

Editorial: Open Innovation and Entrepreneurship

Chris McPhee, Editor-in-Chief

Jean-Pierre Segers, Guest Editor

From the Editor-in-Chief

Welcome to the April 2013 issue of the *Technology Innovation Management Review*. This month's editorial theme is Open Innovation and Entrepreneurship, and I am pleased to introduce our guest editor, Jean-Pierre Segers, Dean of the Business School at PXL University College in Hasselt, Belgium (pxl.be), and Chairman and co-founder of Creative Inc. (creativeinc.be).

In May, the theme is Technology Evolution, and our guest editor is Michael Weiss, who is a faculty member of the Technology Innovation Management (TIM) program (carleton.ca/tim), and who holds a faculty appointment in the Department of Systems and Computer Engineering at Carleton University in Ottawa, Canada.

June's issue will not have an editorial theme, but will include articles relating to our overall scope. There is still time if you would like to contribute an article to the June issue, but I would encourage you to get in touch immediately if you are interested.

We hope you enjoy this issue of the TIM Review and will share your comments online. Please [contact us](#) with article topics and submissions, suggestions for future themes, and any other feedback.

Chris McPhee
Editor-in-Chief

From the Guest Editor

It is my pleasure to be the guest editor and to explore the theme of Open Innovation and Entrepreneurship. In this issue, the authors examine these two concepts and the points at which they intersect.

Henry Chesbrough first promoted open innovation through his book *Open Innovation: The New Imperative for Creating and Profiting from Technology* (2003; tinyurl.com/ce6bsy8). In this book, Chesbrough described open innovation as "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market". Traditionally, R&D departments in large companies were viewed as tightly closed and highly secretive. Open innovation prompted a paradigm shift, thereby opening the doors of these large companies to outside input and encouraging a two-way exchange of ideas and information to stimulate innovation.

Today, the perspective is even broader. Open innovation is seen not only from the perspective of large companies, but from numerous types and sizes of organizations that have important roles to play in open innovation. We see the emergence of "innovation hubs" and can view the open-innovation phenomenon from the perspective of regional innovation involving diverse players, including: clusters of universities and university colleges; research centres for fundamental, basic, and applied research; business ecosystems for established companies and startups, government institutions, knowledge centres and research centres, graduates, entrepreneurs, etc.; technology-transfer offices; investments funds; and startup incubators.

Thus, open innovation is becoming increasingly relevant to entrepreneurs and the organizations that support them. In this issue, authors from Belgium and Norway share their academic insights and experiences as they relate open innovation or entrepreneurship, or where these two topics intersect.

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Chris McPhee and Jean-Pierre Segers

In the first article, **Wim Vanhaverbeke**, Professor at the University of Hasselt in Belgium – and one of Henry Chesbrough's frequent collaborators on the topic of open innovation – offers a new perspective on open innovation by going beyond the innovation funnel. At its origin, open innovation was closely linked to new product development, the innovation funnel, and business models in large companies. However, Vanhaverbeke argues that organizations in different types of industries can benefit from open innovation even when they are not developing new products or services. The integration of open-innovation initiatives into the corporate strategy of the firm can open up the full potential of open innovation and give it a "second wind" for additional growth.

Next, we have two articles that provide insights and case material on the topic of open innovation in the highly developed Norwegian maritime-oil industry. First, **Marina Solesvik** and **Magnus Gulbrandsen**, from the Center of Technology, Innovation and Culture (TIK) at the University of Oslo, Norway, examine the challenge of selecting partners for open innovation. They consider open innovation from the point of view of causation and effectuation approaches, as well as social networking, by closely examining an open-innovation project in the maritime industry aimed at creating a state-of-the-art hybrid ship that uses liquid natural gas and hydrogen as power sources. The results of their case study will be of interest to policy makers and academics, but practitioners in particular will appreciate the authors' insights on choosing partners for open innovation.

Next, **Tatiana Iakovleva**, Associate Professor in the Stavanger School of Business at Stavanger University, Norway, argues that an entrepreneurial mindset might help small and medium-sized enterprises move toward an open-innovation approach. Using the example of a Norwegian firm operating in the maritime-oil industry, her article shows how innovative action may depend on the combined influence of entrepreneurial orientation within the firm and knowledge-providing cooperative links with knowledge providers. Moreover, this article examines the links between open innovation, the entrepreneurial behaviour of small and medium-sized enterprises, and firm performance.

In the fourth article, I focus on the biotechnology clusters that have been emerging in Belgium over the last few decades within the framework of the regional system of innovation. Through a case-based analysis, I demonstrate that strategic technology partnerships between new biotechnology firms and established, large, and international (bio)pharmaceutical companies have a significant impact on the survival and growth of these new biotechnology firms. I argue that new business models should be developed to foster the creation and growth of new biotechnology firms and lower their exposure to risk. In particular, open innovation could play an increasingly important role in the success of new biotechnology firms. For example, one approach pharmaceutical companies have been taking to replenish their drug development pipelines is not only investing in early-stage biotechnology companies, but also opening innovation centres to help these companies grow.

In the fifth article, **Sven De Cleyn**, **Frank Gielen**, and **Jan Coppens** from the iMinds research institute in Belgium, describe how iMinds' incubation and entrepreneurship programs act as a catalyst for open business ecosystems. Traditionally, universities and public research organizations have emphasized the commercial or societal applications of knowledge and technologies developed within a given research organization. At iMinds, however, the incubation and entrepreneurship program represents a new model of open cooperation, where all relevant stakeholders contribute to a business ecosystem, through which spillover effects are generated to the potential benefit of all participants.

Finally, my special thanks go to Nadia Noori, for introducing me to the TIM program, and to Chris McPhee, for his continuous expert feedback throughout the production of this issue. We hope the insights from these articles will help you in your own efforts with open innovation and entrepreneurship.

Jean-Pierre Segers
Guest Editor

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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.

Jean-Pierre Segers is Dean of the Business School at PXL University College in Hasselt, Belgium (pxl.be), and he is the Chairman and co-founder of Creative Inc. (creativeinc.be). He holds a Master's degree in Applied Economics and Public Affairs and is a former researcher in the Small Business Research Institute at the University of Brussels. His main research interests are small businesses and entrepreneurship; innovation and technology management; national and regional systems of innovation; and public-private partnerships.

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