Editorial: Cybersecurity

Chris McPhee, Editor-in-Chief

Tony Bailetti, Guest Editor

From the Editor-in-Chief

Welcome to the November 2014 issue of the *Technology Innovation Management Review*. This is the second of two issues covering the editorial theme of **Cybersecurity**, and I am pleased to welcome back our guest editor, **Tony Bailetti**, Director of Carleton University's Technology Innovation Management program (TIM; timprogram.ca) and Executive Director (Acting) of the VENUS Cybersecurity Corporation (venuscyber.com).

In December, we will be publishing an issue based on our collaboration with the ISPIM Americas conference (americas.ispim.org), which was held in Montreal this past October.

I encourage you to get in touch if you would like to submit an article for a future issue. We hope you enjoy this issue of the TIM Review and will share your comments online. 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 Editor

It is my pleasure to be the guest editor for the October and November issues of the TIM Review, in which we explore the theme of Cybersecurity. A total of 20 authors from industry, government, and academia contributed 10 articles, a Q&A, and a summary of a TIM Lecture to these two issues of the TIM Review. These contributions were the outcomes of a capacity-building initiative led by the VENUS Cybersecurity Corporation and Carleton University in Ottawa, Canada. A nationwide effort to make Canada a global leader in cyberspace offers significant benefits to the online users worldwide as well as many opportunities for scholarly inquiry and innovative industrial initiatives.

The November issue of the TIM Review includes six articles. These articles provide a method to assess scientific contributions in cybersecurity; a tool to identify the tasks required to increase the value of a cybersecurity startup through early and rapid globalization; a set of attributes of cyber-attacks; an overview of crimeware marketplaces; a classification that can be used to predict the timing of malware; and an approach to examine the safety domain of the future online world.

Dan Craigen is a Science Advisor at the Communications Security Establishment in Ottawa, Canada. His article first develops an approach to assess scientific contributions and then applies it to assess two contributions to the science of cybersecurity.

Tony Bailetti, a professor from Carleton University, and **Erik Zijdemans**, a master's student at the University of Southern Denmark, provide a tool and illustrate a process to describe, design, challenge, and invent the actions that should be performed to globalize a cybersecurity startup early and rapidly for the purpose of increasing its value.

Mehdi Kadivar, a master's student at Carleton University's Technology Innovation Management program, examines definitions of cyber-attacks published in the literature and information on ten high-profile attacks to identify the attributes of cyber-attacks.

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Mahmoud Gad is a PhD candidate in Electrical and Computer Engineering at the University of Ottawa. His article examines the actors, value chains, and modes of operation in underground crimeware marketplaces, and it identifies three facilitating technologies that are likely to significantly expand the reach of cybercriminals.

Brent Maheux, a Senior Software Specialist for the Canadian Government proposes an intention-based classification of malware and merges it with an optimal timing model to help predict the timing of malware based on its classification.

Nadeem Douba is the founding principal at Red Canari Inc., **Björn Rütten** is a Senior Research Associate with The Conference Board of Canada, **David Scheidl** is a recent graduate from Carleton University's Global Politics Program, and **Paul Soble** and **D'Arcy Walsh** are Science Advisors at the Communications Security Establishment. Their article uses a transdisciplinary approach to examine the safety domain of the future online world that can enable humanity to reach profoundly new levels of productivity and creativity.

We hope that you, your colleagues, and your organizations benefit from reading the October and November 2014 issues of the TIM Review.

We thank you for reading the journal and urge you to support initiatives to make the online world safe, productive, and creative for its users.

Tony Bailetti
Guest Editor

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.

Tony Bailetti is an Associate Professor in the Sprott School of Business and the Department of Systems and Computer Engineering at Carleton University, Ottawa, Canada. Professor Bailetti is the Director of Carleton University's Technology Innovation Management (TIM) program. His research, teaching, and community contributions support technology entrepreneurship, regional economic development, and international co-innovation.