show that assumptions and practices that ignore daily IRI variation need revising. For managers, we demonstrate how periods of multi-day counting help assess their daily IRI variation and indicate what the causes may be.

Research Category: **Service Networks and Value Chains, Service and Technology**

(THOMAS KULL, MARK BARRATT, ANNÍBAL SODERO, ELLIOT RABINOVICH)

IS THE CUE 'IN STOCK' ALWAYS EFFECTIVE? INVENTORY INFORMATION DISCLOSURE TACTICS TO LEVERAGE STOCKOUT RISK

Tolga Aydinliyim, Baruch College, CUNY
Michael S. Pangburn, University of Oregon
Elliot Rabinovich, Arizona State University
Min Choi, Arizona State University

Unlike in a traditional store environment where inventory is directly visible to customers, Internet retailers have more flexibility in exposing consumers to inventory information. It is common for online sellers to provide only binary information to shoppers, indicating a product is either "in stock" or not. In this paper, we investigate whether an online retailer which optimally prices its product should divulge (precisely) its stocking level, or merely indicate whether the product is in stock. By appropriately designing an inventory information disclosure policy, an online retailer may potentially leverage consumers' heterogeneous sensitivity to stock-out risk and thus enhance profits.

We employ a two period analytic model to address an online retailer's contrasting inventory disclosure policy options. In the second period we assume the firm attempts to clear out any remaining stock at cost and therefore the firm must earn its profits during the primary (first) selling period. We permit two types of consumers: one segment that rationally infers availability when the firm does not divulge its stock level, and the others who rely on some prior belief distribution regarding inventory. If the firm's stock level is either shown or believed to be sufficiently high, then consumers may strategically defer their purchase to the second period, however at the risk of potentially not obtaining the product. Intrinsic to the model is the assumption that consumers' purchase decisions are sensitive to stocking quantities, which we support using data collected from an online book sales website (StrandBooks.com) that divulges stock levels to its customers.

Using the analytic model, we derive the threshold stocking level at which the inventory sharing and masking policies and the corresponding optimal prices yield equivalent expected profits. Below that level, sharing is optimal; above that level, masking is optimal. We also show that, if the inventory decision is endogenous then the retailer should optimally set and disclose a low stock level to ensure a first period sell-out. This structure suggests to managers the potential for increasing profits by tailoring disclosure tactics to a product's stocking level. To explore this issue further, we collected data from Amazon.com, which provides a richer (real-time, multi-product) context for studying the impact of inventory information on sales. Amazon follows a hybrid disclosure policy that masks inventory information at high stock levels but divulges that information at low stock levels. We show that the sales rate under disclosure tends to be higher than under masking, thus demonstrating that Amazon is, at least in many cases, able to enhance sales rates by selectively opting to disclose detailed inventory information only when inventories are sufficiently low.

Research Category: **Service Networks and Value Chains, Service Experience and Co-creation, Service and Technology**

(Tolga Aydinliyim, Michael Pangburn, Elliot Rabinovich, Min Choi)

OPERATIONAL DETERMINANTS OF PRODUCT RETURNS IN INTERNET RETAILING – THE ROLE OF PHYSICAL DISTRIBUTION SERVICES

Shashank Rao, Auburn University College of Business
Elliot Rabinovich, Arizona State University

Pressure continues to build on internet retailers to squeeze out inefficiencies from their day to day operations. One major source of such inefficiencies is product returns. Indeed, product returns in Internet retailing have been shown to be, on average, as high as 22% of sales. Yet, most retailers accept them as a necessary cost of doing business. This is not surprising since many retailers do not have a clear understanding of the causes of product returns. While it is known that return policies of retailers, along with product attributes, are two important factors related to product return incidents, little is known about which operational aspects of the online retail transaction make such a purchase more return-prone.

In the current study, we seek to address this issue. We use a large data set of customer purchases and returns to identify how process attributes in physical distribution service (PDS) influence product returns. The first attribute involves the disclosure of scarcity conditions in inventory availability by retailers to consumers. Our results show that orders in which items are sold after these conditions are revealed to shoppers have a higher likelihood of being returned than orders in which these conditions are not revealed. While prior research has argued that inventory scarcity perceptions have a powerful effect on purchases, our findings suggest that they also have a substantial effect on the likelihood of these purchases being returned.

The second attribute involves the reliability in the delivery of orders to consumers. We find that the likelihood of orders being returned depends on the consistency between retailer promises of timeliness in the delivery of orders and the actual delivery performance of the orders. Moreover, we find that the effect that consistency in the delivery has in the likelihood of returns is stronger for orders that involve promises for expedited delivery than for orders with less expeditious promises. That is, although the occurrence of returns depends on the delays in the delivery of orders to consumers relative to the initial promises made by the retailers, this effect is more notable for orders that involve promises of fast delivery.

Research Category: **Service Networks and Value Chains, Service Experience and Co-creation, Service and Technology**

Rao, S.; Rabinovich, E. "Operational Determinants of Product Returns in Internet Retailing – The Role of Physical Distribution Services." *Working Paper*

(SHASHANK RAO, ELLIOT RABINOVICH)

SELF-SERVICE OPERATIONS AT RETAIL STORES: THE ROLE OF INTER-CUSTOMER INTERACTIONS

Mei Li*, Lehigh University
Thomas Y. Choi, Arizona State University
Elliot Rabinovich, Arizona State University
Aaron Crawford, Arizona State University

Inter-customer interactions are important to the operation of self-services in retail settings. More specifically, when self-service terminals are used as part of customers' checkout processes in retail operations without the explicit involvement of retailers as the direct service providers, inter-customer interactions become a significant managerial issue. In this paper, we examine the impact of inter-customer interactions at retail self-service terminals on customers' service quality perceptions and repeat purchase intentions at retail stores. We conduct a scenario-based experimental design (N=674) using a 2X2 factorial design in which inter-customer interactions are divided into "positive" versus "negative" and occur during the "waiting" or during the actual "transaction" stages of self-services at a retail store. We use attribution theory to develop the hypotheses. The results demonstrate that, through their interactions, fellow customers can exert influences on a focal customer's quality perceptions and repeat purchasing intentions toward a retail store. Further, these influences were impacted by how customers attribute blame or assign responsibility toward the retail store. Service operations managers should leverage these interactions by designing into self-service settings the capacities and interfaces that are best suited for customers' co-production of their self-service experiences.

(MEI LI, THOMAS CHOI, ELLIOT RABINOVICH, AARON CRAWFORD)

SHAREHOLDER VALUE IMPLICATIONS OF SERVICE FAILURES IN TRIADS: THE CASE OF CUSTOMER INFORMATION SECURITY BREACHES

Sachin Modi, McGill University
Michael A. Wiles, Arizona State University
Saurabh Mishra, University of Toledo

The rise in service outsourcing in recent years, despite its many advantages, has also exposed buyer firms to unique challenges. Particularly, inclusion of a third party front-end service provider to form a service triad can lead to a weakening in the position of the buyer firm. This becomes a significant concern in the face of service failures at front-end service providers, elevating the ex-post relational and operational costs of buyer firms and placing a downward pressure on their shareholder value. In this research, the authors investigate the shareholder value losses of one such type of unexpected service failure, i.e., customer information security breaches, and highlight how these losses to the buyer firms get magnified when the front-end service provider in a triad compromises the information. The authors also evaluate two critical resource positions of buyer firms, i.e., employee productivity and financial leverage, which can signal their ability to attenuate the negative fallout of information security breaches in service triads, and thus influence the shareholder value implications of such service failures. The results based on an event-study methodology provide important implications.

Research Category: **Service Networks and Value Chains**

This is a working paper that is currently under review.

(SACHIN MODI, MICHAEL A. WILES, AND SAURABH MISHRA)

TAKING VALUE-NETWORKS TO THE CLOUD SERVICES: SECURITY SERVICES, SEMANTICS AND SERVICE LEVEL AGREEMENTS

* Haluk Demirkan, Arizona State University
Michael Goul, Arizona State University

Cloud services have become an emerging solution for organizations striving to address today's need for agility, but little research has addressed transitioning multiple, collaborating organizations to what can be referred to as a "value-network cloud." We know that organizations adopting cloud services to execute business processes must concomitantly reconfigure their security solutions for their integrated intra- and inter-organizational collaborations. We address the question, "What is needed to make it possible for an entire value-network to take secure, collaborative business process executions to the cloud?" Future value- network cloud solutions will require completely new security approaches that will leverage contracted brokering solutions operating as part of the cloud solution. We view value-network cloud security service provisioning as a bundle decision characterized by a mix of communication patterns relevant to intra- and inter-enterprise collaboration. We propose a cloud service broker model – using semantics and SLA based middleware – to serve as a trusted interface between the enterprise, cloud service providers and other organizations collaborating in a value-network. The approach enables IT governance for value-network cloud services. The architectural requirements adapt design principles for infrastructure management tailored from approaches to how business cartels historically conducted secure business dealings.

Research Category: **Service Networks and Value Chains**

* Corresponding Author

(HALUK DEMIRKAN, MICHAEL GOUL)

THE SERVICE NETWORK EXPERIENCE: CUSTOMER EVALUATIONS OF PERFORMANCE AND BRAND IMAGE

Felicia N. Morgan, University of West Florida
Mary Jo Bitner, Arizona State University
Amy L. Ostrom, Arizona State University

In complex service situations such as healthcare, telecommunications, B2B service solutions, and hospitality, a customer's service experience results from interactions with a set of service providers, all of whom deliver key components of the service solution. Such configurations of customer-facing firms that collectively co-produce a total service experience for customers are conceptualized as "service networks." This research establishes the service network as an important unit of analysis in service research.

The results of two experiments show that the images and associations resulting from experiences with providers in the network can shape customer evaluations of other members of the network, in particular, the brand image of a focal firm. By explicating the nature of relationships between the firms within a particular type of service network from the *customer's point of view*, this research provides a fresh operational perspective and practical implications for managing customer experiences, network relationships, and service brand strategies.

Research Categories: **Service Networks and Value Chains**

Working paper; research sponsored by the CSL

(MARY JO BITNER, AMY L. OSTROM, FELICIA N. MORGAN)

TRANSFORMATIVE SERVICE NETWORKS: A CONCEPTUAL MODEL OF COCREATED VALUE AS HEALTH AND WELL-BEING

Hulda G. Black, Illinois State University
Andrew S. Gallan, DePaul University

Fundamental to emerging theories of value cocreation is a developing awareness that value emerges in networks. This has awakened constituents to the realization that value constellations exist to coproduce value that extends beyond monetary measures to a broader set of elements. In response to this new reality, this paper conceives of cocreated value in a health service network as a patient's health and well-being. Based upon a typology of value-creating interaction styles, a conceptual framework of relationships among entities in a service network is developed. Subsequently, research propositions are developed regarding the structural and relationship properties of networks that advance theory of value cocreation. A health care service network is utilized to illustrate how relationships among network entities impact the health and well-being of patients. Implications for managers include ways to engage service network entities to enhance communication to foster a balanced, mutualistic relationship that optimizes cocreated value.

Research Category: **Service Networks and Value Chains**

This is a working paper that is currently under review.

(HULDA G. BLACK, ANDREW S. GALLAN)

UNLIMITED SHELF SPACE IN INTERNET SUPPLY CHAINS: TREASURE TROVE OR WASTELAND?*

Elliot Rabinovich, Arizona State University
Rajiv Sinha, Arizona State University
Timothy Laseter, University of Virginia

Internet retailing offers merchants limitless shelf space. This has led experts to highlight the existence of a "long tail" of offerings and assert that the future of online business is "selling less of more." However, it is difficult for retailers to offer a large scope of products without having to handle large amounts of returns from customers. This is because customers can and do get overwhelmed by product variety. We shed light on this issue through an assessment of data from sales and returns of almost 7,000 products in a product category. We find that retailers can benefit from expanding the inventories' scope to generate sales from a diversity of products. However, the success of this strategy will depend on managing recurrent execution and product failures. Furthermore, the gains that this strategy will bring to retailers will be bound by product attributes such as prices, size, and market longevity.

Research Categories: **Service Networks and Value Chains**

*Working paper

(ELLIOT RABINOVICH, RAJIV SINHA, TIMOTHY LASETER)

CUSTOMER RESPONSES TO CHANNEL MIGRATION STRATEGIES TOWARD THE E-CHANNEL (NEW)

Debra Trampe, University of Groningen
Umut Konuş, University of Amsterdam
Peter C. Verhoef, University of Groningen

Many firms stimulate customers to use the E-channel for services, which provokes various consumer responses to such limits on their freedom of choice. In a study on bank customers, we examine the extent of customer reactance in response to various E-channel migration strategies, the potential of incentive programs in mitigating customer reactance, as well as the moderating role of attitudinal loyalty. Finally, we address the mediating role of customer forgiveness. Our study documents that rewarding the use of the firm-preferred E-channel is more effective than punishing the retention of the incumbent channel, and that a punishment-based E-channel migration strategy causes similar reactance levels as forced migration does. Importantly, the mere act of forcing also creates reactance among those customers who have already been using the firm-preferred E-channel. In addition, our results reveal that highly loyal customers exhibit lower reactance than less loyal customers. By including customer forgiveness as a process measure we show that this partially occurs because highly loyal customers tend to be more forgiving toward the firm than less loyal customers.

