

Editor's Introduction

In this MISR issue, we are delighted to present four research papers. The summaries of the four papers are as follows.

Yung-Shen Yen in his paper “Posting Articles for Occupational Stress Reduction in Social Networking Sites: A View of Social Cognitive Theory” aims to explore how online users post articles for occupational stress reduction in social networking sites. Drawing on social cognitive theory, this paper examined the effects of subjective norms, personal outcome expectations, and self-efficacy on posting behavior, which in turn reduces occupational stress. A structural equation modeling was used and 262 savvy Facebook users were surveyed. The results revealed that subjective norms, personal outcome expectations, and computer self-efficacy are positively associated with posting behavior, and posting behavior is positively associated with occupational stress reduction. Moreover, the relationship between personal outcome expectations and posting behavior is significant for men, but not for women. In contrast, the relationship between subjective norms and posting behavior is significant for women, yet not for men.

Haren Ghosh and Amit Bhatnagar in their paper “On Measuring and Increasing the Effectiveness of Banner Advertising” argue that banner ad effectiveness can also be determined by measuring the change in perceptions of consumers who have been exposed to a banner ad. They further indicate that the effectiveness of a banner ad can be increased by identifying the issues that are salient to the target consumers and then aligning the message in the banner ad with these issues. A case study is presented where the technique is demonstrated on an advertising campaign launched by the travel department of an Asian country. Consumers who were exposed to the banner ads were shown to be more likely to visit the advertised country

Shiv P. N. Tripathi, Manas Jaiswal and Vrijendra Singh in their paper “Securing DNA Information through Public Key Cryptography” provide robust security to the huge volume of information residing in DNA. In present scenario, security is being managed through symmetric key cryptography only. A new initiative has been taken to increase the robustness of DNA security. In this paper, they are integrating public key cryptography inside traditional DNA security algorithm. The additional security is provided through a new algorithm as proposed, which takes advantage of residue theorem and traditional RSA algorithm. The main security concept is based on complexity in factorization and high versatility of choosing parameters/variables. Basically, DNA is encrypted through symmetric key cryptography and the key used to encrypt the data symmetrically is itself encrypted asymmetrically through proposed modified RSA algorithm. Through examples,

it is further illustrated in this paper that this is not only one of the optimized algorithms to provide a tradeoff between security and computational speed but also adds some sort of defense strategy against various attacks in a layered approach.

Krishnan Batri in his paper “An Effective Pareto Optimality Based Fusion Technique for Information Retrieval” proposes fusion functions to assign relevance scores by considering non dependency among all participating strategies. Relevance score assignment based on the relationship between that specific document and all other documents in the corpus. The existing Comb functions treated as the baseline functions for the proposed functions. Proposed and baseline functions’ performance tested among three medium size corpuses. The average precision value of functions indicates that, one of the proposed functions achieves better performance in comparison with the base line functions. The statistical analysis confirms the same.

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. Finally, to our loyal readers around the world, we hope you find the contents of the papers useful to your work or research.

Dr. Eldon Y. Li
Editor-in-Chief and University Chair Professor

Department of Management Information Systems
College of Commerce
National Chengchi University
Taipei, Taiwan
Fall 2013