Editor

Roberto Reve



- Proceedings of the 15th International Conference on Mathematics and Computers in Business and Economics (MCBE '14)
- Proceedings of the 8th International Conference on Management, Marketing and Finances (MMF '14)

Cambridge, MA, USA, January 29-31, 2014

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Preface

This year the 15th International Conference on Mathematics and Computers in Business and Economics (MCBE '14) and the 8th International Conference on Management, Marketing and Finances (MMF '14) were held in Cambridge, MA, USA, in January 29-31, 2014. The conferences provided a platform to discuss business management, financial management, financial accounting, human resources management, risk management and risk analysis, manufacturing and logistics, digital marketing etc. with participants from all over the world, both from academia and from industry.

Their success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of these conferences are published in this Book that will be sent to international indexes. They will be also available in the E-Library of the WSEAS. Extended versions of the best papers will be promoted to many Journals for further evaluation.

Conferences such as these can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors

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Multi-Agent Simulation Mechanism for Exploring the Changes in Team Creativity with Varying Degrees of Task difficulty and Team Diversity



Professor Kun Chang Lee SKKU Business School Sungkyunkwan University Republic of Korea E-mail: leekc@skku.edu

Abstract: Organizational structures are complex and vary according to sector, field, and type of business or service. In order to be effective, an organization needs to tailor its activities to the environment in which is it located. Based on contingency perspectives, this study is focused on investigating effective ways to design team diversity and maximize team creativity according to task difficulty levels. Considering the organizational team member as an agent, the study employed a multi-agent simulation method to understand the progress of creative manifestation, by observing the exploration and exploitation activity of team members over certain periods of time. The results first reveal that the level of team diversity influences the amount of creativity manifested by team members' activities, such as exploration and exploitation. Second, managers have to properly facilitate either exploration or exploitation depending on task difficulty by striking a balance between them.

Brief Biography of the Speaker: Dr. Kun Chang Lee is a full professor of MIS at SKK Business School at Sungkyunkwan University, South Korea. He also holds a WCU (World Class University) professor position at Department of Interaction Science at the same university. He received his PhD degree in MIS from KAIST (Korea Advanced Institute of Science and Technology). He is on the editorial board at several international journals such as Online Information Review (SSCI), Scientia (SCIE), Journal of Universal Computer Science (SCIE), and Information (SCIE). He conducted as a guest editor at Decision Support Systems. Now he is organizing special issues in Online Information Review (SSCI), Electronic Commerce Research and Applications (SSCI), and Computers in Human Behavior (SSCI), all of which are going to publish in 2012-2013. He has presented his papers regularly in a number of prestigious international conferences like HICSS (Hawaii International Conference on System Sciences), AMCIS (Americas Conference on Information Systems), and ICIS (International Conference on Information Systems). Professor Lee is an internationally recognized authority on decision support, ubiquitous computing, intelligent systems, and creativity science. His publication records include over 150 articles in scholarly and professional journals. Refer to http://academic.research.microsoft.com/Author/957772/kun-chang-lee for more details on Professor Lee's academic records. He has contributed to a number of international conferences as a program committee member; it includes CONTEXT (International and Interdisciplinary Conference on Modeling and Using Context), ACIIDS (Asia Conference on Intelligent Information and Database), WORLDCOMP (World Congress in Computer Science, Computer Engineering, and Applied Computing), UCMA (International Conference Ubiquitous Computing and Multimedia Applications), UBICOMM (International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies), PACIS (Pacific Conference on Information Systems), IASTED International Conference on Artificial Intelligence and Applications, International Conference on Intelligent Systems and Control, International Conference on Ubiquitous Information Management and Communication, IASTED International Conference on Computational Intelligence, International Workshop on Improved Mobile User Experience (IMUx), and IADIS International Conference on Information Systems, among others. Since 2006-2009, he initiated collaborative researches on intelligent decision makings with Waseda University, Japan. He is frequently invited by many companies to help direct the development of intelligent decision support systems and to deliver lectures on decision making to their executives. Last year, he was invited by Harvard Kennedy School as Rajawali visiting fellow to conduct researches on creativity and organize seminars on the related issues. He is the recipient of numerous research funds from Korean Government to continue his studies on creativity, and ubiquitous decision support systems. Dr. Lee is capable of integrating intelligent techniques and behavioral research framework to create a new paradigm of researches on complexity and creativity. In line with this motif, he has recently adopted using multi-agent simulations and brain informatics, obtaining a number of pioneering results that seem useful and meaningful in terms of both practical and academic sense. As for introducing his pioneering works to practitioners working at banking industry, he gave lectures to staffs and faculties at The World Bank, Washington D.C., US.

