Editorial

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Biographical notes: Saqib Saeed is an Assistant Professor at Bahria University Islamabad. He received his PhD in Infromation Systems from the University of Siegen, Germany. He received his Master in Software Technology from Stuttgart University of Applied Sciences, Germany. He is also a Certified Software Quality Engineer from the American Society for Quality. He was working as a Lecturer at the Department of Computer Sciences and Engineering at Bahria University Islamabad, Pakistan before coming to Siegen. His area of interest lie in computer supported cooperative work, ICT4D and empirical software engineering.

Zaigham Mahmood is a Principal Researcher and Reader in Applied Computing in the School of Computing and Mathematics, University of Derby, UK. He has in excess of 70 papers published in proceedings of international conferences and journals as well as chapters in books. He is the Lead Editor of the book *Cloud Computing for Enterprise Architectures* and Editor-in-Chief of *Journal of E-government Studies and Best Practices*. He has also organised special sessions and conference tracks at e-government related conferences. His research interests are in the areas of software engineering, project management, knowledge management, cloud computing and e-government.

Software development is a complex activity which requires application of innovative ideas to improve the reliability and quality in the end products. It requires appropriate tools and techniques to be employed in the software development lifecycle. In order to produce quality products, software development practices need to be constantly improved to achieve the required maturity levels. The failure to do so results in low quality products. Recent emergence of knowledge management paradigm has been highly instrumental in improving organisational performance in every application domain. In order to achieve the goal of efficient production of software and mature development practices, knowledge management approaches have huge potential. However, a majority of the organisations are finding it difficult to adopt the guidelines and approaches, as there are numerous inherent issues. This motivated the editors to organise a special issue

on this topic and examine the impact of knowledge management on software development processes.

We would like to thank Prof. Angappa Gunasekaran, Editor-in-Chief of *International Journal of Business Information Systems* and the Inderscience staff for providing us a platform to publish this special issue. We would like also to thank members of the special issue editorial board for their efforts in reviewing the manuscripts and suggestions to improve the manuscripts. The editorial board included Dr. Rizwan Ahmad (University of Qatar), Dr. Muhammad Ramzan (University of Arid Agriculture Rawalpindi, Pakistan), Dr. Abdul Wahid Hakmi (Altran Technologies Stuttgart, Germany), Dr. M. Ayoub Khan (Ministry of Communication and IT, India), Dr. Izzat Alsmadi (Yarmouk University, Jordon), Dr. Shakeel Khoja (Institute of Business Administration Karachi, Pakistan), Dr. Feras Hanandeh (Hashemite University, Jordan), Sapna Tayagi (IMS Ghaziabad, India), Farrukh Masood Khawaja (Ericsson Telecommunication, Frankfurt, Germany), Abdullah Mumtaz (University of Stuttgart, Germany), Muhammad Aasim Qureshi (Universiti Teknologi Petronas, Malaysia), Sohail Safdar (Universiti Teknologi Petronas, Malaysia) and Muhammad Javed (Dublin City University, Ireland). We are also thankful to the authors for submitting valuable manuscripts in this special issue. The papers published in this issue were received through open call and accepted after a careful peer review process.

The first paper of the special issue, authored by Kevin Vlaanderen et al. proposes the creation of a knowledge management system for software product management to cater for the needs of market driven product development. The authors present a system which could potentially increase the maturity level and quality without increasing the cost.

In the second paper, Francisco Milton Mendes Neto and Marçal José de Oliveira Morais II propose an agent-based model for knowledge transfer about software process to the work force. The aim is to improve the requirements engineering phase of the software process.

In the next contribution, Abdullah Kammani et al. present results of an empirical study carried out in Indian software firms. They propose a knowledge management capability model and present evaluation of Indian software firms using this framework. They conclude that knowledge management capability is imperative for software development.

The fourth contribution by Preeti Mulay and Parag A. Kulkarni presents the knowledge augmentation by incremental clustering. In order to further explain the concept, they have used wine and iris dataset along with software development concepts.

In the next contribution, C.R. Rene Robin and G.V. Uma discuss an ontology-based web service for project analysis. The system can be usefully employed to perform risk analysis of projects in a low cost and time efficient way.

The last contribution by Izzat Alsmadi and Saqib Saeed discusses the effect of open source software projects and associated software developmental methodologies. They discuss lack of support, within existing software process models, for open source projects.