

Editorial: Innovation in Living Labs

Chris McPhee, Editor-in-Chief

Dimitri Schuurman, Pieter Ballon, Seppo Leminen,
and Mika Westerlund, Guest Editors

From the Editor-in-Chief

Welcome to the January 2017 issue of the *Technology Innovation Management Review* – the first of two issues on the theme of **Innovation in Living Labs**. It is my pleasure to introduce our guest editors: **Dimitri Schuurman** (imec and Ghent University, Belgium), **Pieter Ballon** (VUB, Belgium), **Seppo Leminen** (Laurea University of Applied Sciences and Aalto University, Finland) and **Mika Westerlund** (Carleton University, Canada).

This issue is actually our sixth devoted to the topic of living labs, and we have also published a “Best of TIM Review” ebook (amzn.to/1T7obql) of selected articles commemorating the 10th anniversary of the birth of the living labs movement in Europe. The previous five issues are listed below:

- **Living Labs: September 2012**
(timreview.ca/issue/2012/september)
- **Living Labs: November 2013**
(timreview.ca/issue/2013/november)
- **Living Labs and Crowdsourcing: December 2013**
(timreview.ca/issue/2013/december)
- **Living Labs and User Innovation: December 2015**
(timreview.ca/issue/2015/december)
- **Living Labs and User Innovation: January 2016**
(timreview.ca/issue/2016/january)

We hope you enjoy this issue of the TIM Review and will share your comments online. In February, we will publish the second of these two issues on Innovation in Living Labs, which will be followed by one of our regular issues in March.

We welcome your submissions of articles on technology entrepreneurship, innovation management, and other topics relevant to launching and growing technology companies and solving practical problems in emerging domains. Please contact us (timreview.ca/contact) with potential article topics and submissions.

Chris McPhee
Editor-in-Chief

From the Guest Editors

We are delighted to start a new year of the *Technology Innovation Management Review* with the first of two special issues on the theme of Innovation in Living Labs. The majority of the articles featured in the issue were selected, reviewed, and revised papers presented at the Open Living Lab Days 2016, held from August 23 to 26 in Montreal, Canada. Since 2011, this yearly gathering, organized by the European Network of Living Labs (ENoLL; openlivinglabs.eu) has brought together living lab practitioners to engage in dedicated research days, with the diversity and quality of submissions increasing every year. The articles in this issue reflect the latest scholarly evolutions within the living labs movement and within ENoLL.

Living labs remain a dominantly European phenomenon, but year after year, more living labs from other continents join ENoLL. Currently, 20 percent of active living labs are non-European. The fact that the Open Living Lab days were hosted for the first time outside of Europe is another sign of this evolution. This geographical spread is also becoming visible in terms of research, as evidenced by these special issues including an article originating from outside Europe (Australia). Also, the November 2016 issue of the TIM Review featured a Canadian living labs article (Guimont & Lapointe, 2016), and research from a living lab in Asia was presented during the Open Living Labs Days in Montreal, indicating an expanding trend of living labs beyond Europe.

Besides geographical diversity, there is also increasing diversity in terms of topics covered and approaches taken in living labs practice and research. Whereas the early living labs literature focused on living lab definitions and descriptions of (best) practices and the living lab contexts, the current research is more diverse and looks into various aspects and implementations of living lab activities and the conceptualization of innovation in living labs (e.g., Bergvall-Kåreborn et al., 2015; Leminen, 2015; Ståhlbröst & Lassinantti, 2015). Attention has shifted from the “what” to the “how”, with attention on different methods and tools and identifying relevant and similar innovation approaches in order to

Editorial: Innovation in Living Labs

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advance the thinking and conceptual foundations of living labs (e.g., Dell’Era & Landoni, 2014; Schuurman, 2015; Veeckman et al., 2013).

There is also an increase in quality in terms of scientific value, which is enabled by the capability to study living lab activities over a longer period of time, given that some of the pioneering living lab organizations have now been operational for more than 10 years. Historically, over 400 living labs worldwide received the ENoLL quality label, of which a core of 150 initiatives is active at the moment. This churn rate indicates a certain degree of maturity and realism within the living labs movement. In terms of Gartner’s hype cycle (wikipedia.org/wiki/Hype_cycle), we might have passed the peak of inflated expectations and are moving from the trough of disillusionment towards the slope of enlightenment with the more mature and sustainable living lab organizations paving the way for new initiatives in other regions and domains.

The articles in this special issue can be regarded as supporting evidence, including research positioning living labs against other innovation methods and approaches and studies that shed more light on living labs methodology, toolsets, contexts, and their conceptualizations.

The first article is by **Dimitri Schuurman** from imec.livinglabs and Ghent University, Belgium, and **Piret Tõnurist** from Tallinn University, Estonia. They plead for greater interaction and knowledge exchange between different innovation approaches. Being both at the forefront of living labs and innovation labs research respectively, the authors merge their insights into an overview of antecedents, definitions, and research on both concepts. Based on the analysis, they propose a collaboration model between living labs and innovation labs in order to foster and facilitate public sector innovation.

The second article is by **Seppo Leminen** from Laurea University of Applied Sciences and Aalto University, Finland, and **Mika Westerlund** from Carleton University, Canada. They focus on innovation methodology as well as utilized tools and methods in living labs. Based on an investigation of over 40 living labs in ten countries, they discovered that the innovation methodology can be linear or iterative, and that the toolset can be fixed or tailored. As a result, they propose a new typology of living labs, including linearizer, iterator, mass customizer, and tailor – the last type having the greatest potential for radical innovations, while the other categories mostly result in incremental innovations.

