This special issue is about Enterprise Information Systems (EIS), a topic gaining an increasingly relevant strategic impact on global business and the world economy, and here approached as driver of competitiveness for Small and Medium Enterprises (SME), in their quest for competitiveness, agility, flexibility and responsiveness.

Organizations of all sorts are ongoing hard investments (in cost and effort) in search of the rewarding benefits of efficiency and effectiveness that the range of EIS solutions promises. But as we all know this is not an easy task, it is not only a matter of financial investment. It is much more, as the authors of the articles herein include show. EIS are responsibly by tremendous gains or even result in tremendous losses!

For the last decades, it is being recognized that enterprise computer-based solutions no longer consist of isolated or dispersedly developed and implemented MRP solutions, electronic commerce solutions, ERP solutions, CRM solutions, and other, transposing the functional islands to the so-called island of information. Solutions must be integrated, built on a single system, supported by a common information infrastructure central to the organization, ensuring that information can be shared across all functional levels and management, so that it lets users instantly see data entered anywhere in the system and, simultaneously, seamlessly allow the integration and coordination of the enterprise business processes. These suites of solutions are no longer designed for large enterprises, they are tools for small businesses, of all types and sectors of activity, they are tools for SME.

Responsiveness, flexibility, preparedness, agility and business alignment are requirements of competitiveness that enterprises search for. The frameworks, models, solutions, tools and case studies presented, analyzed and discussed in this issue can contribute to highlight new ways to identify opportunities, trends and solutions and to overtake challenges of EIS design, implementation, adoption, management and exploitation, in particular for SME.

This special issue includes a selection of four articles from the book titled “Enterprise Information Systems for Business Integration in SMEs”, edited by the guest editor and published by IGI Information Science Reference, which includes a collection of 27 chapters, representing in its whole a good and comprehensive illustration of the state-of-the-art approaches and developments that address the organizational, managerial and social dimensions of EIS as enabler of SME competitiveness.

Inside this issue

This special issue includes six contributions to the discussion of the main issues, challenges, opportunities and developments related with EIS as a tool for competitiveness for SME, written by 16 authors, that includes internationally renowned and experienced researchers in the EIS field. Contributions came from USA, Eastern and Western Europe, representing five countries.

In the first article, “Measuring the Impact of an ERP Project at SMEs: A Framework and Empirical Investigation”, Argyropoulou, Ioannou, Koufopoul-
los and Motwani analyze and test a novel framework for the evaluation of an ERP project. The framework incorporates specific performance measures, which are linked to a previously developed model, (the ‘six-imperatives’ framework). Two case studies illustrate the use of the framework in two Greek companies aiming to measure, in practical terms, the impact of the ERP project on their operations. The main results indicate that the ‘six-imperatives’ provide a comprehensive methodology based on the profound exploration and understanding of specific business processes and objectives that should be met in order to assess an ERP project.

The factors that lead to business process re-engineering (BPR) success in SMEs are not clearly understood. In the second article, “Process Re-Engineering Success in Small and Medium Sized Enterprises”, Chang, Levy and Powell review the main contributing factors to BPR success using a framework that considers culture, structure, technology and resource. Eight Taiwanese case studies are used to explore issues contributing to, or impeding, successful process re-engineering in small firms. The analysis shows that BPR success is empowered by innovation, employee empowerment, top management commitment and strategic direction and is dependent upon customer relations, IS involvement and financial resources.

ERP solution implementation is a complex process, that requires substantial resources and efforts, and yet the results are very uncertain. The ERP hype has already reached SMEs, so Sternad, Bobek, Dezelak and Lampret in “Critical Success Factors For Enterprise Resource Planning Solution Implementation in SMEs – What Does Matter For Business Integration” examine the strategies, methods and critical success factors from SME point of view. The results of their survey in SME in Slovenia have shown that SME have to pay attention to different critical success factors in different phases of the implementation process. Moreover, there are differences in implementation process as opposed to large companies. Case studies of two SMEs have shown similar results.

From the fourth article, “Developing and Customizing Federated ERP Systems” by Lübke and Gómez we understand that SMEs need to further reduce costs and optimize their business in order to stay competitive. Larger enterprises utilize ERP systems and other IT support for reducing costs and time in their business processes. SMEs lack behind because the introduction and maintenance of ERP systems are too expensive, the return on investment is achieved too late and the associated financial risks are too high. The authors introduce the Federated ERP System (FERP) that addresses the problems SMEs face with conventional ERP systems and offers reasonable and scalable IT support. This is done by decomposing the whole business logic of the ERP system into Web services, which are linked at run-time. Consequently the cost is reduced and the functionality can be scaled to the actual needs.

Finally, “Contrasting Approaches to Preparedness: A Reflection on Two Case Studies” by Warren and Fuller, reflects on ongoing research in SMEs in the manufacturing and service sectors. It contrasts different approaches to the issue of preparedness from an organisational and social perspective, in two cases where new enterprise-wide business processes were implemented and integrated in different settings. In both cases, the emergence of new systems presented a huge challenge to companies hard-pressed to marshal the resources to mount effective change and implementation projects on this scale. The cases presented enable a comparison of different strategies used, one firm responding to organic growth, and the other to rapid industry-driven change. The article focuses not on the implementations per se, but instead on the issue of preparedness for change, drawing out general lessons concerning how to support and maintain organisational preparedness for enterprise wide change.

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