Research Categories: **Service Branding and Selling**

(DEBRA TRAMPE, UMUT KONUŞ, PETER C. VERHOEF)

IT'S ALL RELATIVE: HOW CUSTOMER-PERCEIVED COMPETITIVE ADVANTAGE INFLUENCES REFERRAL INTENTIONS. MARKETING LETTERS (NEW)

Martin Mende, Florida State University
Scott A. Thompson, University of Georgia
Christian Coenen, Zurich University of Applied Sciences

Better understanding the mechanisms that influence customer intentions to spread positive word-of-mouth (WOM) is crucial to both marketing scholars and managers. This multi-method research contributes to marketing knowledge by revealing how a firm's customer-perceived competitive advantage (CPCA) influences positive WOM intentions. Analyses of (i) cross-sectional survey data on bank customers in Germany and (ii) experimental data on customers of car insurance companies in the US reveal two crucial insights. First, CPCA influences WOM intentions in both industries, over and above numerous established antecedents of customer loyalty (e.g., satisfaction, trust, perceived value). Second, this research demonstrates a robust and pervasive CPCA-by-satisfaction interaction effect, such that the influence of CPCA on WOM intentions increases as customer satisfaction decreases. The results show that customer-perceived competitive advantage plays an important role in shaping WOM intentions, especially among less satisfied customers. Theoretical and managerial implications of these findings are discussed.

Research Categories: **Service Branding and Selling**

(Martin Mende, Scott A. Thompson, Christian Coenen)

STRATEGIC BRAND MANAGEMENT: ARCHETYPES FOR MANAGING BRANDS THROUGH PARADOXES (NEW)

Claes Högström, Karlstad University
Anders Gustafsson, Karlstad University
Bård Tronvoll, Karlstad University

Although brands are acknowledged as significant assets in a firm's value creation and differentiation process, branding literature often describes opposing perspectives and contradictory demands. This article develops a framework of three strategic brand management archetypes that provide new insights into the complexity and often paradoxical ambiguity of branding. By combining an empirical qualitative study with extant brand management and relational exchange theory, the authors suggests that firms create, reinforce, switch, or allow certain brand management archetypes to coexist to optimize specific effects and manage paradoxes. From a managerial perspective, the article suggests that understanding strategic brand management and related paradoxes is fundamental for organizations to achieve desired effects with their value creation.

Research Categories: **Service Branding and Selling**

(CLAES HÖGSTRÖM, ANDERS GUSTAFSSON, BÅRD TRONVOLL)

REWARD REDEMPTION EFFECTS IN A LOYALTY PROGRAM WHEN CUSTOMERS CHOOSE HOW MUCH AND WHEN TO REDEEM (NEW)

Matilda Dorotic, BI Norwegian Business School
Peter C. Verhoef, University of Groningen
Dennis Fok, Erasmus University Rotterdam
Tammo H.A. Bijmolt, University of Groningen

The redemption of loyalty program (LP) rewards has an important impact on LP members' behavior, particularly on purchase behavior before and after redeeming a reward. However, little is known about the interplay between members' purchase and redemption behavior when members are not pressured with point expiration and they choose for themselves when and how much to redeem. In this context, the effects of redemption are not straightforward, as little additional effort is required from an LP member to obtain the reward. Analyzing the behavior of 3094 members in such an LP, we find that the mere decision to redeem a reward significantly enhances purchase behavior before and after the redemption event, even when members redeem just a fraction of their accumulated points. Conceptually, we refer to this enhancement as the redemption momentum, which is an alternative and novel explanation of the existence of pre-reward effects that do not depend on points-pressure. In addition to the overall impact of redemption on purchases, prior purchase behavior also enhances redemption decisions. Finally, we find a number of moderating effects on purchase and redemption behavior that derive from the length of LP membership, age, income and direct mailings. Our study's most important managerial implication is that firms should avoid imposing point expiry and/or binding thresholds in order to enhance members' purchase behavior.

Research Categories: **Service Branding and Selling**

(Matilda Dorotic, Peter C. Verhoef, Dennis Fok, Tammo HA Bijmolt)

THE EFFECT OF CUSTOMER INFORMATION DURING NEW PRODUCT DEVELOPMENT ON PROFITS FROM GOODS AND SERVICES (NEW)

Lars Witell, Karlstad University
Anders Gustafsson, Karlstad University
Michael D. Johnson, Cornell University

Purpose – This study aims to investigate how customer information obtained at different phases of a new product development (NPD) process influences profits from new offerings.

Design/methodology/approach – A survey was conducted in the context of NPD in goods and services. A unique database was constructed that merged key informant survey responses with financial data for 244 firms. This database was used to replicate and extend previous research by posing a number of hypotheses regarding the role of obtaining customer information in NPD.

Findings – The results show that obtaining customer information during NPD influences the profits from new offerings, which vary depending on the phase of the NPD process. The financial rewards from obtaining customer information for goods are highest in the early phases of the NPD process and decline in later phases. The financial rewards for services, on the other hand, are high in the early and late phases of the NPD process.

Research limitations/implications – The research is based on a survey combined with objective financial data, that is, a combination of different data sources. The research would have benefitted from longer data series and a higher response rate.

Originality/value – This study replicates and extends previous research by testing the role of obtaining customer information in both manufacturing and service firms by combining survey data with objective financial data.

Research Category: **Service Branding and Selling**

(Lars Witell, Anders Gustafsson, Michael D. Johnson)

THE EFFECT OF SEARCH CHANNEL ELIMINATION ON PURCHASE INCIDENCE, ORDER SIZE AND CHANNEL CHOICE (NEW)

Umut Konuş, Eindhoven University of Technology
Scott A. Neslin, Dartmouth College
Peter C. Verhoef, University of Groningen

This study investigates the impact of eliminating a search channel on purchase incidence, order size, channel choice and, ultimately, sales and profits. We analyze customer panel data from a large retailer over a five-year period. The retailer conducted a randomized field test in which the firm eliminated its catalog for half of the panel. We find that channel elimination decreases purchase incidence, especially for customers who, before the test, were heavy users of the telephone purchase channel that aligns with the catalog search channel. As expected, channel choice for purchases is shifted toward the internet and away from the telephone channel. Interestingly, order size per purchase increases. We investigate the impact of channel elimination on profits across different customer segments. We calculate a net positive impact because the savings from eliminating the catalog compensate for lower sales revenues.

Research Category: **Service Branding and Selling**

(UMUT KONUS, SCOTT A. NESLIN, PETER C. VERHOEF)

THE ROLE OF CONSUMER CONFIDENCE IN CREATING CUSTOMER LOYALTY (NEW)

Yi-Chun Ou, University of Groningen
Lisette de Vries, University of Groningen
Thorsten Wiesel, Westfälische Wilhelms–Universität Münster
Peter C. Verhoef, University of Groningen

How can firms retain customers during recessions? To answer this question, we investigate the moderating role of consumer confidence (CC) on the effects of three types of crucial customer loyalty strategies. These strategies are value equity (VE), brand equity (BE), and relationship equity (RE), collectively called customer equity drivers (CEDs). We build on economics and marketing theories to develop our hypotheses on the concerned moderating role. A meta-analysis is used to synthesize the multilevel results of 13 service industries and to test the hypotheses. In addition, we use several robustness checks to validate the findings of the meta-analysis. The results consistently show that CC partly influences the effects of CEDs on customer loyalty and this influence varies across industries. These findings suggest that managers in service industries should consider CC as an important criterion for effectively adjusting customer loyalty strategies to their specific situation. Specifically, during recessions, when CC is relatively low, VE is effective for retaining customers, but this is more apparent for noncontractual settings than for contractual settings. Also, BE is more effective but only for noncontractual firms.

Research Category: **Service Branding and Selling**

(Yi-Chun Ou, Lisette de Vries, Thorsten Wiesel, Peter C. Verhoef)

BRANDED CUSTOMER SERVICE: HOW ALIGNING FRONTLINE EMPLOYEE BEHAVIOR WITH THE BRAND PERSONALITY IMPACTS CUSTOMER-BASED BRAND EQUITY

Nancy J. Sirianni, Arizona State University
Mary Jo Bitner, Arizona State University
Stephen W. Brown, Arizona State University
Naomi Mandel, Arizona State University

We examine how service brand positioning and brand equity are impacted by personal interactions between employees and consumers through branded customer service, which refers to the strategic alignment of consumers' service experiences with brand promises.

In a series of experiments, we demonstrate that aligning employee behavior with the brand personality positively influences brand equity and we identify consumers' perceptions of brand authenticity as the underlying explanation. Results indicate that employees' brand-aligned behavior is most influential in shaping <u>unfamiliar</u> brands' equity when these brands perform <u>successfully</u>, and conversely, most influential in shaping <u>familiar</u> brands' equity when these brands <u>fail</u> consumers. We also find that the believability of employees' brand-aligned performances is important to consumers.

Our results have implications for the recruitment of frontline staff that credibly fit with the brand personality, as well as the design of internal marketing programs that can help brand managers strategically position service brands from the inside out.

Research Categories: **Service Branding and Selling**

Working Paper

(NANCY J. SIRIANNI, MARY JO BITNER, STEPHEN W. BROWN, NAOMI MANDEL)

BUILDING LONG TERM RELATIONSHIPS BETWEEN SERVICE ORGANIZATIONS AND CUSTOMERS

Ruth N. Bolton, Arizona State University
Ranjit M. Christopher, Arizona State University

Long term relationships must be managed so that they are beneficial to both the organization and its customers. Sometimes, as customers stay longer with a service organization, they may expect price discounts or better service – leading to increased costs to serve them and lower margins. Hence, customer equity may be increased by better managing individual customers' cash flows (through resource allocation decisions) or by altering the customer mix/portfolio to yield larger cash flows with the same degree of risk (Tarasi et al 2013). For example, the budget allocation between customer acquisition and retention can be optimized by analyzing the cash flow patterns of customers (Blattberg and Deighton 1996; Rust, Lemon, and Zeithaml 2004; Tarasi et al 2011).

Why do service managers and researchers study the length of the customer-organization relationship rather than studying (more broadly) relationship depth, breadth, strength or profitability? The key reason is that customer lifetime duration – and its inverse, customer churn or defection – is a significant and substantial problem for organizations in many service industries, including financial, health, utilities, telecommunications and publishing service sectors. Some service organizations face churn rates of 25-40%, implying that a firm's entire customer base can vanish within about five years unless these losses are offset by expensive customer acquisition efforts. Hence, there is intensive interest in how to predict and understand churn so that firms can better manage it (Neslin et al 2006b). We do not assume that a long relationship is always a more valuable relationship (to either party). However, when all else is equal, a long relationship is preferable to a short relationship. Moreover, as this chapter will discuss, managers sometimes find customer lifetime duration a useful surrogate when estimates of customer value are difficult to make and error-prone.

This chapter reviews and synthesizes prior work by considering four questions:

- What managerial and theoretical perspectives have enhanced our understanding of how to build long term relationships between service organizations and their customers?
- How should service researchers conceptualize and measure the duration of the relationship between a service organization and its customer?
- What are the antecedents of long term relationships between organizations and their customers?
- How is the duration of the relationship between an organization and a customer linked to financial outcomes?
- We highlight the contextual differences between business-to-business and business-to-consumer service relationship settings.

This paper will appear in Handbook on Research in Services Marketing, Roland T. Rust and Ming-Hui Huang (Editors), Edward Elgar Publishing Ltd., forthcoming (lead article).

Research Categories: **Service Branding and Selling**

(RUTH BOLTON, RANJIT M. CHRISTOPHER)

GETTING THE RIGHT PAYOFF FROM CUSTOMER PENALTY FEES

Stephen S. Tax, University of Victoria
Young "Sally" Kim, Shenandoah University
Sudhir Nair, University of Victoria

Over the past 20 years, a convergence has occurred regarding the importance of building relationships with valuable customers as the cornerstone of service strategy. More recently, firms have adopted penalties and fees as a central means of growing revenue. This has caused friction with the programs targeted at improving customer relations, and increased defections and spurred government regulation. In this article, we collect and analyze data to identify the aspects of penalties that generate customer dissatisfaction and negative emotional and behavioral responses. We offer guidelines for the implementation of penalties that balance the goals of revenue generation and customer loyalty. These include: preventing unintentional failures, managing the perceived magnitude of penalties, effectively educating customers on the offer, ensuring that penalties are clear and transparent, linking penalty decisions to responsibility for the transgression, taking into account narrowly missing avoiding a penalty, and consideration of the customer relationship and employee empowerment.

Research Categories: **Service Branding and Selling**

(STEPHEN TAX, YOUNG "SALLY" KIM, SUDHIR NAIR)

GROWING EXISTING CUSTOMERS' REVENUE STREAMS THROUGH CUSTOMER REFERRAL PROGRAMS

Ina Garnefeld, University of Wuppertal
Andreas Eggert, University of Paderborn
Sabrina V. Helm, University of Arizona
Stephen S. Tax, University of Victoria

Customer referral programs are an effective means of customer acquisition. By assessing a large-scale customer data set from a global cellular telecommunications provider, the authors show that participation in a referral program also increases existing customers' loyalty. In a field experiment, recommenders' defection rates fell from 19% to 7% within a year, and their average monthly revenue grew by 11.4% compared with a matched control group. A negative interaction between referral program participation and customer tenure reveals that the loyalty effect of voicing a recommendation is particularly pronounced for newer customer-firm relationships. A laboratory experiment further demonstrates that referral programs with larger rewards strengthen attitudinal and behavioral loyalty, whereas smaller rewards affect only the behavioral dimension.

