

## CALL FOR PAPERS

### Next Generation of Enterprise Information Systems: Looking beyond ERP (Journal of Manufacturing Technology Management)

Guest editors

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#### *Topic*

With the revitalisation of the manufacturing and the service economy our technology choices must be the right ones – choices that will provide the necessary infrastructure to support the techniques, software and facilities that are destined to emerge in the near future. The next generation of enterprise resource information systems should support those companies that are not just content to stay in business and stay competitive, but to grow and thrive. Changing customer expectations and demands, coupled with economic uncertainty and political unrest, have caused manufacturers large and small to take a hard look at all aspects of their operations and processes. The next generation of software should be build for these conditions.

Particularly, the following key limitations of current ERP systems have been noted:

- (1) their insufficient extended enterprise functionality in crossing organizational boundaries;
- (2) their inflexibility to ever-changing supply chain needs;
- (3) their lack of functionality beyond managing transactions;
- (4) their closed and non-modular system architecture.

These limitations stem from the fact that the first generation of ERP products has been designed to integrate the various operations of an individual firm.

Whereas the focus previously was primarily on the improvement of internal processes, a more global view reveals the need for improved interactions and strengthened interdependencies between internal needs and actions and the greater supply chain and demand chain. Today's business challenges inevitably call for real-time coordination across multiple locations (owned, contracted, business partners and service providers). New technology, such as a service-oriented architecture (SOA) fulfils these needs. The next generation of enterprise information systems should harness the technology required to optimise performance in the globally extended (manufacturing) enterprise. This is much more than just one more incremental improvement in a long line of evolutionary steps. This new class of ERP technology is an essential link to gaining a leadership position in the manufacturing and service economy of today and tomorrow.

A rapid development in information technology has transformed not only the way people work and interact with each other, but also the focus of management, from within the enterprise to the relations among business partners. Electronic media, such as e-mail, LAN, intranet and Internet, enable tools that help the enterprise to collaborate on its work and missions within its own organisation and with other independent enterprises, including suppliers, customers and even competitors. The work activities that are related to these electronic media are defined as e-Work. The characteristics of the next generation of enterprise information systems might build on the distributed information and production systems.

To the purpose, this Special Issue seeks to explore the following questions:

- How can the control of manufacturing, logistics and service processes be integrated in enterprise-wide information systems that meet tomorrow's challenges? How does the concept of distributed information and production systems contribute to meeting this challenge? How can a wide range of aspects be integrated in these information systems?
- What solutions for information systems will make it possible to cross-organizational borders and manage activities at firm level and network level, e.g. through SOAs? How can e-Work be integrated in the next generation information systems?
- What functionality beyond transactions can be integrated in these next generation information systems? Particularly, for managing the extended manufacturing enterprise?
- How can next generation information systems provide flexibility for ever-changing demands and cater for uncertainties in input, throughput and demand?

### ***Special Circumstances***

This special issue is linked to the 4<sup>th</sup> European Conference on Technology Management (6-8 Sept. 2009 in Glasgow, [www.euromot2009.com](http://www.euromot2009.com)); authors must attend the conference to defend their paper. During the conference, the submissions to the special issue will be discussed in dedicated workshops chaired by the guest editors, in that way exposing the potential publication to a wider academic audience. The audience will be actively involved in the critical review of the contribution of the paper so authors will get more intense feedback in addition to the normal review process for the journal. Shortly after the conference the authors of selected papers will be notified and instructions for revision of papers will be supplied. Final consideration of the paper for journal publication will be conditional on post-conference revisions being made.

### ***1<sup>st</sup> Stage – Submission to Conference***

- March 26, 2009: Abstracts submission ([www.edas.info](http://www.edas.info), Track B7)
- April 15, 2009: Decisions on abstracts
- June 1, 2009: Full paper submission
- June 23, 2009: Review of papers and final acceptance
- July 7, 2009: Final submission of full conference papers

### ***2<sup>nd</sup> Stage – Discussion of Conference Paper***

- August 2009: First selection of papers (for workshops), others will be kept in reserve
- 7-8 Sept. 2009: Workshop on Special Issue during the conference (workshops will include discussion of paper and review of paper by audience)
- Sept. 30, 2009: Decision on invitation to Special Issue, dependant on review and revisions
- Nov. 30, 2009: Submission of draft manuscript for journal

### ***3<sup>rd</sup> Stage – Discussion of Draft Paper Special Issue***

- Dec. 31, 2009: Review and final decision about draft manuscript
- Feb. 28, 2010: Submission of final manuscript
- March 31, 2010: Review of final manuscript
- April, 2010: Final preparation of manuscripts for journal
- Nov. 2010: Publication in *Manufacturing Technology Management* (scheduled for Volume 21, Number 7)