Editorial Preface

Make a Good Decision with the Right Method

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This regular issue of the Journal of Organizational and End User Computing (JOEUC) collects eight articles.

The first paper, titled “How does social identification moderate the repurchase intention? from the perspective of OGB,” investigated whether the social identification of virtual communities would influence their repurchase intention from the perspective of online group buying (OGB) websites. In this study, the author conducted a survey of a class of 40 MBA students about the usage of 11 of the most popular OGB websites in Taiwan by distributing questionnaires that had been revised according to the comments from a prior focus group interview (FGI), where 300 effective samples were used to revise the questions and another 300 samples were used the test the proposed research model. Based on the findings in the research, the author drew the theoretical conclusion that repurchase intention will not be consequently moderated by social identification. Other managerial implications can be drawn for potential merchants and OGB website operators.

The second paper, titled “Assessing the role of Simplicity in the Continuance use of Mobile APPS,” intended to evaluate whether simplicity as a quality attribute of mobile apps is significant in confirming mobile users’ expectations and subsequent appraisal of the usefulness and satisfaction with mobile apps. To examine the proposed model, which extends the Expectation Confirmation Model (ECM) with simplicity, a single-group post-test was adopted in a group of 100 sample students, who downloaded and used the testing app after viewing the information of this app to evaluate their intention to continue using the testing app. The research concluded that simplicity plays a significant role in influencing the user’s confirmation of expectations for mobile apps. Therefore, the authors suggested to mobile app providers and designers that simplicity can be an important factor to enhance the continuous use of apps by users.

In the third paper, titled “A Predictive Analytics Approach to Building a Decision Support System for Improving Graduation Rates at a Four-Year College,” an analytic model that would identify at-risk students and could be incorporated into a decision support system (DSS) was built by analyzing available student data, including data used in applying to universities and data on performance. The data was collected from 6,894 undergraduate students who entered the college of business at a flagship US public university between fall 2007 and fall 2016. Then, an ensemble model that combines several diverse models, including Logistic Regression, Neural Network, Decision Tree, and Boosted Tree, was created. Further, the collected data were sampled in different ways to train the proposed ensemble model. The evaluation result showed that the proposed ensemble model can help better identify student who may drop out than single model methods, thus improving graduation rates. In addition, the research also found that the first two semesters are the most critical for succeeding in any program.
The fourth paper, titled “Screening job candidates with social media: A manipulation of disclosure requests,” focused on the influence of recruiters’ requests for social media information and individual characteristics on job candidate trust in the employer. In order to study this influence, a model of trust in an employer based on candidate characteristics as well as social media screening type was developed. Further, a scenario-based experiment, in which the subjects were asked to pretend that they were job candidates and had just completed an interview, was adopted to test the proposed model. Based on this research, this study drew the conclusion that invasive screening of social media may lead to a loss of trust by the candidate, which could foster hesitancy to accept the position. This factor, as well as a robust understanding of individual attitudes toward privacy, should be taken into account when employers use social media for job screening.

The fifth paper, titled “Designing an XSS Defensive Framework for Web Servers Deployed in the Existing Smart Cities Infrastructure,” proposed a framework based on vulnerable flow analysis and the injection of trusted remark statements in a web page to negate the impact of XSS attacks. The main functions of the proposed framework include classification of response web pages into static and dynamic web pages and the injection of trusted remark statements at the borders of the valid JavaScript code present in the web page. A prototype of the framework was implemented by the authors using the JAVA development framework and was evaluated on a tested suite of real-world web applications to detect the XSS attack mitigation capability. The evaluation confirmed that the proposed framework could recognize XSS worms with few false positives or false negatives and had superior performance compared with other existing XSS defensive methodologies.

In the sixth paper, titled “Secure Fine-Grained Keyword Search with Efficient User Revocation and Traitor Tracing in the Cloud,” the authors developed a secure fine-grained multi-keyword scheme using the key policy design framework of attribute-based encryption. The key advancing points of this scheme are: firstly, it provides protection against key abusers by incorporating extra ciphertext components; secondly, it can effectively handle user revocation by delegating the task of updating the secret key of remaining users to the cloud; thirdly, it takes multi-valued attributes and partially hides the access structure associated with the user; fourthly, it performs multi-keyword searches and supports monotonic predicates consisting of AND, OR, and threshold gates. The proposed scheme was proved to be secure against selective chosen keyword attacks under Decisional Bilinear Diffie-Hellman assumption.

The seventh article, titled “Business Analytics/Business Intelligence and IT Infrastructure: Impact on Organizational Agility,” proposed that business analytics (BA-Use) will interact with IT infrastructure flexibility (IIF) to affect an organization’s agility (OA). The results indicated that both factors have a significant impact on OA. Based on the awareness-motivation-capability (AMC) framework, this study provided insights into how BA interacts with other factors to enhance OA. Additionally, the findings also showed that IT infrastructure is a strategic component which can contribute to OA. Finally, the author suggested that BA has strategic values because of its contribution to OA through IIF.

The eighth paper, titled “Lucky reply effect: How a company’s online replies to consumers’ online comments affect consumers’ predictions of randomly determined rewards,” studied whether companies’ replies to consumers’ posted comments would influence perceptions and judgements on a product. A theoretical model was built by reviewing previous research and hypotheses about online comments, company replies, and consumer beliefs. Further, to examine the validation of the proposed model, two studies aimed at investigating the influence of company replies to consumers’ predictions regarding randomly determined rewards and the influence of the percentage of a company’s replies to comments on consumers’ expectations about winning the random drawing respectively, within two groups of 120 Facebook users, from different departments of a large public university in Taiwan. The paper drew the conclusion that the replies from companies to their consumers’ comments will strongly contribute to a higher expectation of winning the rewards from these consumers. Thus,
the author suggested that companies offer particular promotions to those consumers who always comment and interact with companies on social media to further increase their loyalty and maintain their online participation.

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