In the third article, **Lynn Coorevits** from Ghent University and **An Jacobs** from the Free University of Brussels (VUB), both of whom are also from imec.livinglabs in Belgium, dig deeper into one of the key characteristics of living labs: the real-life context. There is surprisingly little research available on how to capture and study this context in living lab projects. Based on a literature review and a case study, the authors generate a practical framework that enables the evaluation of context from the front end of design onwards.

The fourth article is by **Tanguy Coenen** and **Sarie Robijt**, both from the Free University of Brussels (VUB) and imec.livinglabs, Belgium. They also introduce and merge other innovation perspectives and approaches within living labs. In this article, they look at agile methods that enable the translation of unintended and unforeseen requirements into technology development. These agile methods lack user focus, which is a cornerstone of living labs. Therefore, the authors combine the principles and characteristics of both approaches into a Framework for Agile Living Lab projects (FALL). The article also proposes actor roles to make the framework directly actionable in living labs practice.

Finally, the fifth article, contributed by **Rens Brankaert** and **Elke den Ouden**, both from Eindhoven University of Technology in the Netherlands, looks at the role and implications of design thinking in living labs. Based on a multi-case study applying the action research design in the domain of dementia, they propose that introducing design thinking in living labs will increase their potential to tackle so-called wicked societal problems.

In summary, the articles in this special issue illustrate that living labs is a blossoming research domain. The first, fourth, and fifth articles introduce innovation approaches, methods, and insights in living labs, enriching the outcomes and increasing the possibilities of living labs. The second and third articles contribute insights on living labs methodologies and tools, and they further our overall understanding of living labs.

We hope that you will enjoy reading this special issue on Innovation in Living Labs and that the ideas and insights foster follow-up research from living lab researchers and general innovation researchers alike. Equally, we hope the articles will inform and inspire living lab practitioners as well as general innovation practitioners. As living lab practice is built on co-creation and collaboration, we believe these principles should also be followed in living lab research, and that this is the only way forward for the living labs movement.

Editorial: Innovation in Living Labs

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Editorial by: Dimitri Schuurman and Pieter Ballon

Co-Guest Editors: Seppo Leminen and Mika Westerlund

About the Editors

Chris McPhee is Editor-in-Chief of the *Technology Innovation Management Review*. He holds an MASc degree in Technology Innovation Management from Carleton University in Ottawa, Canada, and BScH and MSc degrees in Biology from Queen's University in Kingston, Canada. Chris 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.

Dimitri Schuurman is the Team Lead in User Research at imec.livinglabs and a Senior Researcher at imec – MICT – Ghent University in Belgium. He holds a PhD and a Master's degree in Communication Sciences from Ghent University. Together with his imec colleagues, Dimitri developed a specific living lab offering targeted at entrepreneurs in which he has managed over 100 innovation projects. Dimitri is responsible for the methodology and academic valorization of these living lab projects and coordinates a dynamic team of living lab researchers. His main interests and research topics are situated in the domains of open innovation, user innovation, and innovation management. His PhD thesis was entitled *Bridging the Gap between Open and User Innovation? Exploring the Value of Living Labs as a Means to Structure User Contribution and Manage Distributed Innovation*.

Pieter Ballon is the Academic Lead of imec.livinglabs, the International Secretary of the European Network of Living Labs, and Director of the research group imec-SMIT at Vrije Universiteit Brussel in Belgium. He specializes in business modelling, open innovation, and the mobile telecommunications industry. Formerly, he was Senior Consultant and Team Leader at TNO. In 2006–2007, he was the coordinator of the cross issue on business models of the Wireless World Initiative (WWI), which united five integrated projects in the European Union's 6th Framework Programme. Pieter holds a PhD in Communication Sciences from Vrije Universiteit Brussel and a MA in Modern History from Katholieke Universiteit Leuven.

Seppo Leminen holds positions as Principal Lecturer at the Laurea University of Applied Sciences and Adjunct Professor in the School of Business at Aalto University in Finland. He holds a doctoral degree in Marketing from the Hanken School of Economics and a doctoral degree in Industrial Engineering and management in the School of Science at Aalto University. His research and consulting interests include living labs, open innovation, value co-creation and capture with users, relationships, services and business models in marketing, particularly in Internet of Things (IoT), as well as management models in high-tech and service-intensive industries. Results from his research have been reported in *Industrial Marketing Management*, the *Journal of Technology and Engineering and Management*, the *Journal of Business & Industrial Marketing*; *Management Decision*, the *International Journal of Technology Management*, the *International Journal of Technology Marketing*, the *International Journal of Product Development*, and the *Technology Innovation Management Review*, among many others.

Mika Westerlund, DSc (Econ), is an Associate Professor at Carleton University 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 in Helsinki, Finland. Mika earned his doctoral degree in Marketing from the Helsinki School of Economics in Finland. His current research interests include open and user innovation, the Internet of Things, business strategy, and management models in high-tech and service-intensive industries.

Editorial: Innovation in Living Labs

Chris McPhee, Dimitri Schuurman, Pieter Ballon, Seppo Leminen, and Mika Westerlund

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