Research Categories: **Service Branding and Selling**

(INA GARNEFELD, ANDREAS EGGERT, SABRINA HELM, STEPHEN S. TAX)

RELATIONSHIPS TAKE TWO: CUSTOMER ATTACHMENT STYLES' INFLUENCE ON CONSUMERS' DESIRE FOR CLOSE RELATIONSHIPS AND LOYALTY TO THE FIRM

Martin Mende, University of Kentucky
Ruth N. Bolton, Marketing Science Institute
Mary Jo Bitner, Arizona State University

Many firms invest heavily in customer relationship management to create close customer bonds. However, not all consumers welcome close relationships. We develop a framework that predicts why consumers differentially prefer close relationships with a firm and how they respond to closeness-enhancing activities.

Our framework – tested with data from the insurance industry - links customers' attachment styles with (a) customers' desire for closeness and (b) loyalty.

Illustrative insights:
- Customer attachment *anxiety* is positively linked and attachment *avoidance* is negatively linked with the preference for a close relationship.
- Customers of low attachment anxiety and avoidance indicate the highest loyalty potential, whereas avoidant customers signal the lowest loyalty.
- Managers can focus cross-selling efforts on customers of low attachment anxiety and avoidance to leverage repurchase likelihood.
- An attachment-informed manager might use high levels of attachment avoidance as early indicators of loyalty-averse customers.

The results provide managers with novel customer segmentation criteria and actionable guidelines that can help the firm tailor relationship marketing activities.

Research Categories: **Service Branding and Selling**

(Martin Mende, Ruth N. Bolton, Mary Jo Bitner)

THE COORDINATION STRATEGIES OF HIGH-PERFORMING SALESPEOPLE: INTERNAL WORKING RELATIONSHIPS THAT DRIVE SUCCESS*

Michelle D. Steward, Wake Forest University
Beth A. Walker, Arizona State University
Michael D. Hutt, Arizona State University
Ajith Kumar, Arizona State University

This article explores the process that salespeople follow in coordinating the activities of ad hoc team members during high-opportunity customer engagements in the business market. Depth interviews were conducted with salespeople and a survey was administered to sales managers from a *Fortune*-100, high-technology firm identify the processes involved in the coordination of expertise.

The study reveals that higher-performing salespeople are more likely to (1) consider relational as well as technical skills when matching team members to customer requirements, (2) attract their preferred experts to the team, and (3) define the appropriate time in the sales cycle to initiate contact with the customer and deploy the team to the customer organization. Key implications for account management are detailed.

Research Category: **Service Branding and Selling**

(Michelle D. Steward, Beth A. Walker, Michael D. Hutt, Ajith Kumar)

UNDERSTANDING UNETHICAL RETAIL DISPOSITION PRACTICE AND RESTRAINTS FROM THE CONSUMER PERSPECTIVE*

Mark S. Rosenbaum, Northern Illinois University
Ronald Kuntze, University of Tampa,
Barbara Ross-Wooldridge, University of Texas-Tyler

This research expands marketing's knowledge regarding unethical retail disposition (URD). URD is a type of consumer fraud, whereby consumers purchase an item of merchandise with the intent of using it and returning it to a retailer. The authors develop a framework illustrating why consumers engage in either URD participation or restraint; next, they demonstrate support for the framework. The authors support and augment previous URD research by reporting that URD offenders employ eight neutralization techniques to remedy personal guilt associated with committing the fraudulent behavior. This research also takes a novel approach by illustrating that consumers describe six motivations underlying URD restraint. Most concerning for retailers is that four of the six reasons for restraint are tenuous. Thus, consumers who refrain from URD may be easily swayed to participate in this illicit behavior. The authors posit that URD may represent a means by which consumers express disdain and mistrust for retailers.

Research Category: **Service Branding and Selling**

(Mark S. Rosenbaum, Ronald Kuntze, Barbara Ross-Wooldridge)

VALUE PROPOSITIONS

Jennifer Chandler, California State University-Fullerton
Robert Lusch, University of Arizona

The proposed framework sheds light on the fundamental role of value propositions in many-to-many service environments. The authors explore how and why market actors (consumers, firms and stakeholders) engage in service exchanges. Building on service-dominant logic and sociology, the authors theoretically link three service constructs: value propositions as invitations to engage, engagement as alignment of connections and dispositions, and service exchange as multi-actor engagement. The authors assert that actors engage in service exchanges to realize the benefits of aligning their past, present, and future connections and dispositions.

Research Category: **Service Branding and Selling**

This article is forthcoming in *MIS Quaterly*.

(JENNIFER CHANDLER, ROBERT LUSCH)

WEARING COMMUNITY: WHY CUSTOMERS PURCHASE A SERVICE FIRM'S LOGO PRODUTS*

Mark S. Rosenbaum, Northern Illinois University
Drew Martin, University of Hawaii, Hilo

The purpose of this research is to investigate customer purchase of a service organization's logo/branded merchandise. The article employs three separate studies; two are conducted with customers of Curves, the world's largest fitness franchise, and the other is conducted at a gym. Two empirical studies test a proposed mediation model. The third study shows the social influences that encourage customers to purchase a firm's logo products. The results show that a customer's integration into a service-based community encourages him or her to purchase the firm's logo merchandise. In addition, a customer's ability to identify with the firm mediates this relationship. The immersion of customers' self- and social identities in a firm emerges as a factor to enhancing their appreciation of the firm by purchasing financially lucrative logo consumables. Managers should understand that a key to selling organizational logo/branded merchandise is to encourage customers to form relationships with other customers and employees.

Research Category: **Service Branding and Selling**

(MARK S. ROSENBAUM, DREW MARTIN)

WHY ATTACHMENT SECURITY MATTERS: HOW CUSTOMERS' ATTACHMENT STYLES INFLUENCE THEIR RELATIONSHIPS WITH SERVICE FIRMS AND SERVICE EMPLOYEES

Ruth N. Bolton, Marketing Science Institute
Martin Mende, University of Kentucky

Relational orientations vary across customers, so that marketing activities and service programs should be customized to individual customers or market segments. However, little is known about the underlying processes that influence how customers bond with a service firm and its employees. This article explains customer-firm and customer-employee relationships based on attachment theory. It provides theoretical and empirical evidence that customers with either high attachment assurance, attachment promotion, or both perceive both service firm and service employee more positively – in terms of satisfaction, trust and affective commitment – than customers with lower levels on these dimensions. However, the service firm and service employees are separate attachment targets, so this study also tests whether customers have a similar propensity to bond with both. It finds that insecurely attached customers who find the interpersonal bond with an employee deficient, compensate for this deficiency by being more likely to bond with the service firm. Companies that measure customer attachment styles can better segment markets, manage customer relationships and allocate resources. For example, customers with high levels of attachment assurance and high levels of attachment promotion toward the firm should be receptive to relationship building and are candidates for social service programs, whereas customers with low levels of attachment promotion are likely to be more responsive to financial programs.

Research Category: **Service Branding and Selling**

(RUTH BOLTON, MARTIN MENDE)

HEURISTICS AND RESOURCE DEPLETION: EYE-TRACKING CUSTOMERS' IN SITU GAZE BEHAVIOR IN THE FIELD (NEW)

Erik Wästlund, Karlstad University
Tobias Otterbring, Karlstad University
Anders Gustafsson, Karlstad University
Poja Shams, Karlstad University

When we visit a retail outlet, we go there to complete some type of shopping goal. These goals may be very specific and precisely planned prior to entering the store, or more abstract, and something we think of on the spur of the moment. The stores may display tens of thousands of different products, making it difficult to achieve the shopping goal in a rational manner. As a result, we use different types of heuristics to meet our shopping goals.

In this study, we investigate how a customer's visual attention is influenced by their shopping goal, based on the results of three field experiments in three different contexts—a gas station, a sports store, and a grocery store. Firstly we establish that differences do exist in viewing behavior based on whether shopping goals are planned or unplanned. A more complex and unplanned shopping goal leads to increased observations of in store stimulus. We then study whether or not the complexity of the first shopping goal also influences the viewing behavior of the next shopping goal, independently of the characteristics of the second goal. The findings confirm that complex decision heuristics deplete cognitive recourse. This finding results in diminished visual attention during subsequent choices. In turn, this has implications for a customer's shopping behavior.

Research Category: **Service Experience and Co-creation**

(ERIK WÄSTLUND, TOBIAS OTTERBRING, ANDERS GUSTAFSSON, POJA SHAMS)

LOSSES LOOM LONGER THAN GAINS: MODELING THE IMPACT OF SERVICE CRISES ON PERCEIVED SERVICE QUALITY OVER TIME (NEW)

Maarten J. Gijsenberg, University of Groningen
Harald J. van Heerde, Massey University
Peter C. Verhoef, University of Groningen

While service quality is an important determinant of customer satisfaction, firms are sometimes confronted with extreme service failures that have a profound impact on customers. These problems occur across service industries, ranging from severe internet outages to strong delays for airlines or trains. A key question that has not been addressed in the literature is: how do service crises impact customer satisfaction over time? To address this question, we introduce a Double-Asymmetric Structural VAR model. It captures not only the short- and long-term effects of service performance on customer satisfaction, but also the differential effects of service crises versus service restoration. We analyze a unique dataset from a major European railway company, spanning seven years of monthly service performance and satisfaction observations. During this period, severe winter weather caused dramatic service crises. We find that losses not only loom larger than gains in the short run, but they also have stronger long run effects on satisfaction than gains. The impact of a crisis also strongly depends on the prior momentum in the service performance.

Research Category: **Service Experience and Co-creation**

(MAARTEN J. GIJSENBERG, HARALD J. VAN HEERDE, PETER C. VERHOEF)

VISION (IM)POSSIBLE? THE EFFECTS OF IN-STORE SIGNAGE ON CUSTOMERS' VISUAL ATTENTION (NEW)

Tobias Otterbring, Karlstad University
Erik Wästlund, Karlstad University
Anders Gustafsson, Karlstad University
Poja Shams, Karlstad University

We used two eye-tracking field experiments to investigate the extent to which in-store signage is used during navigation and decision making, and how the viewing of signage influences customers' visual attention and choice behavior. One hundred and seventy-five customers at a grocery store were exposed to signage stimuli while carrying out predefined shopping tasks. Experiment 1 shows that attention toward signage is affected by customers' levels of store familiarity and in-store search stage (navigation vs. decision making). Experiment 2 demonstrates that signage has a considerable impact on the direction and magnitude of customers' visual attention during decision making.

Research Category: **Service Experience and Co-creation**

(Tobias Otterbring, Erik Wästlund, Anders Gustafsson, Poja Shams)

A PROCESS THEORY OF CUSTOMER DEFECTION IN BUSINESS-TO-BUSINESS RELATIONSHIPS

Thomas Hollmann, North Carolina State University
Mary Jo Bitner, Arizona State University
Cheryl Burke Jarvis, Southern Illinois University

The results of this study will help marketing managers understand how their customers make defection decisions, providing them with a framework for managing customer relationships more successfully. Among the findings relevant for managers, the study illustrates how important it is for the supplier company to successfully meet both individual-level and organizational-level goals, values, and practices. The process and threshold perspective used here also demonstrates the importance of taking a more long-term perspective on defection. The results show that defection decisions are made over many months or even years, in which defection energy builds as a result of many events – often ones the vendor would consider small or overlook entirely – and that the decision is rarely the result of a single focal failure at the end of the relationship. This research also demonstrates that defection decisions can be influenced by events outside the core good/service delivery interactions that may grab the lion's share of the manager's attention.

Research Category: **Service Experience and Co-creation**

Working Paper

(Thomas Hollmann, Mary Jo Bitner, Cheryl Burke Jarvis)

CAPITALIZING ON KUDOS AND CRITICISM: THE INFLUENCE OF SOLICITING FEEDBACK AND COMPANY ACKNOWLEDGMENT ON CUSTOMER ATTITUDES AND REPATRONAGE BEHAVIOR

Sterling A. Bone, Brigham Young University
Katherine N. Lemon, Boston College
Katie A. Liljenquist, Brigham Young University R. Bruce Money, Brigham Young University
Kristen B. DeTienne, Brigham Young University

Most research investigating effects of customer voice on customer loyalty focuses on complaints rather than compliments. In three experiments, the effect of soliciting and acknowledging compliments and complaints on customer attitudes and behavior is investigated. Results reveal that customers asked for feedback view their service encounters more favorably than those not asked. Increased customer repatronage is shown in a 2-year field study of a large U.S. portrait studio chain for customers solicited for compliments. Soliciting feedback affects both immediate attitudes and elicits expectations for acknowledgment that bear heavily on whether companies maintain benefits of soliciting customer opinions; failure to acknowledge customer feedback (complaints and compliments) is detrimental. Customers must feel that their feedback, both positive and negative, is valued. Managers should implement processes to collect and acknowledge positive and negative feedback. We advocate a feedback management system that goes beyond recovering service failures to proactively cultivating positive customer attitudes.

Research Category: **Service Experience and Co-creation**

(STERLING A. BONE, KATHERINE N. LEMON, KATIE A. LILJENQUIST, R. BRUCE MONEY, KRISTEN B. DETIENNE)

COMPARING THE EFFECT OF STORE REMODELING ON NEW AND EXISTING CUSTOMERS

Tracey Dagger, Monash University
Peter J. Danaher, University of Melbourne

Although retailers invest millions of dollars in redesigning, refreshing, and remodeling their stores, it is unclear that such large investments are worthwhile. Prior research indicates that remodeling has only a short-term effect. However, a hitherto unexplored area is its effect on those who visit the store for the first time after it is remodeled (new customers) versus those who had visited before the remodeling (existing customers). This study contrasts the effect of store remodeling on new and existing customers in two field experiments with stores that underwent a major remodeling. Treatment and control stores are used in both experiments. We measure sales before and after the remodeling for new and existing customers; and in one store, we also measure customers' psychological responses. In both cases, sales increase after the remodeling effort. However, sales for new customers are significantly higher than for existing customers after the remodel, and this difference persists for a year. Higher sales to new customers are mostly due to more new customers being drawn to the remodeled store, their higher spend per visit, and their subsequent increased visit frequency.

