Guest Editorial

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Biographical notes: Tai-hoon Kim received his MS and PhD in Electrics, Electronics and Computer Engineering from the Sungkyunkwan University, Korea. He got his second PhD in the School of Computing and Information Science, University of Tasmania, Australia. He was a Professor of Sungshin W. University and a visiting senior of UTAS in Australia. He has written 17 books about software development and computer security, and has published about 200 papers. He is a member of IEEE and ACM.

Sabah Mohammed started his career in 1977 as a Multimedia Maintenance Engineer working for Canon and Sony following his hobby in electronics, although he completed his Bachelor degree in Mathematics (HBSc 1977). In 1979, he started his graduate studies where he received his degrees in Computer Science from Glasgow University, UK (PgD 1980, MPhil 1981) and from Brunel University, UK (PhD 1986). Since late 2001, he has been a full Professor of Computer Science at Lakehead University, with research interest in web intelligence, big data and medical informatics.

Carlos Ramos graduated from the University of Porto, Portugal, in 1986 and obtained his PhD from the same university in 1993. He is Coordinator Professor of the Department of Informatics at the Institute of Engineering, Polytechnic of Porto (ISEP-IPP). His main interests are artificial intelligence and decision support systems, recently with more emphasis on ambient intelligence. He is Director of GECAD (Knowledge Engineering and Decision Support Research Centre), the largest R&D centre of the Polytechnic system in Portugal, and dedicated to AI topics. He coordinates the Ambient Intelligence and Decision Support group of GECAD. He has about 50 publications in scientific journals and magazines and more than 200 publications in scientific conferences.

Adrian Stoica has 30 years of R&D experience in autonomous systems, developing novel adaptive, learning and evolvable hardware techniques and embedding them into electronics and intelligent information systems, for applications ranging from measurement equipment to space avionics to robotics. He has done pioneering work in humanoid robot learning by imitation, hardware security including anti-tamper, brain-computer interfaces including multi-brain fusion for joint decision making, shadow biometrics, shape-changing robots, human-oriented robotics. He is a member of the board of Governors of IEEE Systems, Man, and Cybernetics Society (since 2015).

We are very happy to publish this issue special issue of *International Journal of Technology, Policy and Management.*

Knowledge Management Systems is a special issue that discusses present research exploring the creation of knowledge repositories, improving knowledge assets, enhancing the knowledge environment, managing knowledge as an asset, and big data and analytics. This special issue will aid scientists, policy makers and professionals by discussing the latest theories, state-of-the-art techniques and applications. Special emphasis will be placed on the interaction between theoretical concepts and practical implementations, the exchange between policy analysts and policy makers, and the interface between analytic concepts and human and organisational problem solvers.

This issue contains seven papers. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

The paper 'Analysing consumer's perception comparatively on hybrid electric according to online comments', investigates 1109 online comments to find out the reasons that cause large sale discrepancy. A framework including five aspects and 19 factors is proposed, which help to analyse the consumers perception on HEVs systematically. In addition, based on that framework, the difference on consumers perception between China and America is investigated comparatively, which is also as a good case on HEVs for some other developing and developed countries. Finally, according to comparative result, three basic strategies, including cannikin strategy, suboptimum strategy and dominant strategy, are brought forward to boost the widespread adoption of HEVs in different markets.

The paper 'A control strategy of ES system based on short term wind-PV power prediction', compares the effect of tracking scheduled output in fixed coefficients situation and variable coefficients situation. The results verify the feasibility and flexibility of the proposed strategy, which can improve the ability to schedule of hybrid wind-PV-ES system. Furthermore, the results between multi-objective and single-objective optimisation in fixed coefficient case indicates that multi-objective optimisation is more comprehensive and economy.

In the paper 'Heuristic rule-based process discovery approach from events data', the authors propose a new heuristic rule-based technique that constructs process models and which is capable of handling standard constructs, short loops, invisible tasks, duplicate tasks, and non-free choice constructs. Artificial and real-life data have been used to evaluate the algorithm, and the results demonstrate that the aforementioned characteristics can be discovered correctly.

The paper 'An improved content splitting and merging algorithm for Hadoop clusters using component analysis and hamming distance', the authors have shown an efficient approach of using splitting and merging process of data processing. We have used component analysis and hamming distance to generate thee clusters depending on the split values which is novel in this domain of work. The experimented results of our proposed approach provide better efficiency in term of discrete clusters and time consumption.

In the paper 'Inclusion of Wikipedia, a language specific knowledge resource to generate and update a synset in WordNet', the authors propose a corpus based approach to automate the process of generation of lexical entries, i.e., synsets. We use existing language-specific knowledge resources namely Wikipedia and Wiktionary. We also present a method to update existing synsets in WordNets to include newly coined yet globalised words such as selfie. The inclusion of Wiki features for Hindi visibly improves the process of synset generation along with preserving the authenticity of endemic senses. The experiments performed on a manually created dataset of Hindiwords demonstrate a precision of 81.56% and F-measure of more than 72%.

In the paper 'Matches between network structure and competitive strategies', results show that inter-firm networks with a high degree of centrality should be matched with cost leadership strategies. In addition, these findings indicate that key ties, which may affect how firms process non-redundant resources are a great help to execute cost leadership strategies but are detrimental to the effectiveness of differentiation strategies. Managerial implications and directions for future research are discussed.

The paper 'Modelling and analysing the driving factors for the coordinated development of three modernisations in Central China', the driving force and correlation degree are analysed for the coordinated development of agricultural modernisation, industrialisation and urbanisation. It aims to discover the powerful driving factors and provide a scientific basis for the formulation of some related policies for the government.