

Guest Editorial Preface

Special Issue on Recent Trends on Technology Management

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This special issue consists of the extended version of papers from the 2nd International Conference of Reliable Information and Communication Technology 2017 (IRICT 2017). The conference was held in Pulau Springs Resort, Pulau, Johor, Malaysia, on April 23-24, 2017 and organized by the Information Service Systems and Innovation Research Group (ISSIRG) in Universiti Teknologi Malaysia (UTM) and the Yemeni Scientists Research Group (YSRG). This special issue presents several topics on technology management, which is known as the management of the use of technology for human advantage. The Design Science for information systems research was reviewed with a real case study on developing of a systematic innovation framework to solve problems in small and medium enterprises (SMEs). The special issue also discusses the causes that have encouraged older people to adopt such technology like mobile devices. The successful adoption of Electronic Records Management System (ERMS) to improve educational institutes' performance was introduced. Also, the special issue revealed fundamental indicators of students' acceptance and satisfaction toward learning management system (LMS) in a blended learning environment. In addition, the factors influencing the academicians' behavioral intentions in using open government data (OGD) were empirically examined.

The first article is about Design Science (DS) research for developing of a systematic innovation framework project to solve problems for small and medium enterprises (SMEs). It discussed the use of the most detailed DS model, the design science research roadmap (DSRR). The design science research roadmap (DSRR) model describes the process of using the DSR in information systems in detail. The article provides a clear illustration of using that model with a case study – construction of a systematic innovation framework to solve problems for service-based SMEs – to present the usability of the DSRR model. Each step in the DSRR was reflected by the tasks and activities carried out by the authors to apply those steps in their research. The benefits from presenting this DSRR model with real case study is to help other researchers, especially novice researchers in the field of design science, to gain a comprehensive understanding of the use of the DSRR. This article also shows that the DSRR provides very useful guidance, since it covers almost all the necessary steps to conduct DSR in the information systems field.

The second article is devoted to investigating the factors that influence the older people to use mobile devices. It discusses the causes that have encouraged older people to adopt such technology. The results indicated that mobile device design, functions, social inspiration and economical factor are among the factors that influence older people to use mobile devices. The findings contribute to enhance knowledge on mobile device adoption factors among older people. Further, this study enlightens and assist mobile developers and marketers in designing useful mobile devices, as well as, identifying appropriate marketing strategy that can promote new technology to older people.

The third article provides a model for successful adoption of Electronic Records Management System (ERMS) to improve educational institutes' performance. This article contributes to the ERMS adoption by integrating DeLone and McLean IS Success Model and TAM model to identify the factors

influencing ERMS adoption and the relation between the successful adoption and the organization's performance. The results demonstrated that the quality of the system, information, and service as well as the security provided by the system had a significant positive relationship with the successful adoption of ERMS, which in turn improved performance.

The fourth article presents a detailed assessment of the salient antecedents determining students' approval (perceived usefulness and perceived ease of use) and onward contentment towards using learning management system (LMS) in a blended learning environment. The study revealed fundamental indicators of students' acceptance and satisfaction. The quality of the system proved to be the most important factor in influencing the acceptance and satisfaction of students. Thus, in order to achieve students' satisfaction and acceptance toward LMS usage, higher learning institutions need to pay attention to these crucial variables prior to implementation of LMS enabled learning environment.

The fifth article, empirically examines factors influencing the academician's behavioral intentions in using open government data (OGD). A model was developed based on Rogers' Diffusion of Innovations (DOI) theory to identify these factors by considering perceived characteristics of innovation. Results have shown that compatibility and voluntariness have had a strong influence on behavioral intention. The model provides policy-makers and practitioners a roadmap to determine policy instruments in increasing acceptance and use of OGD by maintaining a good understanding of the influencing factors.

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