Research Category: **Service Experience and Co-creation**

(TRACEY DAGGER, PETER J. DANAHER)

COMPETING WITH QUALITY SERVICE IN GOOD TIMES AND BAD*

Leonard L. Berry, Texas A&M University

The economic storm experienced globally is the perfect time for companies to recommit to improving service quality. Quality service creates value for customers, and superior value – the best way to compete at any time – is the *only* way to compete during a recession. This article discusses and dissects the pillars of competing with service excellence: great employees, reliable service, respect and pleasant surprises, and convenience.

Research Category: **Service Experience and Co-creation**

(LEONARD L. BERRY)

CO-PRODUCTION: A FEAR-WEATHER SYNDROME?

Tor W. Andreassen, Karlstad University
Anders Gustafsson, Karlstad University
Heiko Gebauer, University of St.Gallen

An emerging perspective in marketing considers customers as actively involved in the production, delivery and consumption of services. While there are different terms for this – co-production, co-creation, prosumption – the underlying assumption is that customers are able and willing to be involved in the creation of value. In this paper we challenge this idea to some degree. Building on Prahalad's (2004) five phases of co-production (customer engagement, self- services, customer involvement, problem solving and co-designing), we investigate the association of these five phases on value co-production. We find that customers want to co-produce in all but one of the elements; problem solving. In other words, dissatisfied customers do not want to be involved in helping a company to find a solution to their problem. This finding is robust among high and low experienced users who neither of this group want to be involved in problem solving. From this we conclude that co-production is a fear-weather syndrome, i.e. only when the service functions as expected are customers willing to co-produce.

Research Category: **Service Experience and Co-creation**

Research in progress

(Tor W. Andreassen, Anders Gustafsson, Heiko Gebauer)

CUSTOMER POSITIVITY AND PARTICIPATION IN SERVICES: AN EMPIRICAL TEST IN A HEALTH CARE CONTEXT

Andrew S. Gallan, Case Western Reserve University
Cheryl Burke Jarvis, Southern Illinois University
Stephen W. Brown, Arizona State University
Mary Jo Bitner, Arizona State University

Many service interactions require customers to actively participate, yet customers often do not participate at levels that optimize their outcomes, particularly in health care. To gain insight into how customers shape a service experience with highly uncertain outcomes, we construct a model on the broaden-and-build theory of positive emotions. The model is used to empirically assess how situation-specific emotions and customer participation during a health care service experience affect perceptions of the service provider. The model is tested using data from 190 medical clinic customers. Consistent with theory, results reveal that as customers' relative affect levels become more positive, levels of participation increase as well. In turn, higher levels of positivity and participation improve customer perceptions of the quality of the service provider and satisfaction with the co-produced service experience. Implications of this research focus managers on designing services to help clients manage their emotions in ways that facilitate positivity and participation and thus improve service perceptions.

Research Category: **Service Experience and Co-creation**

Reference: Gallan, Andrew S., Cheryl Burke Jarvis, Stephen W. Brown, and Mary Jo Bitner (2013), "Customer Positivity and Participation in Services: An Empirical Test in a Health Care Context," *The Journal of Academy of Marketing Science*, 41 (3), pp. 338-356.

(ANDREW S. GALLAN, CHERYL BURKE JARVIS, STEPHEN W. BROWN, MARY JO BITNER)

DRIVERS OF CUSTOMERS' SERVICE EXPERIENCES, A STUDY IN THE RESTAURANT INDUSTRY*

Ute Walter, Örebro University
Bo Edvardsson, Karlstad University
Åsa Öström, Örebro University

This article identifies and describes the frequent drivers of favourable and unfavourable customer experiences as described by customers in their own words. The frequent drivers are social interactions, the core service and the physical context. Furthermore the dynamics of resource interactions in customer experiences are shown, with the customer participating as an actor involved when the service is co-created through interactions. The findings are illustrated by extracts from customer narratives and show how experiences come up and that experiences are processes occurring in a social and physical environment when people do things together. The study context is the restaurant setting.

For managers the results suggest that great effort needs to be put into understanding the process of customer experiences and the various interactions involved, especially social interactions and the crucial roles of management, contact employees and customers supporting these interactions.

Research Category: **Service Experience and Co-creation**

(Åsa Öström, Bo Edvardsson, Ute Walter)

DOING IT THE HARD WAY: LOW CONTROL DRIVES PREFERENCES FOR HIGH EFFORT PRODUCTS AND SERVICES

Keisha Cutright, University of Pennsylvania
Adriana Samper, Arizona State University

Consumers often partner with products or services as they strive to make themselves skinnier, smarter, cleaner and healthier. But, exactly what role should a product or service play in delivering these outcomes? Should it require little effort and promise to do the hard work for the consumer? Or, should it require that the consumer do the hard work in order to ultimately achieve the same outcomes? We suggest that, when individuals face low feelings of control, they surprisingly prefer products and services that require higher effort from them. We test this hypothesis across seven studies, manipulating feelings of control and assessing responses to various products and services across health, academics and athletics. We find that the desire to exert increased effort when control is low is driven by an anticipated and actual sense of empowerment gained by working hard.

Research Category: **Service Experience and Co-creation**

Keisha Cutright, University of Pennsylvania; Adriana Samper, Arizona State University (Working paper)

(KEISHA CUTRIGHT, ADRIANA SAMPER)

EXPANDING UNDERSTANDING OF SERVICE EXCHANGE AND VALUE CO-CREATION: A SOCIAL CONSTRUCTION APPROACH

Bo Edvardsson, Karlstad University
Bård Tronvoll, Hedmark University College
Thorsten Gruber, The University of Manchester

According to service-dominant logic (S-D logic), all providers are service providers, and service is the fundamental basis of exchange. Value is co-created with customers and assessed on the basis of value-in-context. However, the extensive literature on S-D logic could benefit from paying explicit attention to the fact that both service exchange and value co-creation are influenced by social forces. The aim of this study is to expand understanding of service exchange and value co-creation by complementing these central aspects of S-D logic with key concepts from social construction theories (social structures, social systems, roles, positions, interactions, and reproduction of social structures). The study develops and describes a new framework for understanding how the concepts of service exchange and value co-creation are affected by recognizing that they are embedded in social systems. The study contends that value should be understood as value-in-social-context and that value is a social construction. Value co-creation is shaped by social forces, is reproduced in social structures, and can be asymmetric for the actors involved. Service exchanges are dynamic, and actors learn and change their roles within dynamic service systems.

Research Category: **Service Experience and Co-creation**

(Bo Edvardsson, Bård Tronvoll, Thorsten Gruber)

HEALTH CARE CUSTOMER VALUE CO-CREATION PRACTICE STYLES

Janet R. McColl-Kennedy, University of Queensland
Stephen L. Vargo, University of Hawai'i
Tracey Dagger, Monash University
Jillian C. Sweeney, University of Western Australia
Yasmin van Kasteren, University of Queensland

This article explores in-depth what health care customers actually do when they co-create value. Combining previously published research with data collected from depth interviews, field observation and focus groups, the authors identify distinct styles of health care customer value co-creation practice. Importantly, we show how customers can contribute to their own value creation through their own (self) activities in managing their health care. Building on past work in service-dominant (S-D) logic, Consumer Culture Theory and social practice theory, we identify "roles", "activities" and "interactions" that underlie customer co-creation of value in health care. We uncover five groupings of customer value co-creation practices yielding a typology of practice styles and link these to quality of life. The practice styles are: "Team Management", "Insular Controlling", "Partnering", "Pragmatic Adapting" and "Passive Compliance". Two in particular, "Team Management" and "Partnering", should be encouraged by managers as they tend to be associated with higher quality of life. The authors provide a health care Customer Value Co-creation Practice Styles (CVCPS) typology. The usefulness of the typology is demonstrated by showing links to quality of life and its potential application to other health care settings.

HOW CUSTOMERS REACT TO SERVICE UNFAIRNESS? MEDIATING ROLES OF MALICIOUS AND BENIGN ENVY ACROSS INTERPERSONAL SIMILARITIES

Kimmy Wa Chan, Hong Kong Polytechnic University
Chi Kin (Bennett) Yim, University of Hong Kong

Relationship marketing advises firms to prioritize customers, assigning them differentiated treatment. Yet offering preferential treatment to selected customers is controversial, especially with regard to the potential reactions of nonrecipients. This study employs social comparison and perceived injustice theories to explicate the process by which nonrecipients react to perceived service unfairness when they do not get the same preferential treatment by spreading negative word of mouth, refusing to cooperate with service employees, and adjusting their level of loyalty. The results of two laboratory experiments and a survey study in the clothing retail sector confirm both mediating roles of malicious and benign envy and moderating effects of customer–customer and customer–employee similarities. Offering differential treatments to customers is more beneficial if firms can help nonrecipients feel benign envy rather than malicious envy. In addition, service firms with a homogenous customer base and high customer–employee similarity need to take particular care before instituting a customer prioritization strategy.

Research Category: **Service Experience and Co-Creation**

This is a working paper.

(Kimmy Wa Chan, Chi Kin (Bennett) Yim)

IS CUSTOMER PARTICIPATION IN VALUE CREATION A DOUBLE-EDGED SWORD? EVIDENCE FROM PROFESSIONAL FINANCIAL SERVICES ACROSS CULTURES*

Kimmy Wa Chan, Hong Kong Polytechnic University
Chi Kin (Bennett) Yim, University of Hong Kong
Simon S.K. Lam, University of Hong Kong

Emergent perspectives in marketing highlight new opportunities for co-opting customers as a means to define and cocreate value through their participation. This study examines how customer participation (CP) drives value creation and satisfaction for both customers and employees with different cultural value orientations in the context of professional financial services. Results from analyzing data collected from 349 pairs of customers and service employees in two national groups (Hong Kong and the United States) suggest that promoting CP could be a double-edged sword for firms: CP enhances customers' economic value attainment and strengthens the relational bond, but it also increases employees' job stress and hampers their job satisfaction. Moreover, the effects of CP on value creation depend on the cultural values; this result implies that arranging customers and service employees with "matched" cultural value orientations could facilitate the creation of value through CP.

Research Category: **Service Experience and Co-creation**

(KIMMY WA CHAN, CHI KIN (BENNETT) YIM, SIMON S.K. LAM)

PROFITING FROM SERVICE FAILURE AND RECOVERY

Michael J. Howley, Jr., Drexel University
Cheryl Burke Jarvis, Southern Illinois University
Stephen W. Brown, Arizona State University
James Ward, Arizona State University

Studies have investigated the effect of customer-firm identification on customer loyalty, but little work investigates how service failures can disrupt this bond, how such disruptions can be amended and the resulting financial consequences for the firm.

This study addresses the following questions. First, do service failures adversely impact customer self-identities? Second, what types of failures impact what aspects of identity? Third, what (if any) are the financial consequences of identity failures and corresponding recoveries? Our data comes from a survey of a large sample of respondents who reported actual service failures and experienced later recoveries. Moreover, we relate their perceptions to financial outcome data supplied by access to longitudinal transactional data for the same customers.

This research contributes in several ways. We develop a theory of how service failures negatively impact customer identity enhancement goals. We also provide managers with an empirical demonstration of the impact of specific identity-focused service recoveries on actual customer profitability.

Research Category: **Service Experience and Co-creation**

(MICHAEL J. HOWLEY, JR., CHERYL BURKE JARVIS, STEPHEN W. BROWN, JAMES WARD)

SELECTIVE HALO EFFECTS ARISING FROM IMPROVING THE INTERPERSONAL SKILLS OF FRONTLINE EMPLOYEES

Tracey Dagger, Monash University
Peter Danaher, Melbourne Business School
Jillian C. Sweeney, University of Western Australia
Janet R. McColl-Kennedy, University of Queensland

Although frontline customer service employees play a vital role in many firms their part in service delivery is often underappreciated. The interaction between frontline employees and customers creates an impression of what is to come in the service experience. A key question is whether this interaction spills over to other unrelated aspects of the business. In this study we conduct a quasi-experiment across two medical clinics, one of which had its frontline employees trained to improve their interpersonal skills. We find that not only does the training create positive perceptions of the service provided by frontline employees, but perceptions of service quality attributes not related to these employees also increase. That is, customer perceptions of the interpersonal skills of frontline employees "spill over" to other service quality attributes. However, this spillover effect does not impact all service attributes uniformly; rather, it is restricted to only credence attributes which customers find difficult to evaluate. We term this a "selective halo effect." This finding demonstrates that customer perceptions of the interpersonal skills of frontline employees extend well beyond the range in which they perform their expected duties. Our paper builds on attribute evaluability theory and information economic theory by demonstrating the existence of a selective halo effect. Further, we develop a classification system that managers can use to predict which attributes are most likely to be influenced by a selective halo effect. We encourage managers to think of frontline employees as "barometers of the business" and consequently to invest in continued training for these key personnel.

Research Category: **Service Experience and Co-Creation**

Dagger,Tracey S. Danaher Peter J., Sweeney, Jillian. & McColl-Kennedy, Janet. (2013). "Selective Halo Effects Arising from Improving the Interpersonal Skills of Frontline Employees", *Journal of Service Research*, 16, 488-502.