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Quo Vadis Financial Reporting Harmonization for SMEs (Perceptions of Czech Accounting Professionals)



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Abstract: SMEs play an important role in the global economy and their accounting issues are recently under debate, especially after the issuance of the IFRS for SMEs by the IASB in 2009. The comparative analysis between the national regulations and the IFRS for SMEs provided evidence that there are differences between the accounting systems and that the magnitude of the differences between the national regulations and the IFRS for SMEs would influence the cost of a possible adoption of the standard. The IFRS for SMEs is considered to be "a significant development which may have strong impact on accounting and auditing practice in the future, but the attitude of national regulators and standard-setters is crucial in establishing the limits of this possible impact" (Jermakowicz and Epstein, 2010). The interviews with the representatives of the main actors involved in the accounting process (preparers, auditors, professional bodies, regulators, academics, users) revealed their perception about the characteristics of SMEs and SMEs accounting, the costs and benefits of a possible implementation of the standard. Interviewees considered Czech Republic as a typical representative of emerging economy from CEE area with the traditional linkage of accounting system to tax system and application of prudence principle in accounting. Interviewees also points out that the fair value approach could not be widespread in the Czech Republic due to the less efficiency of financial markets.

Brief Biography of the Speaker: Jirí Strouhal graduated from the University of Economics Prague in 2003 and finished his doctoral studies in 2005. In 2006 he became an accounting expect (Czech accounting profession certification scheme based on British ACCA curricula). In the period 2007 – 2009 he was member of the Committee for Education and Certification of Accountants Czech Republic and Executive Board member of the Chamber of Certified Accountants (Union of Accountants CR). From 2011 he is President of Chamber of Certified Accountants Czech Republic and member of Accreditation Committee of this professional organization.

He is reputed academician and practitioner; he published more than 400 research outputs, from which could be stated 25 monographers in the area of accounting and corporate finance, more than 40 research papers published in reputed databases (ISI, SCOPUS – important piece of them in WSEAS/NAUN research journals). His ISI H-index is 1, SCOPUS H-index is 7 and Google Scholar H-index is 10. His major is corporate financial reporting, partially focused on international accounting harmonization and financial securities reporting. He was a plenary speaker of DEEE 2010 conference in Tenerife, E-ACTIVITIES 2011 conference in Jakarta, and conferences in Harvard (ICBA 2012) and Cambridge (EDUCATION 2012). Also did organized special sessions focused on measurement issues in finance and accounting at WSEAS conferences in Timisoara (EMT 2010), Iasi (AEBD 2011), Angers (EMT 2011), Harvard (ICBA 2012), Porto (AEBD 2012), Prague (ECC 2012), Harvard (MMF 2013) and Chania (ICFA 2013). He was a chair of Zlin conferences which were held in September 2012 at Tomas Bata University in Zlin, Czech Republic.

Mobile Payments: Past, Present and Future



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Abstract: Mobile Banking and Payment systems are developing at a very fast pace. The first solutions of this kind are evidenced in 1997, and from that time until nowadays they have undergone a long evolutionary path. From today's point of view we can recognize three phases of MPayment evolution:

- Phase 1 Short messaging-based payment
- Phase 2 Payment using mobile Internet browser
- Phase 3 Downloadable application-based payment

Each of those phases is interesting for some reason and fundamentally innovative. Each of them establishes a new type of relationship between bank or other payment service provider and their customers and therefore needs a new type of CRM to be developed, but also imposes new, always more dangerous threats and bigger worries.

As we can expect, the MPayment development process will not stop here. The future of in this field brings, of course, new solutions and opportunities, and probably new challenges and uncertainties, too. As far as we can see from actual viewpoint, perhaps some of the four scenarios for future MPayments will be effectuated. Popularly appointed, those scenarios could maybe be:

- Credit carriers domination
- · MPayments for the people
- MPayments ... if we have to
- New dogs, old tricks

Each of the phases of the MPayments evolution, as well as the possible future development trends will be systematically examined and explained.

