

IFAC Conference on Manufacturing Modelling, Management and Control

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Call for Papers for a special session on

Decision Tools for Enterprise Resilience

Session chairs: Prof. Raul Poler (Universitat Politècnica de València, Spain)
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A resilient enterprise has the capability to respond rapidly to unforeseen disruptions. It is the ability to bounce back — and, in fact, to bounce forward — with speed, determination and precision. Enterprise Resilience is the next phase in the evolution of traditional, place-centric enterprise structures to highly virtualized and customer-centric structures. A resilient enterprise effectively aligns its strategy, operations, management systems, governance structure, and decision-support capabilities so that it can uncover and adjust to continually changing risks, endure disruptions to its primary earnings drivers, and create advantages over less adaptive competitors.

In environments characterized by discontinuous changes and uncertainty, enterprises respond by bolstering their agility and flexibility. Resilience is the ability to respond to the ups and downs of the business cycle or to quickly rebalance product-service mix, processes, and the supply chain, by bolstering enterprise agility and flexibility in the face of changing environments.

A key issue faced by organizations today is the challenge to deliver the products matching the needs of individual customers, in different geographical markets, at any time, and preferably individually customized, as cheaply and as quickly as possible. The mass customization strategy has been suggested as a way to address the challenge of providing individual products with mass production efficiency. While there has been plenty of research on the enablers in manufacturing and sales of such a strategy, companies still fail to profit from mass customization as it is not included in a networked environment that allows the company to profit from mass customization along the entire value chain. New methods and tools are needed to enable enterprises to respond robustly on customized market demand scenarios, within required cost and time restrictions.

Resilience it is not about responding to a one-time crisis, or just having flexible processes. It is about continuously anticipating and adjusting to discontinuities that can permanently impair the value proposition of a core business. It requires innovation with respect to those organizational values, processes, and behaviours that systematically favour perpetuation over innovation, renewal being the natural consequence of the enterprise. Potential topics include, but are not limited to:

- Resilient Production Planning
- Resilient Order Promising Process
- Resilient Production Scheduling
- Resilient Distribution Planning
- Resilient Multi-site Production Design
- Delivery Reliability
- Efficient Mass Customization
- Resilient Process Configuration
- Even Management
- Performance Evaluation
- Risk Assessment
- ICT for Enterprise Resilience
- Best Practices on Enterprise Resilience

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For author guidelines, please refer to <http://www.mim2013.org>

Important dates:

November 16, 2012: deadline for invited paper submission (6 pages max.)

February 1, 2013: notification of paper acceptance/rejection

April 15, 2013: final papers submission and early registration