SMALL DETAILS THAT MAKE BIG DIFFERENCES: A RADICAL APPROACH TO CONSUMPTION EXPERIENCE AS A FIRM'S DIFFERENTIATING STRATEGY

Ruth N. Bolton, Arizona State University
Anders Gustafsson, Karlstad University and BI – Norwegian Business School
Janet R. McColl-Kennedy, The University of Queensland
Nancy J. Sirianni, Northeastern University
David K. Tse, Hong Kong University

Service organizations and marketers have focused too much of their energy on their core service's performance and too little emphasis on designing a customer journey that enhances the entire customer experience. There is nothing wrong with firms seeking continuous improvement in service quality and customer satisfaction. These efforts are needed for firms to be competitive in the marketplace. The problem occurs when performance levels and service offerings become too similar within an industry, so that price is the only competitive weapon that remains. We argue that in order to break this deadlock, companies need to focus on the small details that make big differences to customers.

The paper builds on interviews with executives in successful service organizations. It analyzes differentiation strategies in diverse service organizations across consumption contexts, nations and cultures around the world. We argue for radical approaches to help service organizations truly understand customers and provide service experiences that engage and delight them. We argue that the new challenge for marketing is to help companies find and implement these small details to make a large impact on the overall customer experience.

In order to truly understand the customer experience, we need a holistic view of all interactions customers have with a company. We need to understand the customer-firm interactions at all touch points, that is, during search, purchase, consumption and post-consumption. Customer experience involves the customers' cognitive, affective, emotional, social and sensory responses to the firm. The originality of this research lies in our focus on the small details that make a difference to customers during the service process rather than in the final outcome of the service performance.

THE EFFECT OF UTILITARIAN, HEDONIC, AND ECONOMIC VALUE IN SELF-PRODUCTION VERSUS CO-PRODUCTION DECISIONS

Thomas Hollmann, North Carolina State University

This study investigates the moderating role of relationship age on the relationship between customer satisfaction and customer defection behavior in business-to-business relationships. In the context of a business financial service provider, we show that the link between satisfaction and defection follows different functional forms for short-term, versus medium-term, versus long-term clients. For short-term clients, we find a linear relationship, i.e. higher levels of satisfaction protect against defection. For medium-term clients, we find no relationship between satisfaction and defection. For long-term clients, we find a quadratic, inverted U-shape relationship between satisfaction and defection. As a result, long-term clients at a mid-level of satisfaction are at the highest risk of defection. We discuss implications for research and practitioners and suggest several avenues for future research.

Research Category: **Service Experience and Co-creation**

Working Paper

(THOMAS HOLLMANN)

THE SERVICE DELIVERY NETWORK (SDN): A CUSTOMER-CENTRIC PERSPECTIVE OF THE CUSTOMER JOURNEY

Stephen S. Tax, University of Victoria
David McCuthcheon, University of Victoria
Ian Wilkinson, University of Sydney

In this article, we introduce the concept of the service delivery network (SDN) defined as two or more organizations that, in the eyes of the customer, are responsible for the provision of a connected overall service experience. This responds to calls for frameworks recognizing that dyadic service encounters are embedded in the series of experiences customers have with complementary providers as part of the journey to achieve their desired goals. Adopting an SDN perspective presents a dramatically different set of challenges for managers and provides research opportunities challenging the current view of established service concepts. Managers must recognize that to better serve the customer they need to understand the role that they play in the customer-defined service journey and be prepared to coordinate their activities with complementary providers. Participating in helping build and manage the SDN for the customer, or understanding how they fit into customer's self-designed SDN, becomes a central challenge often requiring firms to develop a new set of capabilities.

Research Category: **Service Experience and Co-creation**

(STEPHEN TAX, DAVID MCCUTHCHEON, IAN WILKINSON)

THE SERVICE RECOVERY PARADOX: TRUE BUT OVERRATED?

Stefan Michel, IMD Switzerland
Matthew L. Meuter, California State University, Chico

This article explores the concept of a service recovery paradox—where customers are more satisfied after a service failure and recovery than they are after an adequately delivered service. The study was conducted in a banking context with over 11,000 customer interviews based on actual customer encounters with the bank.

The authors establish that the service recovery paradox is in fact real. More importantly the magnitude and frequency of a service recovery paradox is assessed and we conclude that they are rare events and the impact is small, but significant. Although reliable, error free service delivery is critical; the study highlights the valuable contribution of a strong service recovery program.

Research Category: **Service Experience and Co-creation**

(STEFAN MICHEL, MATTHEW L. MEUTER)

TOWARD A THEORY OF REPEATED PURCHASE DRIVERS CONSUMER SERVICES*

Michael Paul, Bauhaus-University of Weimar
Thorsten Hennig-Thurau, Bauhaus-University of Weimar
Dwayne D. Gremler, Bowling Green State University
Kevin P. Gwinner, Kansas State University
Caroline Wiertz, City University

The marketing discipline's knowledge about the drivers of service customers' repeat purchase behavior is highly fragmented. This research attempts to overcome that fragmented state of knowledge by making major advances toward a theory of repeat purchase drivers for consumer services. Drawing on means–end theory, the authors develop a hierarchical classification scheme that organizes repeat purchase drivers into an integrative and comprehensive framework. They then identify drivers on the basis of 188 face-to-face laddering interviews in two countries (USA and Germany) and assess the drivers' importance and interrelations through a national probability sample survey of 618 service customers. In addition to presenting an exhaustive and coherent set of hierarchical repeat purchase drivers, the authors provide theoretical explanations for how and why drivers relate to one another and to repeat purchase behavior. The framework also provides companies with specific information about how to manage long-term customer relationships successfully.

Research Category: **Service Experience and Co-creation**

(MICHAEL PAUL, THORSTEN HENNIG-THURAU, DWAYNE D. GREMLER, KEVIN P. GWINNER, CAROLINE WIERTZ)

UNDERSTANDING PARTICIPATION IN COMPANY SOCIAL NETWORKS

Carla Martins, University of Porto
Lia Patrício, University of Porto

Companies have increasingly participated in social networks, but research on how to create value in this new context is still scarce. This article contributes to better understand company social networks (CSNs), defined as people connected to a company or brand through a social networking site. This research involved an exploratory study of the page maintained by a large retailer for six months, followed by a qualitative study with members of the CSN. The results highlight differences between CSNs and other types of online communities. Members rely on the company to help them achieve their goals; few count on their CSN peers, with whom they maintain weak ties. Unlike brand communities, most members are not enthusiasts but instead engage in a pragmatic relationship with the brand. Study results show that CSNs can create value for both the host company and its members, but active management is necessary to unlock that potential. The implications for CSN management include strategies to foster participation and increase value for companies and members.

(CARLA MARTINS, LIA PATRÍCIO)

UNDERSTANDING VALUE CO-CREATION IN COMPLEX SERVICES WITH MANY ACTORS

Nelson Pinho, University of Porto
Gabriela Beirão, University of Porto
Lia Patrício, University of Porto
Raymond P. Fisk, Texas State University

Service research has traditionally focused on dyadic relationships between customer and service provider, but the service environment has become more complex. This paper presents a qualitative study of value co-creation from the perspective of multiple stakeholders in complex networks, in the context of the Portuguese national health record. Study results show that for patients, physicians, nurses and pharmacists in this complex setting, traditional service quality dimensions such as ease of use and reliability are still important, but new dimensions arise related to how the service enables value creation by supporting collaboration among stakeholders. These results indicate that managers should go beyond dyadic relationships to carefully design their services to support value co-creation among different actors in the value network.

Research Category: **Service Experience and Co-creation**

(NELSON PINHO, GABRIELA BEIRÃO, LIA PATRÍCIO, RAYMOND FISK)

SERVICE VALUE OPTIMIZATION AND MEASUREMENT

ADVANCES IN CUSTOMER VALUE MANAGEMENT (NEW)

Peter C. Verhoef, University of Groningen
Katherine N. Lemon, Boston College

Extract from article

One of the key developments in marketing and management practice in the last decade has been the growth of customer relationship management (CRM). Many firms have invested in large customer databases to understand, monitor and influence customer behavior (Boulding et al. 2005). "CRM is defined as the practice of analyzing and utilizing marketing databases and leveraging communication technologies to determine corporate practices and methods that will maximize the lifetime value of each individual customer" (Kumar and Reinartz 2005: 5). One of the critical aspects in this definition is the role of customer value, which is the economic value of the customer relationship for the firm. Therefore, other researchers also use the term "customer value management" (CVM), which: entails the optimization of the value of a company's customer base. CVM focuses on the analysis of individual data on prospects and customers. The resulting information is used to acquire and retain customers, and to drive customer behavior with the developed marketing strategies in such a way that the value of all current and future customers is optimized. (Verhoef, van Doorn et al. 2007) CVM conceptually has its roots within relationship marketing. Relationship marketing has mainly focused on measuring constructs, such as commitment and trust, which create successful relationships with customers (R.M. Morgan and Hunt 1994). Customer data are not essential within relationship marketing.

Research Category: **Service Value Optimization and Measurement**

(PETER C. VERHOEF, KATHERINE N. LEMON)

RELATIONSHIP CHARACTERISTICS AND CASH FLOW VARIABILITY : IMPLICATIONS FOR SATISFACTION, LOYALTY, AND CUSTOMER PORTFOLIO MANAGEMENT (NEW)

Crina O. Tarasi, Central Michigan University
Ruth N. Bolton, Arizona State University
Anders Gustafsson, Karlstad University
Beth A. Walker, Arizona State University

Service firms seek customers with high revenues, profits, or lifetime value. However, they frequently ignore variations in consumption that lead to cash flow variability and adversely influence service operations and financial performance. This study shows that variation in individual customers' consumption or spending on services can be decreased in ways that are actionable by most managers, without decreasing revenues or profits. First, customer satisfaction has a "double-whammy" effect: lower cash flow variability and higher cash flow levels. This finding is important because firms can increase satisfaction in many ways. Second, customers who participate in loyalty programs have more variable cash flows, but not higher average cash flows. Hence, firms should design loyalty programs to improve customer satisfaction or intangible benefits (e.g., membership recognition), rather than offering economic incentives. Third, customers who purchase many different offerings, or allocate a large share of their purchases to the firm, have higher cash flow variability and higher average cash flows. Firms can optimize the customer portfolio by combining customers with high variability with customers who have different, offsetting cash flow patterns. Fourth, personal characteristics, such as age and income, also influence cash flow variability. Empirical findings are robust across two settings: telecommunications and financial services. The study describes sensitivity analyses of how different service and relationship marketing strategies influence a firm's business outcomes. The article concludes with insights into how to integrate service management principles, which emphasize consistency or low variability in processes, with customer relationship management principles that emphasize growing relationships and cash flows.

Research Category: **Service Value Optimization and Measurement**

(CRINA O. TARASI, RUTH N. BOLTON, ANDERS GUSTAFSSON, BETH A. WALKER)

TURNING CUSTOMER SATISFACTION MEASUREMENTS INTO ACTION (NEW)

Line Lervik Olsen, BI Norwegian School of Management
Lars Witell, Karlstad University
Anders Gustafsson, Karlstad University

Purpose – The purpose of this paper is to contribute to the literature on customer orientation by developing and empirically testing a model that attempts to explain the elements that constitute customer orientation and that, in turn, influence customer satisfaction. In particular, this study focuses on how service firms design, collect, analyse and use customer-satisfaction data to improve service performance. This study has the following three research objectives: to understand the process and, as a consequence, the phases of customer orientation; to investigate the relationships between the different phases of customer orientation and customer satisfaction; and to examine activities in the different phases of customer orientation that result in higher customer satisfaction.

Design/methodology/approach – This study, combining quantitative and qualitative research, is based on a cross-sectional survey of 320 service firms and a multiple case study of 20 organisational units at a large service firm in the European telecom industry.

Findings – The results show that customer orientation consists of a process that includes three phases: strategy, measurement and analysis and implementation. Contrary to previous research, implementation has the strongest influence on customer satisfaction. In turn, customer satisfaction influences financial results. In-depth interviews with managers provided insights into the specific activities that are key for turning customer-satisfaction measurements into action.

Originality/value – This research contributes to the literature on customer orientation by developing and empirically testing a model that attempts to explain what constitutes customer orientation and, in turn, influences customer satisfaction and financial results. Given the large amount of research on customer satisfaction, studies on how service firms collect and use customer-satisfaction data in practice are scarce.

Research Category: **Service Value Optimization and Measurement**

(LINE LERVIK OLSEN, LARS WITELL, ANDERS GUSTAFSSON)

A VALUE-BASED INFORMATION TECHNOLOGY SERVICES PRICING STRATEGIES

* Haluk Demirkan, Arizona State University
Robert R. Harmon, Portland State University

While service orientation and commoditization are creating opportunities for customers of information technology (IT) services, it is also creating challenges for the service providers. Pricing strategies are the most important and also very complex decisions for today's IT service providers. Pricing strategies for IT services have traditionally focused on covering costs, achieving desired margins and meeting the competition. These pricing schemes range from simple approaches, easily copied by competitors, to complex models that are not easily managed. In order to be successful in today's competitive business world, the service providers need to define their pricing strategies by considering the customer's perceived value from the service they receive rather than using traditional cost-based pricing strategies. Prior research has generated considerable knowledge about the design of effective cost based pricing strategies. Today, however, increasing signs have accumulated that this wisdom might be inadequate in shaping appropriate insights for contemporary practice. This paper seeks to direct research attention toward the following question: How should information technology services firms determine their pricing strategies in order to establish longer-term value-oriented service relationships with customers? We articulate vendor cost-centric vs. customer value-centric pricing models to review the literature and relevant theories. In articulating this logic, we aim to shift thinking away from the traditional product focus toward more complex structures that are reflective of contemporary practice. The structures are designed around IT services capabilities and value-based approach. Successful value-based pricing is dependent on the IT organization's ability to understand and anticipate customer's value expectations, experiences, user-generated service definitions, designs and implementations.

