

Editorial: Service and Innovation

Chris McPhee, Editor-in-Chief

Risto Rajala, Marja Toivonen, and Mika Westerlund, Guest Editors

From the Editor-in-Chief

Welcome to the May 2014 issue of the *Technology Innovation Management Review*, in which we revisit the editorial theme of Service and Innovation. As in our April issue, our guest editors are **Risto Rajala** (Aalto University), **Marja Toivonen** (VTT Technical Research Centre of Finland), and **Mika Westerlund** (Carleton University), who have done a wonderful job in soliciting enough high-quality submissions for two issues on Service and Innovation. In total, we have 10 articles devoted to this theme: five in the April issue (timreview.ca/issue/2014/april) and another five in the May issue.

Our June and July issues will be unthemed, and we welcome submissions of articles on technology entrepreneurship, innovation management, and other topics relevant to launching and growing technology companies. Please contact us (timreview.ca/contact) with article topics and submissions, suggestions for future themes, and any other feedback.

We hope you enjoy this issue of the TIM Review and will share your comments online.

Chris McPhee
Editor-in-Chief

From the Guest Editors

This is the second of two issues on Service and Innovation that put forward the pivotal role of services in today's economic growth. The inspiration for these issues draws from the global interest in service innovation and the enabling technologies, processes, and knowledge resources across industries. Interaction of knowledge resources is a necessary driver of service innovation. Along with the developments of technology, the creation and management of knowledge have emerged as core themes of service innovation.

Technology as an enabling driver and knowledge as the focus of exchange are considered equally important resources in service innovation. However, the quality of interaction among participants in service systems will ultimately determine the success or failure of service innovation. Value creation through service innovation often takes place in multi-stakeholder settings, which call for resource integration through social interactions. Nevertheless, the processes, organizational structures, and contingency factors catalyzing value creation in multi-actor interaction in both intra- and inter-organizational settings have not been sufficiently explored.

The theoretical backgrounds of the articles are rooted in multiple disciplines, taking in technology studies, industrial marketing, management, and general innovation studies. The April issue (timreview.ca/issue/2014/april) introduced user-centric service in a variety of innovation contexts and investigated its social dimension. This issue continues to synthesize knowledge on service innovation by focusing on the interconnectedness of products and value creation activities, intellectual property, innovation practices, and the methods of interaction in collaboration in service systems.

We hope that this issue of the TIM Review will shed light on service innovation, which is important for both research and practice. The articles included in this issue represent studies carried out mainly in European countries, but also in other markets, especially in Asia. Furthermore, the issue has an interesting diversity in terms of industrial settings and methodological ap-

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proaches. Many of the findings are generalizable across contexts and industries, irrespective of the geographical area.

In the first article, two authors from Sweden – **Patrik Ström** from University of Gothenburg and **Mirko Ernkvist** from the Ratio Institute – investigate the product and service offerings in the Chinese online gaming industry. Online gaming has become a compelling industry for investors and entrepreneurs, especially in Asia. The industry's evolution in China demonstrates the complexity of the growth of this industry through various knowledge and production networks. Although Chinese companies have not been among the first movers in this industry, many of them have managed to move up the value chain within a few years, from operators of foreign-developed games to primary game developers. The authors argue that Chinese companies have managed to grow by utilizing the strategic control of services, player preferences, and responsiveness in their networks, translating the gained control into evolutionary improvements of their game offerings.

In the second article, two authors from Germany – **Matthias Gotsch** from the Fraunhofer Institute for Systems and Innovation Research ISI in Karlsruhe and **Christiane Hipp** from the Technical University Cottbus – present an empirical approach to measuring innovation outcomes through the analysis of trademarks in knowledge-intensive business services. With rooting in previous empirical investigations in other industries, the authors show that a trademark may be used as an innovation indicator. Based on the results from a survey of almost three hundred companies, the authors emphasize the role of trademarks in protecting intellectual property pertaining to knowledge-intensive services. Furthermore, they suggest that trademarks serve as adequate indicators to measure service innovation outcomes across knowledge-intensive business sectors.

The third article, by **Heidi Korhonen** from the VTT Technical Research Centre of Finland, discusses the transformation of industrial operation, from providing services as add-ons to industrial production toward providing services as solutions. She investigates the phenomenon from the perspective of the service-dominant logic, which emphasizes value co-creation in actor-to-actor networks. This study pays special attention to organizational structures and practices in industrial operation. The empirical case illustrates a development program of a Nordic manufacturer of arc welding

equipment, showing how the manufacturer has become more customer and service oriented. Also, Korhonen discusses the implications of the service-dominant logic for innovation practices and argues that similar patterns can be expected to take place in many other industrial companies.

In the fourth article, **Silvia Gliem**, **Janny Klabuhn**, and **Nadine Litwin** from the Brandenburg University of Technology Cottbus-Senftenberg, Germany, analyze the interaction between technological development and service innovation in high-technology industries. Building on an extensive literature review, the authors show that the early studies of service innovation brought in the results of technological innovation to the realms of services. By analyzing a variety of theoretical approaches to technology-service interaction, the article deepens the understanding of innovation in the area of services. The authors analyze a number of case studies representing different service industries and differing technologies. Their findings reveal several factors in technology-service interaction, including the kind of technology involved in the innovation activities, the stage of development of the technology, and the type of service.

In the last article, **Madeleine Gray**, **Mikaël Mangyoku**, **Artur Serra**, **Laia Sánchez**, and **Francesc Aragall** discuss public service innovation in the European living lab context, with a focus on the Integrating Design for All in Living Labs (IDeALL) project. The authors argue that innovativeness may not be a sufficient catalyst in bringing new products to market, or in the development of public services that really meet people's needs. They discuss the outcomes of a number of experiments related to designing services with users in real-life settings. These experiments shows how different collaboration methods can help innovators to develop solutions that genuinely meet user requirements. The article provides perspectives to using such methods and analyzes their use in the investigated cases. By doing so, the article helps businesses and public bodies to discover and test innovation approaches based on living labs.

We hope that you will enjoy this issue and that you will find the outcomes beneficial for the future research of service innovation and in the practice of service business development.

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Guest Editors

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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.

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.

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.

Mika Westerlund, D.Sc. (Econ) is an Assistant Professor at Carleton University's Sprott School of Business in Ottawa, Canada. He previously held positions as a Postdoctoral Scholar in the Haas School of Business at the University of California Berkeley and in the School of Economics at Aalto University. Mika earned his doctoral degree in Marketing from the Helsinki School of Economics. His doctoral research focused on software firms' business models and his current research interests include open and user innovation, business strategy, and management models in high-tech and service-intensive industries.

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