
Editorial

Lorna Uden

Faculty of Computing Engineering and Sciences (FCES),
School of Computing,
Staffordshire University,
College Road, Stoke-on-Trent, Staffordshire ST4 2DE, UK
Email: L.uden@staffs.ac.uk

Welcome to V14 N1 issue of *IJWET*. There are four papers in this issue. The first paper is 'Creating entrepreneurial education programs and ecosystems in universities' by Anna Závodská, Veronika Šramová and Dario Liberona. According to these authors, one of the main factors in emerging countries for start-up companies is the lack of entrepreneurial skills of founders and their co-workers. These authors argue that creating favourable start-up ecosystems requires cooperation of many stakeholders such as companies, public institutions (universities, self-governing regions, research centres, incubators, co-work spaces) as well as enthusiastic individuals. Universities play a crucial role in the ecosystem creation and development of entrepreneurial knowledge and skills. This paper describes the development of an entrepreneurial course at the University of Žilina in Slovakia and an entrepreneurship educational program at the Santa María Technical University in Chile. The case studies described in this paper show many common factors, such as the need to improve the entrepreneurial program at universities, and the importance of integrating and collaborating with the entrepreneurship ecosystem of universities and real operating start-ups.

The authors for both countries have tested various approaches to develop a start-up education which consists of a university program, related thematic events and practical experience for students aiming to establish their own business. They argue that to prepare students for successful entrepreneurship careers universities must provide a rather complex entrepreneurial ecosystem and experiential activities throughout the whole career of students. The findings of the studies highlight the need to develop a broader vision of entrepreneurship teaching and promote the university-based entrepreneurial ecosystems. The university-based entrepreneurial ecosystems need to cover a wide spectrum consisting of education and extra curricula activities, different types of knowledge creation, different skills and competences that are needed to stimulate entrepreneurial propensities, and these practices should be identified as an integral part of university-based entrepreneurial ecosystems. Through learning-by-doing activities students can improve their entrepreneurial and enterprise skills. Further studies are needed to validate the model.

The second paper is 'Holistic evaluation of knowledge management practices in large Indian software organisations' by Asish Oommen Mathew and Lewlyn L.R. Rodrigues. This research analyses the knowledge management (KM) implementation in Indian software organisations from the perspective of the knowledge workers. According to these authors, a holistic KM evaluation was conducted by capturing the perceptions of critical success factors, process capability, and the effectiveness of KM. The parameters

of the study were developed by using content analysis. A questionnaire survey was conducted to capture the knowledge worker's perception of the eight generic dimensions of critical success factors, five dimensions of KM process capability and five dimensions of KM effectiveness. The data for this research was collected from 423 knowledge workers from 66 large software firms that were listed on the Bombay Stock Exchange (BSE). The perception of each factor was converted to knowledge management index (KMI) scores for interpretation. The results indicated that the overall implementation of KM in Indian software firms was in the right direction with above average KMI scores for all factors. The critical success factors, knowledge process capability factors, and KM effectiveness parameters were ranked based on their perception scores.

These authors are right in saying that the research has limitations. The present study was based on a quantitative approach and was descriptive in nature. The empirical validation of the proposed conceptual model needed to be conducted with a larger sample size for analysing the effect of each factor on the KME. Secondly, The KMP dimensions considered in this research were limited to knowledge generation, application, distribution, auditing and benchmarking. It would be good in future research to gather the perceptions of other stakeholders such as top managers, customers, shareholders, etc. to analyse KM from different viewpoints.

The third paper is 'A simple decision-making approach for information technology solution selection' by Yuri Zelenkov. The author of this paper argues that information technology (IT) is an indispensable tool for any organisation today, so the choice of adequate IT solutions is a critically important skill. According to this author, the selection of an appropriate IT solution consists of various tangible and intangible criteria which are uncertain and incomplete. There are lots of quantitative and qualitative factors to be considered such as business goals, benefits, project risks, available resources, and many others. Traditional project selection technology focuses mainly on quantitative tools. According to these approaches, economic and non-economic factors should be transformed into monetary values and the evaluation should be conducted using cost-benefit analysis. However, these approaches ignore multiple factors that impact IT solution selection, because there is no useful transformative formula to combine all relevant criteria into a single decision-making model. IT project selection process should go beyond traditional 'business value' techniques and introduce concepts of value and risk because appraisal techniques fail to accommodate the intangible benefits and risks associated with IT projects.

The author of this paper proposes a simple method of evaluation of the alternative IT solutions based on five criteria, namely the cost of ownership, the time for the change, security risks, acceptance by users, and confidence in the supplier's ability to implement the solution. In accordance with the theory of probabilistic mental models, a reference class is proposed for each criterion and variables that can be measured quantitatively are chosen on its base. To simplify the decision-making process, a weighted production model is used for the comparison of alternatives. However, it is important that this approach must be validated by empirical studies of its use.

The final paper is 'Finding and validating medical information shared on Twitter: experiences using a crowdsourcing approach' by Scott J. Duberstein, Daniel Adomako Asamoah, Derek Doran and Shu Z. Schiller.

According to these authors, social media provide users a channel to share meaningful and insightful information with their network of connected individuals. In Twitter, there is a common trade-off in collecting information from social media: the more *specific* the

topic, the more challenging it is to extract reliable and truthful information. If the purpose is to focus on a specific topic, it becomes challenging to extract a sample of tweets that meet the following important criteria:

- 1 the tweets extracted should cover all existing perspectives of the topic
- 2 the number of tweets should be sufficiently large enough for natural language processing and other types of analytics
- 3 the tweets should be an authentic representation of the information shared in the tweet.

These challenges cannot be addressed by simply increasing the sample set of users, which may result in unnecessary noise and wrong perceptions of a specific topic.

The authors of this paper present their experience in extracting viable and reliable information from Twitter about a specific topic. The paper shows a systematic method for collecting a list of inputs, which is then properly fed into an application that queries Twitter's API and returns tweets with higher granularity. According to these authors, in the use case demonstrated in this paper, major depressive disorder (MDD) related tweets were successfully extracted. In validating the extracted tweets for their authenticity, they designed and implemented two surveys administered in Amazon Mechanical Turk (AMT) crowd sourcing platform. These authors argue that the surveys validated the methodology and the reliability of AMT's work performance, making it possible for using AMT for reliable scientific research. More empirical studies are necessary to validate the effectiveness of this method.