Research Category: **Service Value Optimization and Measurement**

* Corresponding Author

(Haluk Demirkan, Robert R. Harmon)

BALANCING RISK AND RETURN IN A CUSTOMER PORTFOLIO*

Crina Tarasi, Central Michigan University
Ruth Bolton, Marketing Science Institute
Michael D. Hutt, Arizona State University
Beth A. Walker, Arizona State University

Marketing managers can increase shareholder value by structuring a customer portfolio to reduce the vulnerability and volatility of case flows. This article demonstrates how financial portfolio theory provides an organizing framework for (1) diagnosing the variability in a customer portfolio, (2) assessing the complementarity/similarity of market segments, (3) exploring market segment weights in an optimized portfolio, and (4) isolating the reward-on-variability that individual customers or segments provide. Using a 7-year series of customer data from a large business-to-business firm, the authors demonstrate how market segments can be characterized in terms of risk as well as return. Next, they identify the firm's efficient portfolio and test it against (1) its current portfolio and (2) a hypothetical profit-maximization portfolio. Then, using forward- and back-testing, the authors show that the efficient portfolio has consistently lower variability than the current customer mix or the profit-maximization portfolio. Guidelines are provided for incorporating a risk overlay into established customer management frameworks. The approach is especially well-suited for business-to-business firms that serve market segments drawn from diverse sectors of the economy.

Research Category: **Service Value Optimization and Measurement**

(CRINA TARASI, RUTH BOLTON, MICHAEL D. HUTT, BETH A. WALKER)

DO SERVICE GUARANTEES GUARANTEE GREATER MARKET VALUE?*

Jeffrey Meyer, Bowling Green State University
Dwayne D. Gremler, Bowling Green State University
Jens Hogreve, Catholic University of Eichstaett-Ingolstadt, Germany

Although service guarantees have been an often studied topic, no research has examined the return on service guarantee investments. The authors fill this gap by examining the effects of service guarantees on firm market value by identifying new service guarantee announcements and using these announcements as the events for an event study. The results show that simply offering a service guarantee does not necessarily result in greater market value for the offering firm. Instead, the market value of a service guarantee depends on the scope of the guarantee and the process required for invoking the guarantee. In particular, guarantees that are specific in scope and automatically-invoked lead to greater market value than unconditional guarantees and customer-invoked guarantees, respectively. In addition, these differences are moderated by firm size. The research extends signaling theory as an explanation for the differential effects of service guarantees based on the design of the guarantee. The findings also suggest managers in smaller firms should lean towards using specific guarantees when possible, while managers in larger firms may have more flexibility in the design of their service guarantees; similarly, managers in smaller firms should choose automatically invoked service guarantees to increase their firm's market value.

Research Category: **Service Value Optimization and Measurement**

(JEFFREY MEYER, DWAYNE D. GREMLER, JENS HOGREVE)

RISK CONSIDERATIONS IN THE MANAGEMENT OF CUSTOMER EQUITY

Ruth N. Bolton, Arizona State University
Crina Tarasi, Central Michigan University

Researchers and managers typically recognize "customer risk" by considering the probability of customer defection, as well as by discounting cash flows using the cost of capital. However, in the finance literature, risk is associated with unexpected variability in future cash flows. An understanding of cash flow variability is critical for firms to effectively forecast, allocate resources, manage customer equity and prepare for the future. The variability or unpredictability of future cash flows arises from underlying customer interactions, consumption patterns and purchase behavior – as well as from organizational processes that support them. This chapter summarizes alternative approaches to reducing variability in future cash flows without adversely affecting cash flow levels. First, firms can target customers with low cash flow variability or low risk. Second, since customers do not have fixed cash flow characteristics, the variability of individual customers' future cash flows can be decreased through appropriate management actions. Third, firms can allocate resources to specific customers and market segments (through their marketing plan) to yield future cash flows that complement each other and thereby decrease aggregate variability of future cash flows. This chapter offers practical ways for firms to optimize their customer base by balancing return and risk and describes avenues for future research.

(RUTH N. BOLTON, CRINA TARASI)

CHALLENGES AND SOLUTIONS FOR MARKETING IN A DIGITAL ERA (NEW)

Peter S.H. Leeflang, University of Groningen
Peter C. Verhoef, University of Groningen
Peter Dahlström, McKinsey & Company, United Kingdom
Tjark Freundt, McKinsey & Company, United Kingdom

Internet usage continues to explode across the world with digital becoming an increasingly important source of competitive advantage in both B2C and B2B marketing. A great deal of attention has been focused on the tremendous opportunities digital marketing presents, with little attention on the real challenges companies are facing going digital. In this study, we present these challenges based on results of a survey among a convenience sample of 777 marketing executives around the globe. The results reveal that filling "talent gaps", adjusting the "organizational design", and implementing "actionable metrics" are the biggest improvement opportunities for companies across sectors.

Research Category: **Service and Technology**

Leeflang, Peter SH, Peter C. Verhoef, Peter Dahlström, and Tjark Freundt. "Challenges and solutions for marketing in a digital era." *European Management Journal* 32, no. 1 (2014): 1-12.

(PETER S.H. LEEFLANG, PETER C. VERHOEF, PETER DAHLSTRÖM, TJARK FREUNDT)

DYNAMIC EFFECTS OF SOCIAL INFLUENCE AND DIRECT MARKETING ON THE ADOPTION OF HIGH-TECHNOLOGY PRODUCTS (NEW)

Hans Risselada, University of Groningen
Peter C. Verhoef, University of Groningen
Tammo H.A. Bijmolt, University of Groningen

Many firms capitalize on their customers' social networks to improve the success rate of their new products. In this article, the authors analyze the dynamic effects of social influence and direct marketing on the adoption of a new high-technology product. Social influence is likely to play a role because the decision to adopt a high-involvement product requires extensive information gathering from various sources. The authors use call detail records to construct ego networks for a large sample of customers of a Dutch mobile telecommunications operator. Using a fractional polynomial hazard approach to model adoption timing and multiple social influence variables, they provide a fine-grained analysis of social influence. They show that the effect of social influence from cumulative adoptions in a customer's network decreases from the product introduction onward, whereas the influence of recent adoptions remains constant. The effect of direct marketing is also positive and decreases from the product introduction onward. This study provides new insights into the adoption of high-technology products by analyzing dynamic effects of social influence and direct marketing simultaneously.

Research Category: **Service and Technology**

Risselada, Hans, Peter C. Verhoef, and Tammo HA Bijmolt. "Dynamic effects of social influence and direct marketing on the adoption of high-technology products." *Journal of Marketing* 78.2 (2014): 52-68.

(Hans Risselada, Peter C. Verhoef, Tammo H.A. Bijmolt)

A REFERENCE MODEL FOR SUSTAINABLE E-LEARNING SERVICE SYSTEMS: EXPERIENCES WITH THE JOINT UNIVERSITY/TERADATA CONSORTIUM

* Haluk Demirkan, Arizona State University
Michael Goul, Arizona State University
Mary E. Gros, Teradata Corporation

Many e-learning service systems fail. This is particularly true for those sponsored by joint industry/university consortia where substantial economic investments are required up-front. This paper provides an industry/university consortia reference model validated through experiences with the eight year old Teradata University Network. The reference model addresses basic and advanced sustainability capabilities that integrate partner, application, faculty, student and e-learning service system issues. Our validation of the reference model includes a mapping to the literature regarding recent advances in e-learning service system infrastructures and supported capabilities. One outcome of that validation step is a comprehensive set of capability assessment questions to be used by consortia.

Research Category: **Service and Technology**

* Corresponding Author

(HALUK DEMIRKAN, MICHAEL GOUL, MARY E. GROS)

A SERVICE-ORIENTED WEB APPLICATION FRAMEWORK

* Haluk Demirkan, Arizona State University
Robert R. Harmon, Portland State University
Michael Goul, Arizona State University

The unprecedented convergence in the field of IT - emergent Web applications, Web 3.0, cloud computing, internet-enabled smartphones, RFID, high-performance computing, global high-speed communications, and advanced sensing and data analysis - is creating opportunities and also challenges for organizations. Today, a company's business highly depends on a robust, Web enabled, flexible information and communication infrastructure to foster corporate agility and productivity. This paper proposes a systematic framework for conceptualizing the implementation of a Service-Oriented Web Application Framework that includes inter- and intra- organizational business process, service and resource execution models for development and deployment of emergent Web applications that are easy to use, easy to understand, easily re- deployed, role-based and data centric. By breaking large monolithic solutions into flexible components, enabling out-of-the-box interoperability and process lifecycles, the Service-Oriented Web Application Framework provides opportunities for organizations to develop and deploy platform, technology and location independent, reduced risk and context-rich Web solutions.

Research Category: **Service and Technology**

* Corresponding Author

(Haluk Demirkan, Robert R. Harmon, Michael Goul)

ASSOCIATING CONSUMER PERCEIVED VALUE WITH BUSINESS MODELS FOR DIGITAL SERVICES

Aaron Baird, Georgia State University
Raghu Santanam, Arizona State University

As digital services increasingly deal with commodity offerings (i.e., digital content and features that are similar between service providers), service providers are seeking to differentiate themselves with variations in their digital service business models. We seek to demonstrate that consumer value for digital service business models may be quite different even when consumers have similar preferences for standard technology characteristics. In the context of this paper, we specifically consider consumer perceived value associated with Personal Health Records (PHRs) and PHR digital business models, through the use of an integrated latent variable and choice empirical model. We find that although consumer perceived value for PHRs is generally high, when offered a choice between three competing PHR business models, consumers state high value for only two of the business models in the choice set: PHRs offered directly by groups of medical providers and Integrated PHRs. These findings suggest that while perceived value may be high for generally considered digital services, variations in the underlying digital service business models are likely to have significant impacts on consumer valuations of digital services.

Research Category: **Service and Technology**

(AARON BAIRD, RAGHU SANTANAM)

CONSUMER INFORMATION SYSTEMS AS SERVICES: CASE STUDY OF IPTV SERVICES

Tuure Tuunanen, University of Auckland
Lesley Gardner, University of Auckland
Martin Bastek, Deloitte

Consumer Information Systems (CIS) are Information System, which provide services primarily to consumers instead of addressing needs of users in traditional organizational settings. Examples of such systems are Internet protocol television (IPTV) services, which are being launch globally at the moment. Design of traditional services typically involves a trade-off between achieving high service productivity and quality. To this end, the use of mass customization has been proposed as a solution. Our paper presents a conceptual framework that can potentially enable designers to achieve such mass customization for consumers information systems. We present that we should consider CIS as services offered to consumers, not only as systems or software, in order to achieve this. We apply the framework to three New Zealand IPTV service offerings and investigate how it applies.

Research Category: **Service and Technology**

(TUURE TUUNANEN, LESLEY GARDNER, MARTIN BASTEK)

DETERMINANTS OF MOBILE APPS SUCCESS: EVIDENCE FROM APP STORE MARKET

Gun-Woong Lee, Arizona State University
Raghu Santanam, Arizona State University

Mobile applications markets with App stores have introduced a new approach to define and sell software applications with access to a large body of heterogeneous consumer population. This research examines key seller- and App-level characteristics that impact success in an App store market. We tracked individual Apps and their presence in the top grossing 300 charts in Apple App Store and examined how factors at different levels affect the Apps' survival in the top 300 charts. We used a generalized hierarchical modeling approach to measure sales performance, and confirmed the results with the use of a hazard model and a count regression model. We find that broadening App offerings across multiple categories is a key determinant that contributes to a higher probability of survival in the top charts. App-level attributes such as free App offers, high initial ranks, investment in less popular (less competitive) categories, continuous quality updates, and high volume and high user review scores have positive impacts on Apps' sustainability. In general, each diversification decision across a category results in approximately a 15% increase in the presence of an App in the top charts. Survival rates for free Apps are up to two times more than that for paid Apps. Quality (feature) updates to Apps can contribute up to a three-fold improvement in survival rate as well. A key implication of the results is that sellers must utilize the natural segmentation in consumer tastes offered by the different categories to improve sales performance.

Research Category: **Service and Technology**

(GUN-WOONG LEE, RAGHU SANTANAM)

DEVELOPING A FRAMEWORK TO IMPROVE VIRTUAL SHOPPING IN DIGITAL MALLS WITH INTELLIGENT SELF-SERVICE SYSTEMS

Haluk Demirkan, University of Washington-Tacoma
James C. Spohrer, IBM

Growing movements to urban places, increasing unemployment, decreasing buying power, rising real estate cost and demanding consumers for convenience and price are creating challenges for retailers. This paper reviews a sample list of retail channels, and proposes a systematic framework for conceptualizing the data-driven, and mobile- and cloud-enabled intelligent self-service systems to improve virtual shopping. With adoption of intelligent self-service systems, - more service oriented, more instrumented (from sensors to smart phones for monitoring consumers' behaviors), interconnected (patterns of interactions), and intelligent (algorithms help recognize patterns) - retail organizations can provide more cost effective quality retail service experiences to consumers.

