

Editorial

The Decade of Technology Intelligence

WELCOME TO A NEW DECADE

WELCOME to the first issue of 2020s. Technology and engineering continue to alter our lives faster than ever. This has made our field and, as a result, this journal extremely important for our society. We inform decision makers at all levels about how new technologies are changing the way we live and do business. In the beginning of this millennium and the century, Internet came as a major force changing our lives as well as businesses. Many business giants perished while new players and regions emerged, as a result the way we live our lives has changed drastically. Last decade was the decade of wireless communications. Combined with Internet, wireless communication enabled us to be in continuous contact with each other and our business. This decade will likely to see Artificial Intelligence (AI) shape our lives through harvesting data. The decade will most likely be labeled as the decade of AI fueled by data. I would also guess that we would see further predictive intelligence, gathered through data guiding us in our future decisions. In other words, we would be enjoying technology intelligence. So I prefer labeling the decade as the decade of technology intelligence.

As outlined in the prior issues, we launched several special issues to investigate the above-mentioned changes, factors, and decisions causing these changes. So far, we have seen a tremendous amount of interest in our initiatives. For example, the blockchain special issue received more than 100 submissions highlighting the activity in this area.

The new year and the new decade brought us very good news. Our journal received the 1000th submission of the year at the end of the 11th month. This was the first for our journal and represents more than 100% increase in two years. While interest in our journal went up, the quality of our journal has continued to be recognized around the world. I have been invited to lecture about the journal to many countries including England, Turkey, Germany, and Taiwan. Everywhere I was greeted by many scholars who think highly of our journal and our team. Most recently, we heard stellar news from Australia. Australian Business Deans Council (ABDC) decided to include our journal in their listing and rated us as an "A" journal. Congratulations to all of us.

ABOUT THIS ISSUE

There are 18 papers in this issue and they are listed per the thematic areas of Technology and Engineering Management Society (TEMS) they match given as follows:

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Mastering the Challenges of Regulations, Policies, and Standards

- 1) *A Three Decade Mixed Method Bibliometric Investigation of IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT*: G. Marzi, A. Caputo, E. Garces, and M. Dabic contributed to our task of setting a standard as a journal by conducting a bibliometric analysis of our journal.
- 2) *How Trust Pursuing Businesses Play in an Asymmetric Power Network?*: T.-H. Liu investigated the intersection of sociology, psychology, and economics by studying asymmetric power in an organizational network

Developing From Engineer to Leader

- 3) *The Career Satisfaction of IT Professionals with Mixed Job Demands*: J. J. Jiang, W. Houg, G. Klein, and J. Chia-An Tsai developed a model of career satisfaction for IT professionals.

Integrating Technology for Capability and Productivity

- 4) *A Decision Making Framework for Maintenance and Modernization of Transportation Infrastructure*: Z. Dowd, A. Franz, and J. Wasek proposed a decision framework based on systems thinking approach and leveraging network analysis and Bayesian networks for the aging transportation infrastructure.
- 5) *Operational Change Value During the Great Recession in Varied Technology Industries*: A. Manikas and P. Patel explored how companies reacted during the 2008 recession and found the impact of reactions such as focus on marketing or R&D functions on the value of their stocks.
- 6) *Marrying the Best of Both Worlds: An Integrated Framework for Matching Technology Transfer Sources and Recipients*: H.-Y. Liu, A. Subramanian, and C. C. Hang tackled an important problem in the technology world by studying how to match technology transfer sources and recipients.

Moving Product/Services From Idea to Market

- 7) *Advertising or Freemium: The Impacts of Social Effects and Service Quality on Competing Platforms*: Z. Li, G. Nan, and M. Li focused on social networking services and how firms leverage them for advertising.
- 8) *The Impact of Intellectual Capital on Supply Chain Collaboration and Business Performance*: Y. Shou, J. Prester, and Y. Li studied the impact of internal resources on the external output of the firms and identified critical relationships.
- 9) *What Does Front-End Research Build On? A Cocitation Analysis of the Intellectual Background and Potential Future Research Avenues*: V. Joachim and P. Spieth leveraged

technology intelligence through citation burst analysis to explore front-end research in the new product development literature.

Identifying and Implementing Successful Projects, and Systems

- 10) *Improving System Maturity Assessments by Incorporating a Design Structure Matrix (DSM)*: Z. Tompkins, M. Grenn, and B. Roberts introduced an innovative application of DSM to assess readiness of complex systems.
- 11) *Risk-Based Procurement Strategy for Electricity Retailers: Different Scenario-Based Methods*: M. Charwand and M. Gitizadeh reviewed risk assessment methods for electricity retailers and proposed a strategy for optimum output.
- 12) *Model-Based Systems Engineering Uptake in Engineering Practice*: B. Cameron and D. Adsit leveraged an MIT program based on systems engineering to explore how models are used in engineering practice.
- 13) *Identifying System Archetypes in Order to Comprehend and Improve the Program Management Practices in Organizations*: L. Sales and S. Barbalho used system dynamics to explore and optimize project management practices in organizations.
- 14) *The Effect of Stakeholder Associated Risks in Mega Engineering Projects: A Case Study of A PPP Airport Project*: H. Aladag and Z. Isik demonstrated the use of multicriteria decision models to prioritize risks in big public projects.
- 15) *Product Deterioration Based Demand Forecasting and Service Supply Model for MRO Service Chain*: L. Li, M. Liu, W. Shen, and G. Cheng introduced an innovative model for better management of the supply chain.
- 16) *An In-Depth Analysis of Contingent Sourcing Strategy for Handling Supply Disruptions*: Y. He, S. Li, H. Xu, and V. Shi studied sourcing strategies in the case of shortages.
- 17) *A Latent Class Regression Approach to IT Maintenance Outsourcing Service Management*: L. Hou and W. Zheng explored IT outsourcing strategies and satisfaction from them.
- 18) *Mass Customizing Paratransit Services with a Ridesharing Option*: D. Mo, Y. Wang, E. Lee, and M. Tseng explored a unique form of transportations service and how it can be customized for many.

TUGRUL U DAIM
 Technology Management Doctoral Program
 Department of Engineering and Technology
 Management
 Maseeh College of Engineering and
 Computer Science
 Portland State University
 Portland, OR 97201 USA
 tugrul.u.daim@pdx.edu