

Minitrack: “Business Value of Smart Devices on the Internet of Things”

Track: [Organizational Systems and Technology](#)

[52nd Annual Hawaii International Conference on System Sciences \(HICSS\)](#)

[January 08 - 11, 2019, Maui, Hawaii](#)

Description:

The IoT is allowing the possibility of tracking and tracing any tagged mobile object as it moves through the value chain thus producing unprecedented end-to-end supply chain visibility. This creates tremendous opportunities for operational and strategic benefits. However, the effective management of this new visibility for improved decision making requires the combination and analysis of data from item-level identification using RFID, sensors, satellites, social media feeds, 2 photos, video and cell phone GPS signals; in short, big data analytics.

While the IoT, combined with wireless sensor networks and big data analytics have tremendous potential for transforming various industries, many scholars and practitioners are struggling to understand these concepts and capture the business value of smart devices being connected through the IoT. In addition, very few empirical studies have been conducted to assess the real potential smart devices and the IoT.

This minitrack addresses issues organizations face as they seek to create and realize business value from incorporating the emerging Internet of Things (IoT) into their organizational infrastructure, their electronic business partner relationships, and the products and services they offer to customers. We encourage authors to share new and interesting theoretical and methodological perspectives on topics relevant to both academic researchers and practitioners. We welcome work-in-progress that examines existing and extended theory using smart devices on the IoT combined with wireless sensor networks, RFID, and big data analytics. We give special consideration to research submissions when the author(s) commit to include an industry partner in their presentation. We welcome research that reflects a range of current research methods including case studies, analytical models, conceptual studies, econometrics, and frameworks.

The following areas are suggestive of the range of topics that are considered suitable:

- Detailed case studies of IoT smart devices implementation, usage and impact
- Methods for developing the business case for IoT adoption
- Forecasting the technical evolution of the IoT when combined with smart devices, wireless sensor networks, RFID, and big data analytics and their combined relationship to the economics of IoT usage
- Impact of data-driven organizations using data from RF-related tracking and sensor devices on decision making
- New IoT-enabled e-commerce business models
- The role of IoT and related smart technologies for enterprise and network transformation
- The role of IoT and related smart technologies for supply chain management (SCM)
- New products and services enabled by mobile smart devices on the IoT
- IoT and industry-wide transformation
- Mathematical techniques for data analysis and analytics
- Managing the technical integration of the IoT combined with smart devices, wireless sensor networks, RFID, and big data analytics tools with other applications

- Aligning interorganizational governance, incentives, and ownership when the visibility in the supply chain is increased
- Safeguarding security and privacy in an environment of the IoT and big data analytics

Important Dates:

April 15, 2018: Paper Submission System Launched

June 15, 2018 | 11:59 pm HST: Paper Submission Deadline

August 17, 2018: Notification of Acceptance/Rejection

September 22, 2018: Deadline for Authors to Submit Final Manuscript for Publication

October 1, 2018: Deadline for at least one author of each paper to register for HICSS-52

Minitrack Co-Chairs:

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Bio Sketches for the co-chairs are below.

FRED RIGGINS is a Professor in the Department of Accounting and Information Systems and Director of the Center for Enterprise Business Analytics at the College of Business at North Dakota State University. His research focuses on e-commerce, interorganizational systems, RFID, IoT, and microfinance. He has published in leading journals including *Management Science*, *Journal of Management Information Systems*, *Journal of the Association for Information Systems*, *International Journal of Production Economics*, *International Journal of Operations and Production Management*, *International Journal of Electronic Commerce*, and *Communications of the ACM*. According to Google Scholar he has an *h*-index of 23 and over 3,800 citations.

SAMUEL FOSSO WAMBA is a Professor at Toulouse Business School, France. His research focuses on business value of IT, interorganizational systems, RFID, supply chain management, e-commerce, mobile commerce, big data/business analytics and open data. He has published in the *Academy of Management Journal*, *European Journal of Information Systems*, *Production Planning and Control*, *the International Journal of Production Economics*, *Information Systems Frontiers*, *the International Journal of Production Research*, *the Business Process Management Journal*, etc. He has been organizing special issues on IT-related topics for top IS and OM journals. He is CompTIA-RFID+ certified. Per Google Scholar, he has an *h*-index of 30 and 2756 citations (statistics of March 04, 2018).