Research Category: **Service and Technology**

(HALUK DEMIRKAN, JAMES C. SPOHRER)

DO APP DESCRIPTIONS MATTER? EVIDENCE FROM A MOBILE APPS MARKET

Gun-Woong Lee, Arizona State University
Raghu Santanam, Arizona State University
Sungho Park, Arizona State University

Consumers use an array of extrinsic and intrinsic cues to assess the quality/value of Apps in mobile App markets. The extrinsic and intrinsic cues include product descriptions (producer cues) and product page view formatted by the market (market cues). While the cues in product descriptions are voluntarily selected by developers and deliver subjective information on Apps (i.e., low fidelity), those presented through market formats are mandatory and provide objective cues (i.e., high fidelity). We evaluate whether extrinsic and intrinsic cues in App descriptions have significant impacts on the success of App sales and whether they can complement or substitute market cues. Text-mining techniques are utilized to identify commonly used App product description patterns conveying extrinsic and intrinsic cues from 7,376 Apps in the 300 paid Games charts over 20 weeks in the Apple App Store. We empirically classify keyword groups presenting extrinsic ('price promotion', 'sales performance', and 'user review') and intrinsic ('feature update' and 'content') cues. The classification information is utilized in the empirical analysis to assess the impact of cues on App sales. Our results suggest that extrinsic cues ensure better prediction on App sales than intrinsic ones do regardless of information sources, and that market cues are more reliable quality indicators of Apps than producer cues. In addition, we empirically substantiate the complementarities between extrinsic cues in product description and market formats. Overall, the research findings highlight the strategic impacts of product description formulation and have salient implications for theorizing about product description management in the emerging mobile App store markets.

Research Category: **Service and Technology**

Lee, G., Raghu, T. S., "Determinants of Mobile Apps Success: Evidence from App Store Market." *Journal of Management Information Systems, Forthcoming*

(GUN-WOONG LEE, RAGHU SANTANAM, SUNGHO PARK)

ELECTRONIC WORD-OF-MOUTH VERSUS INTERPERSONAL WORD-OF-MOUTH: ARE ALL FORMS OF WORD-OF-MOUTH EQUALLY INFLUENTIAL?

Matthew L. Meuter, California State University, Chico
Deborah Brown McCabe, Menlo College
James M. Curran, University of South Florida, Sarasota-Manatee

Customers are increasingly using social media channels in their purchase decisions. We explore the influence of interpersonal word-of-mouth (WOM) and various forms of electronic word-of-mouth (eWOM). WOM is found to have more influence on behavioral intentions, trust in WOM, and attitude toward the firm compared to all eWOM channels explored. The influence of various eWOM channels is also compared. Independent sources (i.e., Facebook and yelp.com) are more influential than company-controlled sources of eWOM, such as customer testimonials on a firm website. This pattern is consistent across behavioral intentions, trust in WOM, and attitude toward the firm.

Research Category: **Service and Technology**

(Matthew L. Meuter, Deborah Brown McCabe, James M. Curran)

ENCOURAGING EXISTING CUSTOMERS TO SWITCH TO SELF-SERVICE TECHNOLOGIES: PUT A LITTLE FUN IN THEIR LIVES

James M. Curran, University of South Florida
Matthew L. Meuter, California State University

There is clearly rapid growth of technological applications being used in the customer – firm interactions. In most situations where a technological service delivery option is implemented, existing customer are already using an interpersonal service delivery approach. This research helps us to better understand how consumers can be encouraged to switch from the interpersonal mode to a technologically based service delivery mode.

Here a predictive model based on consumer attitudes and anticipated outcomes (such as utility, enjoyment and social acceptance) is used to predict intentions to switch to a technologically based service delivery approach. The research was conducted within the banking industry. As expected, consumer attitudes toward technology were critical. In addition, it was determined that enjoyment is a stronger predictor of intentions to change than utility, even in the banking context.

Research Category: **Service and Technology**

(JAMES M. CURRAN, MATTHEW L. MEUTER)

FRONTLINE EMPLOYEE MOTIVATION TO PARTICIPATE IN SERVICE INNOVATION IMPLEMENTATION

Susan Cadwallader, California State University, Fullerton
Cheryl Burke Jarvis, Southern Illinois University
Mary Jo Bitner, Arizona State University
Amy Ostrom, Arizona State University

Front line employees often are in a prime position to accelerate acceptance of a new Self Service Technology (SST) by explaining its benefits and demonstrating its use to customers. Yet, often they are reluctant to do so.

This research examines employee behaviors and motivation regarding recommending a new SST to end customers. More than 300 sales and service employees in dealerships of a major manufacturer were surveyed to assess their motivation for recommending a new consumer SST.

Results of the research suggest that managers can improve employee motivation to participate in service innovation implementation by:

- Creating a sense of the importance of the innovation and building buy-in throughout the organization.
- Providing training for employees about how to use the SST themselves and how to demonstrate and recommend it to customers.
- Establishing organizational processes that allow employees choice and independence regarding the implementation of their job tasks, even while emphasizing the value and importance of their participation.

Research Category: **Service and Technology**

(SUSAN CADWALLADER, CHERYL BURKE JARVIS, MARY JO BITNER, AMY OSTROM)

HIGH TECH AND HIGH TOUCH: A FRAMEWORK FOR UNDERSTANDING USER ATTITUDES AND BEHAVIORS RELATED TO SMART INTERACTIVE SERVICES

Nancy Wünderlich, University of Paderborn, Germany
Florian von Wangenheim, Technical University of Munich, Germany
Mary Jo Bitner, Arizona State University

Smart services – services delivered via technology embedded in products, machines, and other physical objects – represent a fast-growing segment of the service innovation marketplace. This paper examines a specific category of smart services which we label "interactive smart services" in which a customer interacts via phone or the Internet with a service provider who is also able to access and control the customer's equipment. We build a comprehensive framework for understanding t user attitudes, acceptance and usage for this category of interactive smart services. The research employs a grounded theory approach and is supported by interviews with smart service users and providers in a B2B context in the United States, Germany and China. This research findings illustrate that the typical focus of service providers on <u>technology features</u> is not enough to increase usage behaviors of smart service customers. Instead, providers should emphasize the <u>interpersonal relationship</u> during the technology-mediated service interaction by providing control cues, raising social presence and trust building mechanisms.

Research Category: **Service and Technology**

This paper is under review at a journal.

(Nancy Wünderlich, Florian von Wangenheim, Mary Jo Bitner)

INTERACTIVE SERVICES: A FRAMEWORK, SYNTHESIS AND RESEARCH DIRECTIONS

Ruth N. Bolton, Marketing Science Institute
Shruti Saxena-Iyer, Arizona State University

This article briefly reviews marketers' current knowledge about interactive services. It defines interactive services as services that have some form of customer–firm interaction in an environment characterized by any level of technology (i.e., a high or low technology environment). Customers may interact with the firm's physical elements (including technology), processes and people in both service creation and delivery.

Consequently, customer participation directly influences service quality and behavioral outcomes (e.g., service usage, repeat purchase behavior and word-of-mouth)—as well as firm outcomes (efficiency, revenues and profits). Hence, a recurring theme throughout our article is that the nature of customer participation is critically important for the effective creation and delivery of interactive services. The article identifies key research areas and their relevance to managerial practice. This analysis yields a set of research questions that provides an agenda for future research.

Research Category: **Service and Technology**

(Ruth N. Bolton, Shruti Saxena-Iyer)

INTERNET RETAIL OPERATIONS: INTEGRATING THEORY AND PRACTICE FOR MANAGERS

Elliot Rabinovich, Arizona State University
Timothy Laseter, University of Virginia

The rise of the Internet as the first choice for retail shoppers presents new challenges for retailers and suppliers. This book details how information technology evolved to play such a role in retail supply chain networks, how this has impacted supply chain networks, and how this has changed service operations. The first part of the text addresses information technology in relation to service and retail industries. The second part covers how the new supply chain dynamics impacts traditional service and retail delivery, the costs involved, the impacts on customer service, and customer expectations. The third part presents case studies of how different retailers meet challenges.

Research Category: **Service and Technology**

(ELLIOT RABINOVICH, TIMOTHY LASETER)

LEVERAGING THE CAPABILITIES OF SERVICE-ORIENTED DECISION SUPPORT SYSTEMS IN THE CLOUD

* Haluk Demirkan, Arizona State University
Dursun Delen, Oklahoma State University

Using service-oriented decision support systems (DSS in Cloud) is one of the major trends for many organizations in hopes of becoming an agile business. After defining a list of requirements for service-oriented DSS, we propose a conceptual framework for DSS in cloud, and discus about research directions. A unique contribution of this paper is its perspective on how to servitize the product oriented DSS environment, and demonstrate the opportunities and challenges of engineering DSS in cloud environment. When we define data, information and analytics we see that traditional measurement mechanisms do not work efficiently. Organizations may care about service accuracy and quality in addition the cost and delivery time. Service-oriented DSS (DSS in Cloud) proposes scale, scope and speed economies. This article contributes new knowledge in service science by tying the information technology strategy perspectives to the database and design science perspectives for a broader audience. Usually the more technical perspective is offered on a standalone basis, and confined to the database systems space – even when the discussion is about business processes.

LEVERAGING THE CAPABILITIES OF SERVICE-ORIENTED DECISION SUPPORT SYSTEMS: PUTTING ANALYTICS AND BIG DATA IN CLOUD

Haluk Demirkan, Arizona State University
Dursun Delen, Oklahoma State University

Using service-oriented decision support systems (DSS in Cloud) is one of the major trends for many organizations in hopes of becoming more agile. In this paper, after defining a list of requirements for service-oriented DSS, we propose a conceptual framework for DSS in cloud, and discus about research directions. A unique contribution of this paper is its perspective on how to servitize the product oriented DSS environment, and demonstrate the opportunities and challenges of engineering service oriented DSS in cloud. When we define data, information and analytics as services, we see that traditional measurement mechanisms, which are mainly time and cost driven, do not work well. Organizations need to consider value of service level and quality in addition to the cost and duration of delivered services. DSS in Cloud enables scale, scope and speed economies. This article contributes new knowledge in service science by tying the information technology strategy perspectives to the database and design science perspectives for a broader audience.

Research Category: **Service and Technology**

(HALUK DEMIRKAN, DURSUN DELEN)

PROCESS COMPLETENESS: STRATEGIES FOR ALIGNING SERVICE SYSTEMS WITH CUSTOMERS' SERVICE NEEDS*

Gabriele Piccoli, Università di Sassari
M. Kathryn Brohman, Queen's University
Richard T. Watson, University of Georgia
A. Parasuraman, University of Miami

The growth of electronic commerce, coupled with the continuing growth of the service sectors of the global economy, has spawned newfound attention to service systems. However, despite growing attention to IT-enabled customer service, most organizations still struggle with designing and implementing process flows to enable their customer service strategy. In this article we introduce the notion of "process completeness," which is achieved when a firm's service delivery system matches the typical customer's breadth of expectations, and discuss a set of process completeness states and strategies in order to provide a vocabulary and a framework for research and practice concerned with the design of optimal workflow for customer service processes. Based on a set of six case studies, our work shows that identifying the optimal process completeness strategy is necessary for organizations in order to avoid either under-completeness, and customer dissatisfaction, or over-completeness, and an unnecessary depletion of limited resources.

Research Category: **Service and Technology**

(GABRIELE PICCOLI, M. KATHRYN BROHMAN, RICHARD T. WATSON, A. PARASURAMAN)

ROADMAPPING THE NEXT WAVE OF SUSTAINABLE IT

Robert Harmon, Portland State University
* Haluk Demirkan, Arizona State University

This paper explores the strategic dimensions and drivers of sustainable IT and roadmaps its likely development as a disruptive innovative force over the next decade as it moves beyond the datacenter and throughout the IT organization, the firm, markets, and society at large. Its purpose is to provide a comprehensive view of the emerging industry to inform sustainable IT strategy development and stimulate future research.

The paper defines the emerging field of sustainable IT and its green IT and sustainable IT services dimensions. It identifies market segments, products and services, technologies, compliance and reporting requirements, organizational changes, and value migration and roadmaps a likely future landscape for the development of sustainable IT strategy.

Developing a sustainable IT strategy is a major issue for most organizations. Managers and researchers can use the results of this study to better understand the dimensions of sustainable IT and its likely future growth paths. Researchers will find the comprehensive approach to the topic useful for planning future technological innovations and determining their disruptive potential. Managers can use the results to benchmark their current situation and develop strategies for the next generation of sustainable IT service solutions.

Research Category: **Service and Technology**

* Corresponding Author

(ROBERT HARMON, HALUK DEMIRKAN)

SEEDING THE CLOUD BY RE-ALIGNING PEOPLE, PROCESS AND TECHNOLOGY

* Haluk Demirkan, Arizona State University
Michael Goul, Arizona State University
George W. Brown, Value Chain Group, Inc.

To cut costs, mitigate risk and reduce the complexity, many organizations are exploring their IT landscapes with lenses that transcend business process management, organizational structure, services-based sourcing strategies, legacy application integration and virtualized resource management. We refer to this type of integrated exploration as a service-oriented transformation for agility. Today, a central driver for service-oriented transformation is the advent of cloud computing. Preparing an organization for adoption of cloud computing options may require a jolt to current IT practices, and that is the purpose of a Cloud Adoption Readiness Assessment (CARA). CARA is an integrated exploration that provides a path to follow to realize a culture suited for service-based computing – we refer to it as 'seeding the cloud' since CARA precedes consideration of entering into cloud computing contracts. In fact, CARA may result in service-oriented transformations that make little use of public cloud computing, major use of private clouds or some hybrid combination. In this article, we explain CARA and discuss results

from it's evolution and application at Intel Corporation.

