

# Preface

The 10th Knowledge Management in Organizations (KMO) Conference: Knowledge Management and Internet of Things was held during August 24–28, 2015, at the University of Maribor, Slovenia.

The Internet of Things (IoT) involves using sensors and actuators to track and manage machinery and other physical assets across a network. It is rapidly gaining momentum, bringing millions of devices and objects into the connected world and enabling whole new ways of managing assets and operations. The IoT also has the potential to transform manufacturing, build infrastructure, provide health care, and manage supply chains by monitoring and optimizing activities and assets at a very granular level. The explosion of IoT applications provides many opportunities for businesses to improve performance and create new service offerings. The unparalleled connectivity among devices offers new convenience for users and consumers.

The proliferation of networked sensors through the IoT is creating more data. The large amounts of data collected, in turn, create new business opportunities for enterprises including OEMs, service providers, and software publishers, for the monetization of IoT.

To match this growth in data requires advanced analytics. There are many emerging challenges for creating the IoT. These include the integration and management of heterogeneous data, the integration and transfer of enriched data, the effective use of knowledge-based decision systems, retrieval and sharing of knowledge automatically from huge volumes of data, ensuring security and protecting privacy.

The data created from the IoT are only beneficial to organizations when they can be turned into useful knowledge. When data are turned into knowledge, the enterprise is better positioned to respond and innovate in all phases of its operation so as to gain competitive advantages and even build entirely new business models.

This growing capability of firms to derive meaning using data from the IoT means that knowledge management (KM) systems can provide the platform for companies to improve their most valuable asset. KM systems should form a crucial part of IoT investment. KM has the ability to integrate and leverage information from multiple perspectives. The IoT is uniquely positioned to take advantage of KM processes and procedures. These processes and procedures enable IoT applications to provide a rich structure so as to enable decisions to be made in a multitude of ways. Organizations do not make decisions based on one factor; the total picture is what should drive decisions. KM enables organizations to take the total picture IoT offers, and along with leveraging tools that provide processing speed to break up the data into subsets for analysis.

Developing a superior capacity to take advantage of the IoT will enhance competitive advantage through KM that will lead to improved services. KM systems should form a crucial part of IoT investment because it has the ability to process the type of knowledge that data from IoT can transform and exploit. Turning data from IoT into

useful knowledge for real-time IoT analytics poses many new challenges to the development of IoT applications.

The KMO conference series provides a forum for scientists and practitioners from around the world who are active in the knowledge management to share knowledge. This was the tenth anniversary of the conference. The KMO conference has been growing steadily since its inception. The first conference originated from the knowledge sharing and collaboration between researchers from four universities, Staffordshire University in the UK, the University of Vaasa in Finland, Kamurai Madurai University in India, and the University of Maribor in Slovenia. The first conference was held at the University of Maribor, Slovenia. Since then, KMO conferences have been held in several different countries. The second KMO was organized in Italy by the University of Lecce; the third KMO in Finland in 2008 by the University of Vaasa and University of Applied Sciences in Vaasa; the fourth KMO in 2009 in Taipei, Taiwan; the University of Veszprem hosted the fifth KMO 2010 conference in Hungary, while the sixth KMO in 2011 was hosted by the Tokyo Institute of Technology. During the seventh conference in Salamanca, the first LTEC workshop was held alongside KMO; LTEC has been a part of KMO since. In 2013 the eighth KMO was held in Taiwan for the second time, hosted by the National University in Kaohsiung. The ninth KMO in 2014 and the third LTEC workshop were organized in Santiago de Chile. This year the conference returned to the place where it began in Slovenia.

The KMO conference is unique in several ways. Firstly, the conference aims to provide a holistic view on KM from different perspectives, including organizational, social, and technical, as well as from a business and economic perspective. Secondly, the conference includes different aspects of KM from diverse disciplines. Thirdly, the conference combines concepts, approaches, methods, and theories from different domains and disciplines, whereas pilot projects and case studies assist in identifying and establishing best practices. Fourthly, the KMO conference also brings state-of-the-art research into KM. Last but not least, KMO is a very friendly conference that provides an environment where participants can share and exchange knowledge as well as collaborate in research.

As in previous years, the papers from this year's proceedings address KM challenges and best practices related to KM in organizations. We had 59 papers this year. All the papers published in the proceedings have undergone a rigorous review process involving at least three reviewers. Authors of these papers come from 27 different countries, including Australia, Austria, Brazil, China, Colombia, Czech Republic, Finland, Germany, Hong Kong, India, Italy, Japan, Kenya, Korea, Malaysia, Oman, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Taiwan, UAE, UK, and USA.

The papers are organized into nine thematic sections as:

- KM Processes
- Successful Knowledge Sharing and KM Practices
- Innovations for Competitiveness
- KM Platforms and Tools
- Social Networks
- Intelligent Systems

- KM and IoT
- Knowledge Management in Health Care
- KM in Education and Research

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We hope that these proceedings will be beneficial for your research and that the information in this volume will be useful for further advancements the field of KM in both research and industry.

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