Editorial: Technology in Service Innovation
Chris McPhee, Editor-in-Chief

Stephen L. Vargo, Marja Toivonen, and Risto Rajala, Guest Editors

From the Editor-in-Chief

Welcome to the February 2015 issue of the *Technology Innovation Management Review*. The editorial theme of this issue is **Technology in Service Innovation**, and I am pleased to welcome our guest editors: **Stephen L. Vargo**, Distinguished Professor and Chair of Marketing at Shidler College of Business in Honolulu, Hawaii, **Marja Toivonen**, Research Professor at VTT Technical Research Centre of Finland, and **Risto Rajala**, Assistant Professor at Aalto University in Helsinki, Finland.

This issue is an outcome of the 2014 Annual Conference of the European Association for Research on Services (RESER; reser.net), which was held last September in Helsinki, Finland. RESER is a network of research groups and individuals active in services research and policy formulation. Our previous collaborations with RESER resulted in two issues of the TIM Review on Service and Innovation in April 2014 (timreview.ca/issue/2014/april) and May 2014 (timreview.ca/issue/2014/may).

The 2015 RESER Conference (reser2015.dk) will be held in Copenhagen, Denmark, from September 10–12. The overall theme of this year's conference will be "Innovative Services in the 21st Century", and it will be preceded by a doctoral colloquium (tinyurl.com/npzfjd5) from September 8–9, 2015. The deadline for submitting abstracts is May 11; please see the Call of Papers (tinyurl.com/kbdasme) for the conference themes and details of the submission process.

In March, our guest editors will be **Brendan Galbraith**, a Senior Lecturer, from Ulster University Business School in Belfast, Northern Ireland, and **Nadia Noori**, EU Researcher at BES La Salle – Roman Llull University in Barcelona, Spain. The March issue is based on articles selected and adapted from the 2014 International Conference on Engineering, Technology and Innovation (ICE) Conference, which took place in June 2014 in Bergamo, Italy. Dr. Galbraith is the Chair of the 2015 ICE Conference (www.ice-conference.org), which will be held from June 22–24 in Belfast. Note that the submission deadline for this conference is March 1st.

We hope you enjoy this issue of the TIM Review and will share your comments online. For future issues, we welcome your submissions of articles. Please contact us (timreview.ca/contact) with article topics and submissions, suggestions for future themes, and any other feedback.

Chris McPhee
Editor-in-Chief

From the Guest Editors

As a key enabler of business operations, technology drives service innovation and provision in the contemporary business landscape. Digitalization has facilitated the emergence of information-intensive service processes and the increasing connectivity of actors in a variety of service systems. Moreover, technologies have greatly influenced the design of service-based business models across industries.

The inspiration for this special issue draws from the global interest in the service business and the enabling technologies and infrastructure that make service business models a moving target for research and practice. Along with the developments in technology, efforts to advance our understanding of what is valuable to customers and how value is co-created in service systems have emerged as core themes in the research of service.

However, the processes by which value is created and co-created in the era of digitization are not comprehensively understood. The role of information technology in service innovation is of particular interest, because the increasing information intensity of services will transform into value for the users if service providers are capable of enabling users to benefit from the information in the contexts of use. Also, the service providers may benefit from the increasing volume and velocity of information by improving their own operations through effective management of service-related information.

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The theoretical backgrounds and research designs of the articles in this issue are rooted in multiple disciplines, including technology studies, industrial marketing, as well as business and management studies. This issue presents research on service by focusing on the interconnectedness of actors and the methods of their interaction in service systems.

We hope that this issue of the TIM Review will shed new light on the role of technology in service businesses, which is important for both research and practice. The articles included in this issue represent studies carried out in different geographical areas across Europe and Asia. The issue also has an interesting diversity in terms of research designs and methodological approaches. Many of the findings are generalizable across contexts and industries, irrespective of the geographical area.

In the first article, **Kentaro Watanabe**, **Ken Fukuda**, and **Takuichi Nishimura** of the National Institute of Advanced Industrial Science and Technology of Japan investigate a technology-assisted design methodology for employee-driven innovation in services in a Japanese elderly-care facility context. The article shows that employee-driven innovation is playing an increasingly important role in the service industry by responding to a variety of customer needs across industries. The authors propose a technology-assisted design methodology to promote employee-driven innovation in services and submit that further research is required to examine the activities and technologies that support employee-driven innovation.