For Intel, CARA signified the beginning of a journey. Whether faced with managing a complex federation of high technology supply chain partners, the journey has been grounded through close examination of process and services fusion. Intel's agility agenda includes tighter integration of IT systems, reducing order-fulfillment lead times and inventory, managing overspends and enabling faster placement of orders, accelerating new product development, and reaching new customers.

Research Category: **Service and Technology**

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Demirkan, H., Goul, M. and Brown, G.W., "Seeding the Cloud by Re-Aligning People, Process and Technology," Working paper, Arizona State University, 2011.

(HALUK DEMIRKAN, MICHAEL GOUL, GEORGE W. BROWN)

SELF SERVICE AND INTER-CUSTOMER INTERACTIONS: BLAME ATTRIBUTION, RESPONSIBILITY ASSIGNMENT, PERCEIVED SERVICE QUALITY AND REPEAT PURCHASING INTENTIONS

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Inter-customer interactions play a significant role in the management of retail service operations. Our study takes place in a retail self-service setting where the service provider is not directly involved in the service operations (i.e., self-service terminals). Our research shows that fellow customers can exert influence on a focal customer's quality perception and repeat purchasing intentions. When negative inter-customer interaction occurs, how much a focal customer holds the service provider to be accountable leads to reduced service quality perception and reduced repeat purchasing intentions. However, this relationship does not hold when there is a positive inter-customer interaction. When positive inter-customer interaction occurs, how much a focal customer assigns responsibility to the service provider does not translate into enhanced service quality perception or repeat purchasing intention. Such counter-intuitive results give service providers specific strategies on how to actively manage their customers to be efficient technology users and encourage collaboration among customers.

Research Category: **Service and Technology**

(MEI LI, THOMAS CHOI, ELLIOT RABINOVICH, AARON CRAWFORD)

SERVICE-ORIENTED METHODOLOGY FOR SYSTEMS DEVELOPMENT

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Despite advances in software development practices, organizations struggle to implement methodologies that match the risk in a project environment with needed coordination capabilities. Plan-driven and agile software development methodologies each have strengths and risks. However, most project environments cannot be classified as entirely "risky" or "stable," suggesting the need for hybrid approaches. We leverage a design science approach to implement a novel hybrid methodology based on concepts from the service-oriented paradigm. We motivate the approach using theory on interdependence and coordination, and design the methodology using theory on modularity and service-dominant logic. We also examine the impacts of its adoption at a large electrical power company over a three-year period. The results imply that service-oriented theory should be applied to the human processes involved in systems development in order to achieve better fit between project risk, interdependencies and the selected methodology(ies) in order to improve overall project performance.

Research Category: **Service and Technology**

(MARK KEITH, HALUK DEMIRKAN, MICHAEL GOUL)

SERVITIZED ENTERPRISES FOR DISTRIBUTED COLLABORATIVE COMMERCE

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Agility and innovation are essential for survival in today's business world. Mergers and acquisitions, new regulations, rapidly changing technology, increasing competition and heightened customer expectations mean companies must become more responsive to changing demands. This move to agility through innovation can be possible with the service oriented solutions offered by Collaborative Servitized Enterprises (CSE). In this article, the authors demonstrate the architecture of a CSE and develop a multidisciplinary research program, incorporating a more science-based approach to the effective, scalable, secure, and knowledge-driven design and development of collaborative servitized enterprises, to address some of today's commoditization lead issues. The authors' primary objective is to lay the foundation of an integrated service culture, which is characterized by a cross-disciplinary attitude that fulfills customers' needs. A secondary attitude within that culture is an awareness of the complexities associated with service tradeoff decision-making, requiring a careful balance of value, risk, cost, and quality of service.

Research Category: **Service and Technology**

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(HALUK DEMIRKAN, JAMES C. SPOHRER)

SMART HEALTHCARE SYSTEMS FRAMEWORK: MORE SERVICE ORIENTED, INSTRUMENTED, INTERCONNECTED AND INTELLIGENT

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A sustainable healthcare information system relies on ability to collect, process and transform healthcare data into information, knowledge and action to achieve cost-effective health outcomes on individual and population levels while meeting current consumer demands without reducing its capacity to provide for future. Healthcare providers have many complex and unique challenges. This paper proposes a systematic framework for conceptualizing the data-driven and mobile- and cloud-enabled smart healthcare systems. With adoption of smart healthcare systems, - more service oriented, more instrumented (from sensors to smart phones for monitoring health), interconnected (local and global epidemiological patterns), and intelligent (algorithms help recognize patterns and suggest appropriate responses from lots of data) - healthcare organizations can provide cost effective quality healthcare services with less IT set-up cost and reduced risk.

Research Category: **Service and Technology**

(HALUK DEMIRKAN)

SUSTAINABLE "DIGITAL UNIVERSE": HOW SHOULD FIRMS ORGANIZE BUSINESS AND IT STRATEGY FOR A BETTER WORLD?

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Did you know the "internet of things" will expand to encompass around 16 billion devices by 2020? IDC Research indicates that the creation and replication of new digital information set a record in 2009 by growing to 800 billion gigabytes, 62 percent over the previous year; and between 2009 and 2020, the information in the Digital Universe will grow by a factor of 44 to 35 trillion gigabytes, the number of files in it to be managed will grow by a factor of 67, and the storage capacity will grow by a factor of 30. The growth of the digital universe in last five years will have a measurable impact on the environment, in terms of both power consumed and electronic waste. Power consumption that was 1kW per server rack in 2000 is now closer to 10kW. Customers building new datacenters are planning for 20kW per rack. Also, electronic waste is already accumulating at more than 1 billion units a year — mostly computers, laptops, mobile phones, but also personal digital electronics. This will make it clear to business executives and CIOs that much of next 10 years of their careers will be spent dealing with challenge of the mismatch of these growth rates and the sustainability of digital universe.

The emerging emphasis on a broader corporate social responsibility (CSR)-based definition of sustainable IT is likely to leave corporate IT groups ill prepared to deal with the full range of issues that make up the knowledge sphere and practice of CSR. Furthermore, the existing gap between IT groups and customers, both internal and external, and the lack of alignment between IT and business strategy should give one pause as IT tries to navigate the CSR/CS strategic waters without a full appreciation for the social responsibility dimensions and potential impacts on IT.

As the new discipline of sustainable IT grows and assumes, by choice or by mandate, a broader societal mission, there will be increasing pressure for integration with corporate sustainability and social responsibility strategies. The purpose of this paper is to define the CSR dimensions that impact IT, review the current state of sustainable IT, provide a sustainable IT strategy and innovation framework, and review the sustainable IT initiatives of a number of companies (such as Intel, IBM and HP) that are viewed as leaders in CSR as they plan for the future of sustainable IT.

Research Category: **Service and Technology**

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(HALUK DEMIRKAN, ROBERT R. HARMON)

TESTING THE RECRUITMENT OF LEAD USERS FROM VIRTUAL COMMUNITIES TO CO-CREATE INNOVATIVE IT ENABLED SERVICES FOR CONSUMERS

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Contemporary information systems and services must fulfill the needs of a variety of consumers instead of traditional organizational users. New ways to incorporate these consumers as users in development are required. The lead user method used in new product and service development is a promising approach to tackle this problem. However, the finding and recruiting of the lead users has been found very burdensome for the firms. We propose the use of virtual communities for the task. We tested empirically this new way of identifying and contacting the lead users for requirements discovery for an innovative mobile service. The proposed method was compared to a traditional way of recruiting lead users, namely snowballing. Our findings show that the proposed method can be considered to be at least as good method for lead user recruitment as snowballing in terms of perceived quality of the requirements discovered.

Research Category: **Service and Technology**

(TUURE TUUNANEN, JOHANNA BRAGGE, WENDY HUI, VILLE VIRTANEN)

THE INFLUENCE OF C2C COMMUNICATIONS IN ONLINE BRAND COMMUNITIES ON CUSTOMER PURCHASE BEHAVIOR*

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This article reports on a study of consumers' use of online message boards as a means of "customer-to-customer" service in providing product opinions, usage information, and other forms of guidance that influence purchase decisions. Increasingly, consumers use the internet as a form of service technology for pre-purchase information gathering. While technical specifications and potentially biased selling points can be gleaned from corporate web sites, online brand communities are becoming essential conduits for the customer-to-customer (C2C) sharing of product information and experiences. This study uses a *netnography* technique to code and analyze conversations between brand community members of two competitor firms. These data are combined with a survey component and actual purchase data to develop insights into how these communities operate and influence participants in important ways. This study provides several managerial insights, including considering the relative strengths and weaknesses of company-sponsored versus anonymous, and moderated versus open communities as service vehicles for the company.

Research Category: **Service and Technology**

(CHARLES H. NOBLE, MAVIS ADJEI, STEPHANIE M. NOBLE)

THE TRICK OF THE TAIL: SUPERSTARS, NICHES AND PRODUCT RETURNS IN INTERNET RETAILING

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Charles Noble, University of Mississippi
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Our paper explores and reconciles two seemingly contradictory theories for market growth and appropriate strategic responses in Internet retailing. The popular "Long Tail" view argues that the greater variety offered on the Internet expands the range of products that can be sold profitably by providing better matching between customer desires and available products. The "Superstar" or "Steep Tail" model offers an antithetical view, suggesting that the very best products will increasingly dominate categories due to the growth of "winner-take-all" markets. Our empirical research examines data from over 5,000 SKUs of an Internet retailer of durable consumer goods to understand how product popularity affects return rates and product profitability. While past research on media consumables generally supports the Long Tail view, our data on household durables shows significantly higher return rates in the distribution tail, supporting the Superstar perspective. However, this result is balanced with the finding that product margins are higher for niche products. Overall, these findings suggest the Long Tail view is not unilaterally dominant in online retailing and should be considered in tandem with a Superstar view.

Research Category: **Service and Technology**

(Rajiv Sinha, Elliot Rabinovich, Charles Noble, Timothy Laseter)

UNDERSTANDING GENERATION Y AND THEIR USE OF SOCIAL MEDIA: A REVIEW AND RESEARCH AGENDA

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Generation Y or the Millennial Generation exerts a peculiar fascination on both managers and academics. In what has become common parlance, members of Generation Y are called Digital Natives, rather than Digital Immigrants (Prensky, 2001). They are the first generation to have spent their entire lives in the digital environment; information technology profoundly affects how they live and work (S. Bennett, Maton et al., 2008; Wesner & Miller, 2008). Generation Y actively contributes, shares, searches for and consumes content – plus works and plays – on social media platforms. Service managers and researchers are especially interested in Generation Y's social media usage because it may be a harbinger of how people will behave in the future.

The purpose of this paper is to review what we know – and don't know – about Generation Y's use of social media and to assess the implications for individuals, firms and society. Service organizations, managers, researchers and public policy makers are interested in Generation Y's use of social media because it affects people's behavior in many domains – with positive and negative outcomes for customers, firms and their employees, and society. Generation Y's social media use affects consumers' identity formation, their expectations regarding service, formation of habits, their engagement with brands and firms, participation in value co-creation, brand loyalty, purchase behavior, lifetime value and (ultimately) the value of the firm. It thereby influences organizational decisions about service customization and productivity, such as how resources are allocated between labor and automation. It also profoundly influences the design and implementation of interactive services – including location-based, retail and self-service technology (Berry, Bolton et al., 2010) – as well as customer relationship management practices. Moreover, Generation Y's use of social media has important ramifications for how firms hire and manage employees. Last, social norms and behavior may be changing due to Generation Y's use of social media – affecting civic engagement, attitudes toward privacy, nutrition, health care practices and public safety in the general population.

This paper begins by distinguishing Generation Y from other cohorts in terms of systematic differences in values, preferences and behavior that are stable over time (as opposed to maturational or other differences). Next, we describe Generation Y's social media use. Then, the paper describes how Generation Y's use of social media influences outcomes for individuals, firms and society. It concludes with a discussion of research implications.

Research Category: **Service and Technology**

(RUTH N. BOLTON, A. PARASURAMAN, ANKIE HOEFNAGELS, SERTAN KABADAYI, THORSTEN GRUBER, YULIYA KOMAROVA LOUREIRO, NANNE MIGCHELS, DAVID SOLNET)

WHEN TRADITIONALLY INSEPARABLE SERVICES ARE SEPARATED BY TECHNOLOGY: THE CASE OF PATIENT PORTAL FEATURES OFFERED BY PRIMARY CARE PROVIDERS

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Health-care services have traditionally been provided and consumed simultaneously, as exemplified by in-person patient visits to primary care providers (PCPs), where clinical assessment and treatment are provided and consumed face-to-face. Technological intermediation is changing this traditional assumption, however, as patient-centric technologies, such as patient portals, are creating service separation opportunities. While service separation facilitated by patient portals may bring welcome changes to access, efficiency, and clinical outcomes, usage of patient portals by health-care consumers remains low. This paper contributes to this important policy context by reporting findings from a study designed to assess patient perceptions associated with hypothetical patient portal features offered by PCPs and potential subsequent impacts to PCP loyalty and switching propensity. We find that patient portal features focused on back-office (clinical) self-service capabilities (such viewing health records or summaries from prior visits) are perceived positively by consumers, but, interestingly, clinical digital communication and collaboration features (such as online video consultations with physicians) do not have significant perception impacts. These findings suggest that patient portals may act as a complement to health-care service delivery, while substitution for clinical in-person interactions may not be viewed positively.

Research Category: **Service and Technology**

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