Brief Biography of the Speaker: Prof. dr. sc. Zeliko Panian was born in 1951 in Zagreb, the capitol of the Republic of Croatia. He made his faculty diploma, master thesis and Ph.D. at the University of Zagreb. Until today, the whole of his working age he spent at the Faculty of Economics and Business in Zagreb, where he is also today engaged as a full professor in permanent vocation. He is lecturing at university and professional graduate, post-graduate and doctoral studies. ZelikoPanian is leading a scientific and specialists post-graduate study in Information Management for 16 generation of students. He is lecturing on two subjects - E-Business and Business Intelligence. He also lectured at about twenty other different post-graduate and doctoral studies in Croatia (Faculty of Economics and Business in Zagreb, Faculty of Economics in Split, Faculty of Mechanical Engineering in Zagreb, Faculty of Civil Engineering in Zagreb, Faculty of Organization and Informatics in Varazdin, Faculty of Humanities in Zagreb, Faculty of Humanities in Zadar) and neighboring countries (Faculty of Economics in Sarajevo and Faculty of Economics in Mostar, Bosnia and Herzegovina, as well as Faculty of Economics and Business in Maribor, Slovenia). As a visiting professor he lectured at People's University in Beijing, China, Faculty of Naval Engineering in Athens (Greece) and Florida State University (USA). Z. Panian was a referee, session chair and workshop organizer and leader at 82 international conferences all-over the World. Professor Panian is author of 34 domestic books and co-author of 7 international and 12 domestic books. He published more than hundred scientific and professional papers in different conventional and electronic journals and magazines. He conducted about and was the head of 15 scientific projects.

DEA for Establishing Performance Evaluation Models: A Case Study of a Ford Car Dealer in Taiwan



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Abstract: Effective resource allocation brings better enterprise competitiveness. This study, taking Ford-Right, a Ford Car dealer in Taiwan, as an example, integrates data from enterprise system (ES) and Dealer Management System (DMS) to establish performance evaluation models in sales sites. Performance evaluation model was combined with Data Envelopment Analysis (DEA) so as to analyze relative efficiency of different service centers. This study included eleven service centers of Ford-Right and originally incorporated two inputs and three outputs, one of which was removed because of negative correlation with other variables. Empirical results identified five relatively efficient service centers. In addition, through slack variable analysis, DEA helped to find critical variable for improvement and served as references to reach target performance of respective service center.

Brief Biography of the Speaker: Jui-Min Hsiao, completed his bachelor studies at Feng Chia University, Department of Industrial Engineering (1998), master studies at National Cheng Kung University, Department of Industrial Management Science (2000) and also doctoral studies at National Cheng Kung University, Department of Industrial and Information Management (2005).

He specialized in industrial engineering and business administration. He worked as instructor at Fortune Institute of Technology, Department of Industrial Engineering and Management (2000-2005), as assistant professor at Fortune Institute of Technology, Department of Business Administration (2005-2006) and also as assistant professor at Kun Shan University, Department of Business Administration (2007-2011). In the recent decade, he also worked as consultant at Ford-Right (2003-2009), at Chia-Shing Suzuki (2010-2011), Mazda-Right (2010-2011), and at SMEA. He was also former VP of Ford-Right (2010-2011) and is now concurrently serving as a management consultant at Ford-Right. Hsiao was Director of the Innovation and Incubation Center, Leader of the Industrial-Academic Cooperation Division and also as assistant professor at National I-lan University(2012-2013).

He is now Associate Dean of the Humanities and Management College at National I-lan University and also as assistant professor, Department of Applied Economics and Management (2011-2013).

His main teaching and research areas include E-commerce, supply chain management, operational management, marketing, management information system, business negotiation, human resource management, and knowledge management. He has anchored various industrial-academic cooperation projects and research projects. He also authored or co-authored 18 patents. He was invited by various organizations for training and lectures. He has been endeavoring his efforts to put academic management tools in practice. Published articles and technical reports include research papers about automobile selling industry, biotechnology industry, pharmaceutic industry, etc. He is author of about 60 papers published in international journals and conference proceedings.

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