
Editorial

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Biographical notes: Charles A. Shoniregun is a Reader in Internet Security and Web Services. He has taught in many universities and colleges in the UK and abroad. He is a Renowned Researcher and Consultant in Internet Security, and he is an Elected Member of the University of East London Academic Board. He has Degrees from the University of East London (BSc (HONS), MSc, PGCLTHE, and PhD), and is a member of many professional bodies. His research interests are in the fields of Internet security, web services, risk assessment of technology-enabled information, electronic and mobile commerce (emC), telecommunications and applied information systems.

Alex Logvynovskiy is a Visiting Lecturer at the University of East London (UeL). He has degrees in software engineering and has published many research papers and co-authored a book. He is a co-founder of the e-Centre for Infonomics, and a member of the British Computer Society (BCS); Association of Developers and Users of Intelligent Systems (ADUIS), an affiliated society of European Coordinating Committee for Artificial Intelligence (ECCAI); and Network of Academics and Professionals (NAP), a section of European Distance Education Network (EDEN). He has over 10 years of experience in the software industry. His current research and consultancy are in

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Charles R. Winer is Professor in the Computer Information Technology Department at Purdue University Calumet and Principal of Winfo Data Systems, an IT consulting enterprise. He joined the Faculty of the University in 1983. His research and professional experience includes over 30 years in information technology in database systems. He holds the CDP and CCP designations. He earned the MA and BA Degrees in Business Education/Information Systems from Governors State University. He has published several articles in industry journals, presented papers at national and international conferences, and is an invited keynote speaker at international conferences.

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The transformation framework for business integration within and across national boundaries are the key strategies organisations use to improve their competitive position and overall performance. This type of transformation framework necessitates that business learns from external sources.

This special issue of *IJEB* includes six research papers that present the scientific and industrial communities with many ideas and results. The contributions of these papers can decrease the extent of the problems identified, and propose solutions that can be adopted by businesses and the adoption and broad use of electronic business technologies like internet. The summaries of the papers in this special issue are as follows:

The Hierarchical Nonparametric Discriminant Analysis (HNDA) content-based image retrieval (CBIR) system for e-business applications has the potential to become an integral component for future e-business applications. Developments in CBIR have drawn interest from many researchers and practitioners in recent years. 'A hierarchical nonparametric discriminant analysis approach for content-based image retrieval system' by Kien-Ping Chung and Chun Che Fung, takes a closer look at the challenges on how to retrieve the most appropriate or relevant images at the fastest speed possible.

Nowadays, search engines are used for finding relevant documents on the web or within a web site. All search engines are index-based; they index web pages and try to match a user query with index terms so as to determine relevant pages. To resolve the problem of vocabulary mismatch between query and index terms, a thesaurus is often used in the IR process. However, the thesaurus is domain-specific and often needs the involvement of professional experts. Current methods to extract key terms are based on natural language processing techniques, statistical analysis and learning algorithms. These methods are complex and do not necessarily aid in providing satisfying IR results. 'A simple method to extract key terms' by Xiangzhu Gao, San Murugesan, and Bruce Lo, evaluates the extraction method and compares it with other methods.

Research and expert opinions have indicated that the governance of project prioritisation and resource allocation is critical to project and organisation success. 'Using resource and portfolio management solution to align IT investment with business' by Rongzeng Cao, Wei Ding, and Chunhua Tian reviews the actions that IT organisations can take to manage shared IT services, which needs to meet resource-competing requests from multiple business units, including the key advanced technologies, complete model for selecting projects and resource allocation problems, together with experiences gained from a bank in Asia Pacific.

For the purpose of business integration, the composition of various business services is naturally required, supported by the associated IT services. 'A stochastic service composition framework for business integration under uncertainty' by Ying Huang, Jen-Yao Chung, Yinsheng Li and Kuo-Ming Chao, proposes a framework for service-oriented business integration under uncertainties. This framework describe how to achieve better business and IT integration results by composing a set of appropriate business and IT services through a service composition model with uncertainties. The framework will furthermore provide a structure of how the service composition model with uncertainties can be established and maintained.

Micro-payment is a service intensive activity, where many payment tasks involve different forms of services, such as payment method selection for buyers, security support software, and product price comparison. 'Web services: an approach to business integration models for micro-payment' by William Song, Deren Chen and Jen-Yao Chung, analyses the web service issues in the context of micro-payment systems for investigating business integration models.

The paper titled 'A model driven XML transformation framework for Business Performance Management model creation' by Shyh-Kwei Chen, Hui Lei, Michael Wahler, Henry Chang, Kumar Bhaskaran, and Joachim H. Frank, proposes a model driven development framework for XML to XML translation with the additional benefits of code re-use and strong built-in model validation, which was later applied to the domain of business performance management, converting documents from human-readable XML format to machine-readable XMI format. Evaluation of their experiment indicates that XML models can have more than 75% size reduction.

However, businesses are under increasing pressure to deliver better services more cost effectively. Many are turning to internet-based transformation frameworks for business integration to help them achieve the possible solution to their business operation problems.

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