EXPERTISE, INNOVATION AND TECHNOLOGY: ARE WE IN THE e-XXI CENTURY?

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Preface

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Biographical notes: Pedro Soto-Acosta is a Professor of Management at the University of Murcia (Spain). He holds a PhD in Management Information Systems (MISs) and a Master’s Degree in Technology Management from the University of Murcia. He received his BA in Accounting and Finance from the Manchester Metropolitan University (UK) and his BA in Business Administration from the University of Murcia. He attended Postgraduate Courses at Harvard University (USA). His work has been published in journals such as the European Journal of Information Systems, the IET Software, the International Journal of Information Management and the Information Systems Management. He is also an Editorial Board Member and Associate Editor for several international journals and Chairman of various international conferences.

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Today, Information Technologies (ITs) are having an important impact on the relationships between firms and also on internal business processes. For instance, with an Intranet’s ability to provide intraorganisational communication at reduced cost, employees can distribute and communicate their ideas more readily, enabling them to be
more involved in the decision-making process. As a result, firms are rebuilding some of their key business processes based on ITs and networking technology to conduct business electronically. In this sense, the wide spread utilisation and diffusion of e-business technology is constantly going on and it is affecting several areas of the business context. Similarly, research into the e-business topic has been conducted from different perspectives. Several studies have analysed e-business or IT alignment to organisational strategies. That is, how closely e-business is able to align its strategies with that of the organisation. Other works analyse the use of e-business for interorganisational business activities, arguing that e-business has helped to integrate systems between companies.

Still other works investigate on consumer attitudes towards online shopping.

This special issue comprises a selection of extended versions of the best papers presented at the IASK E-activity and Leading Technologies 2010, which main theme was “Expertise, Innovation and Technology: Are We in the e-XXI Century?”. The first study, entitled ‘Combining attack trees and fuzzy numbers in a multi-agent approach to fraud detection’, by Buoni, Fedrizzi and Mezei introduces a multi-agent system called Fraud Interactive Decision Expert System, which puts more emphasis on the evaluation of behavioural aspects of fraud detection according to the judgements expressed by two groups of experts, inspectors and auditors, respectively. The multi-agent system combines think-maps, attack trees and fuzzy numbers under a Delphi-based team work support system and offers to the users a suitable way to better understand and manage fraud schemes. The second contribution, entitled ‘Information asset analysis: credit scoring and credit suggestion’, by Silva and Analide, focuses on risk management. The authors create a decision mechanism that is able to evaluate a client’s risk. To achieve this objective, they present a suggestive algorithm, which better explains and gives insights on how the decision mechanism values attributes. The third paper, entitled ‘Open source Business Intelligence: an alternative to proprietary tools’, by Bernardino and Ribeiro analyses open-source approach to Business Intelligence, evaluating and comparing three of the most used open-source business intelligence tools: OpenI, Pentaho and SpagoBI. They concluded that Open Source Business Intelligence platforms are growing both in functionalities and in quality and visual appeal, being OpenI the less developed and Pentaho the most appealing. The fourth study, entitled ‘A snapshot of the Portuguese e-banking activity: insights and a conceptual framework to allocate strategic hindrances’, by Ferreira and Monteiro Barata, investigates into the e-banking topic. More specifically, the paper offers a snapshot of the e-banking activity in Portugal by highlighting some of the major strategic hindrances faced by the sector’s evolution. The authors provide a conceptual framework where barriers to the e-banking evolution are allocated into four major categories of strategic hindrances. Furthermore, to show the practical relevance of the proposed framework, they conducted a panel study and thereby discussed the framework’s strengths and weaknesses. The fifth study, entitled ‘E-government principles: implementation, advantages and challenges’, by Alshehri and Drew, discusses the available literature about e-government implementation stages, its challenges and benefits. This article gathers and consolidates several relevant issues regarding e-government such as the definitions of e-government and e-readiness, classification of implementation stages, advantages of e-government implementation and particularly focuses on the challenges of e-government implementation. The authors analyse a brief study of Saudi Arabia’s developing e-government program, which indicates that most of the issues raised in literature are relevant. Finally, the sixth paper, entitled ‘Behavioural Targeting in online advertising using web surf history analysis
and contextual segmentation’, by Deane, Rees and Rakes, analyses the online advertisement publishing industry. The authors propose a supervised learning based ad targeting technique, which will help online advertisement publishers to create traffic and interest for their clients by delivering advertisements which are closely in line with the recipient’s interests.

We are grateful for this opportunity to report and disseminate research presented at IASK E-Activity and Leading Technologies 2010.