# Editorial

## Kostas Metaxiotis

Ministry of Economy and Finance,
23-25 Lekka Str.,
GR-105 62 Athens, Greece
E-mail: kmetax@epu.ntua.gr

**Biographical notes**: Kostas Metaxiotis is an Assistant Professor in the University of Piraeus and Advisor to the Secretary for the Information Society in the Greek Ministry of Economy and Finance. He has wide experience in knowledge management, artificial intelligence, decision support systems, and e-business. He has published more than 70 scientific papers in various journals and international conferences. He is member of editorial boards and Reviewer in several journals and member of Program Committee at international conferences. Since 1996 he has been participating in various European Commission-funded projects within Tacis, Phare and IST Programmes as Senior ICT Consultant and Manager.

Small and medium-sized enterprises (SMEs) are a vital part of any national economy. Nowadays, to survive in the global knowledge-based economy, SMEs have to improve their products, services and processes, exploiting their intellectual capital in a dynamic network of knowledge-intensive relations inside and outside their borders. The managerial challenge, then, consists of creating new knowledge management (KM) configurations – in term of technological and organisational tools – leading to organisational models sustainable from the competitive point of view.

On the other hand, it is nowadays clear that advanced decision support systems (DSS) as well as business information systems (BIS) assist enterprises in automating and integrating corporate cross-functions and provide the basis for business process management integration in order to minimise costs and increase efficiency and effectiveness of enterprises.

In the European Union, there is currently a debate concerning the necessity to support SMEs and enhance their competitiveness through tools fostering technological and strategic-organisational innovation. Janez Potočnik, the European Commissioner for Science and Research, stressed in Paris (15 September 2008) that SMEs are the DNA of the European economy. The figures prove this statement:

- there are 23 million SMEs in Europe… some 99% of all businesses

- they employ 100 million people… some 70% of the workforce.

However, it is agreed that many SMEs do not invest in ICTs. The 2005 e-business report shows that while many medium-sized SMEs are now catching up, small firms (up to 49 employees) remain behind. Some remain sceptical about ICT and e-business, finding many IT solutions still too expensive or untrustworthy.

The *International Journal of Management and Decision Making* (*IJMDM*) has invited research, application and survey papers for this special issue devoted to the adoption and

use of DSS, BIS and KM in SMEs and has selected seven contributions from the industry, research institutes and academia on international level. Selecting relevant papers for the special issue has been a challenging endeavour.

Samaha and Baki present an exploratory study whose objective is to achieve an investigation into the IS strategy of SMEs in Egypt, by exploring whether Egyptian SMEs follow the traditional IS models that are used by organisations in the Western civilisation or do they have an equally effective procedure. In Egypt, the business environment is characterised by certain organisational practices and management style deficiencies (such as authoritarian management style) and limitations of financial resources. Therefore, investigating the IS strategy of SMEs in Egypt could open the door to improved procedures and practices. While SMEs constitute more than 99% of all non-agricultural private enterprises in Egypt and account for nearly three quarters of new employment generation, the sector suffers from inadequate resources and inefficient labour utilisation. This necessitates the adoption of development strategies and policies that make the economic environment conductive to its growth and integration in the mainstream economy. In this context, this study aims at discovering if a trans-national global IS can be applied to SMEs in Egypt. A trans-national global IS can be described as an accumulation of different 'best-practices' from around the world regarding IS, including frameworks and models from different theorists.

Shahzad presents a semi-star schema for operational and analytical requirements of SMEs. SMEs cannot afford development and maintenance cost of data warehouse (DW) therefore their decision quality suffers. In order to equip these enterprises with data warehousing functionalities, key-properties of DW are analysed and decision-support (analytical) requirements of SMEs are collected. Based on the analysis, a semi-star schema is proposed and evaluated for its advantages. In this study, the author found that semi-star schema can be used for fulfilling operational and analytical requirements of small and medium enterprise.

Lin et al. in their paper, 'Customer relationship management in Taiwan's banking industry', focus on customer relationship management (CRM) and its adoption in Taiwan's banking industry. Successful CRM can generate huge profits for companies through improved customer retention. A major challenge that banks are facing today is in implementing new technological solutions that provide greater responsiveness and flexibility to their clients. Many corporations are now conducting transactions with fewer banks. The challenge for all banks, large and small, comes from not only creating a centre of excellence with established international standards of communication, but also reconstructing and automating their business processes for efficiency. The research of Lin et al. present and analyse the key factors for implementing successful CRM in Taiwan's banking sector.

The paper of Kirytopoulos et al., 'Project termination analysis in SMEs: making the right call', proposes a framework, based on a multicriteria decision-making method, the analytic network process, which incorporates both qualitative and quantitative criteria. As an outcome, the study reveals the criteria that have to be taken into consideration in project termination decisions and provides a structured approach in order to help project managers make such decisions. The paper includes a case study of a troubled ERP implementation project in an SME for clarification purposes.

Ergazakis et al. in their paper, 'KM in SMEs: a research agenda', attempt to propose a research agenda for the relation of KM and SMEs In general, SMEs hesitate to implement KM methodologies, mainly due to the following factors:

- KM is being considered as an unaffordable luxury

- SMEs consider that KM cannot offer them strong advantages

- they doubt whether they can apply KM into their processes.

On the other hand, research in the field of KM and SMEs has been slow in formulating unified methodologies, tools, systems and best practices. In this context, the need for a new research agenda in the use of KM in SMEs has never been more urgent. Based on a comprehensive literature review on KM, the main goal of this paper is to present a new agenda so as to support the research in the field of KM in relation to SMEs by reviewing available literature and exploring future research avenues.

Kelly and Kumar investigate the relationship between KM resulting from a synchronisation model for organisational success and the self-efficacy of individuals in the organisation. More specifically, the authors investigate the impact of the ETK model to manage knowledge for organisational success on the self-efficacy of entrepreneurs in the organisation. The ETK model was developed and applied to organisations as a framework to improve performance. It refers to the three concepts of emotional competence (E), technology competence (T) and knowledge competence (K) within an organisation and is a synchronisation concept of linking the E, T and K components in an organisation so that they operate synergistically. Using the data from 200 small and medium entrepreneurs in the Mexican economy, the paper concludes that the synergistic operation of the E, T and K components in an organisation is significantly related to the self-efficacy scores of the organisational entrepreneurs.

Finally, Papadopoulou et al. in their paper, 'An intelligent decision support system for SMEs' activation in the energy sector', present an innovative, intelligent decision support system for enhancing the SMEs' role in the provision of energy services to operational units of the wider building and industrial sector. Moreover, the system's pilot application is presented and discussed.

I would like to thank the authors of these papers for their hard work and patience with us during the development of this special edition and now hope, that you, the reader, will find these papers as interesting as we do. In addition, the Guest Editor gratefully acknowledges the assistance provided by the Chief Editor of Inderscience, the Editor of the *IJMDM* and the referees who reviewed the manuscripts for this special issue.