In the second article, **Ute Reuter** of the VWA-University of Extra-Occupational Studies in Stuttgart, Germany, explores electronic procurement in service operations. The study highlights the potential for future use of electronic procurement solutions in business-to-business services. The construction of reliable measurement models in the research area of electronic procurement is a major step towards a more rigorous investigation of this important topic.

In the third article, **Chaoren Lu** of Karlstad University, Sweden, with **Wei Geng**, and **Iris Wang** of Southwest Jiaotong University, China, present a study of the role of mobile technologies in creating service experiences in the context of travel service. The article shows that,

in some areas of consumer service, the traditional ways of service-provider–user interaction is being replaced by marketspace transactions, where the foundation of customer–provider interaction has changed. In particular, a travel experience can be expanded into the customers' life-long context by appropriate technologies.

In the fourth article, **Sabrina Cocca** of the Fraunhofer IAO Institute and **Ann-Mareen Franke** and **Simone Schell** of BioRegio STERN Management GmbH in Germany describe how a new service offering can be developed systematically using an agile development approach. Through a case of knowledge-intensive business services (KIBS), the article shows that knowledge gained in the early phases of service development plays a key role in agile new service development, and provides valuable information for subsequent testing and prototyping.

In the last article, **Doris Schartinger**, **Effie Amanatidou**, **Laura Pombo-Juarez**, **Günter Schreier**, **Susanne Giesecke**, **Totti Könnölä**, **Ian Miles**, and **Ozcan Saritas** from different European research institutions and universities in Austria, UK, and Spain investigate the critical issues in service and system innovations in the field of personal health systems technologies. The authors show that personal health system (PHS) technologies can enhance public and private health service delivery and provide new business opportunities globally.

Combined, these articles provide an overview of the increasingly important role of technology in service innovation. In particular, the studies shed new light on the ways new communication technologies enable different groups of people, including the users and employees in the service organization, to participate in service innovation. Also, the articles contribute to the understanding of the ways technology changes service procurement and delivery processes. We hope this issue inspires future research on the ways new technologies facilitate service innovation, and the organizational and business performance implications of making use of technology in the processes of value co-creation.

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About the Editors

Chris McPhee is Editor-in-Chief of the *Technology Innovation Management Review.* Chris holds an MASc degree in Technology Innovation Management from Carleton University in Ottawa and BScH and MSc degrees in Biology from Queen's University in Kingston. He has over 15 years of management, design, and content-development experience in Canada and Scotland, primarily in the science, health, and education sectors. As an advisor and editor, he helps entrepreneurs, executives, and researchers develop and express their ideas.

Stephen L. Vargo is a Shidler Distinguished Professor and Professor of Marketing at the University of Hawai'i at Manoa. He has held visiting positions at the Judge Business School at the University of Cambridge, the University of Warwick, Karlstad University, the University of Maryland, Collage Park, and other major universities. He has articles published in the *Journal of Marketing,* the *Journal of the Academy of Marketing Science,* the Journal of Service Research, and other major journals and has been awarded the *Harold H. Maynard Award* and the *AMA/Sheth Foundation Award* for his contributions marketing theory. Thomson-Reuters recently identified him as one of the *World's Most Influential Scientific Minds* in economics and business.

Marja Toivonen is Research Professor at VTT Technical Research Centre of Finland, her specialty being service innovation and service business models. She is also Adjunct Professor at Aalto University in Helsinki, Finland. Marja has written several articles on service-related topics and been an invited speaker in many international conferences focusing on these topics. She is a council member of the European Association for Research on Services (RESER), and she is a member of the European Union's 2013–2014 High-Level Expert Group on Business Services.

Risto Rajala, D.Sc. (Econ) is an Assistant Professor in the Department of Industrial Engineering and Management at Aalto University in Helsinki, Finland. Dr. Rajala holds a PhD in Information Systems Science from the Aalto University School of Business. His recent research has dealt with management of complex service systems, development of digital services, service innovation, and business model performance. Rajala's specialties include management of industrial services, collaborative service innovation, knowledge management, and design of digital services.