Editor's Introduction

This year marks the 30th anniversary of Department of Management Information Systems at National Chengchi University. Meanwhile, we also celebrate the 20th volume of MISR since its debut in 1988. In this festive issue, we are delighted to present four research papers. The summary of the four papers is as follows.

Mary K. Foster and Richard Michon in their paper "Insights into Motivation to Participate in Online Surveys" argue that more and more marketing research is being conducted using online surveys and the response rate is an issue because of the importance of these data for business decision-making. The study uses a sample of 1,501 from an existing opt-in online survey research panel to gain insight into the motivations of participating in online research, and the right incentives for participation. The findings suggest that respondents are motivated by their perceived level of expertise to offer relevant information, familiarity with and trust toward the sponsors of the survey, the propensity for sharing and participation in social media, sponsors' valuing their opinions through feedback, and sponsors' addressing privacy concerns appropriately. Further, the study segments responses by their type and frequency of social media use. Those with high participation and high information needs are motivated by all of the factors identified. In contrast, those who mostly socialize on social media are motivated by familiarity with sponsors, the opportunity to share online, and having privacy expectations met. Those who use social media mostly to seek information are motivated to participate by trust in sponsor, and having privacy expectations met. The types of incentives that work best to increase participation are consistent with the motivations identified: information about the nature and enforcement of privacy protection policies; ability to earn points toward rewards for quality of online contributions; and enforcing an online code of conduct. These results are of interest to marketing researchers who identify strategies for improving participation that are within managerial control and are not dependent on intrinsic characteristics of the participants.

Dinesh Kumar Saini and Sanad Al Maskari in their paper "Data Management Issues and Data Mining of Real Time System Application for Environment Monitoring" argue that environment pollution monitoring and control is a critical problem for the whole world. The aim of the paper is to present the challenges surrounding environmental data sets and to address these in order to develop solutions. Environmental data sets present a number of data management challenges including data collection, integration, quality and data mining. Environment data sets are also very dynamic and this presents additional

challenges ranging from data gathering to data integration, particularly as these data sets are normally very large and expanding continuously. Statistical methods are an effective and economical way to analyze small, static data sets but they are not applicable for dynamic, real-time and large data sets. The use of data mining methods to discover hidden knowledge in large datasets therefore presents great potential to improve environmental management decisions. A representative environmental data set from quantitative air quality monitoring instruments has been assessed and will be used to demonstrate some of the issues in applying data mining approaches to monitoring data quality.

Jagvinder Singh, Adarsh Anand, Avneesh Kumar and Sunil Kumar Khatri in their paper "A Discrete Formulation of Successive Software Releases Based on Imperfect Debugging" state that software reliability is the major dynamic attribute of the software quality, so gaining reliability of software is a vital issue for software products. Due to intense competition, the software companies are coming with multiple add-ons to survive in the pure competitive environment by keeping an eye on existing systems in operational phase. Software reliability engineering is focused on engineering techniques for timely add-ons/upgrades and maintaining software systems whose reliability can be quantitatively evaluated. In order to estimate as well as to predict the reliability of software systems, failure data need to be properly measured by various means during software development and operational phases. Although software reliability has remained an active research subject over the past 35 years, challenges and open questions still exist. The paper presents a discrete software reliability growth modelling framework for multiple upgrades including the concept of two types of imperfect debugging during software fault removal process. The proposed model has been validated on real data set and provides fairly good results.

Prakash Kuppuswamy and Saeed Q. Y. Al-Khalidi in their paper "Securing E-Commerce Business Using Hybrid Combination Based on New Symmetric Key and RSA Algorithm" aim to explore how security in e-commerce is becoming more topical as the traditional shopping and transactions are moving away from physical stores to online stores. E-commerce has had a drastic effect on the global economy and has rapidly accelerated over the years into trillions of dollars each year. Protecting online payment users and application systems requires a combination of managerial, technical and physical controls. In the paper, they propose hybrid cryptographic system that combines both the symmetric key algorithm, and popular RSA algorithm. The symmetric key algorithm, which is based on integer numbers, and the RSA algorithm are widely used in all data security application. Efficiency of the combined security method is better than each individual method.

As the final note, we would like to thank all the authors and reviewers for their collaborative efforts to make this issue possible. It is our sincere wish that this journal become an attractive knowledge exchange platform among information systems researchers. Last but not least, to our loyal readers around the world, we hope you find the contents of the papers useful to your work or research.

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