

Announcement of a special issue of Journal of Decision Systems

On

Emerging approaches, models and tools for managing Design and New Product Development in a collaborative environment

Guest-editors:

Vincent ROBIN (corresponding editor), IMS-Bordeaux Labs, Bordeaux University.
Christophe MERLO, LIPSI Laboratory, ESTIA Bidart.
Marc ZOLGHADRI, IMS-Bordeaux Labs, Bordeaux University.

Aims and scopes:

Industrial organisation, design and New Product Development (NPD) processes have strongly evolved since twenty years ago. Today customers want products that fulfil exactly their expectations from technical, social and economic viewpoints. The challenge for companies is then to convert customer's expectations into technical solutions through the most appropriate final products and/or services. So, the purpose of design and development management is both to improve the performance of the company and to make its processes reactive and proactive to answer better customers' waiting and constraints of the market.

Controlling design and NPD projects means to be able to understand and to evaluate the design process and the context in which products and services are developed. Difficulties concern several domains. Some of them are directly connected to the design process such as: identification of the customer's requirements and their clarification in terms of design specifications, consideration of the customer's expectations during the design process, and resolution of all the design problems to fulfil the requirements. Some others are related to support processes such as the design of internal facilities or the network of partners. These problems must be addressed by project managers who have to structure the NPD project and teams. The answers to these problems refer to evolution of product model, product knowledge sharing, co-design of the product and associated services, design process reengineering and co-ordination in a collaborative context, identification of potential partners and operational network definition, decision-making in an uncertain context, NPD project organisation and management of the project, effective collaboration protocols definition, etc.

This special issue will focus on research works concerning NPD and design project definition and management in a collaborative context within an extended enterprise. Papers should deal with emerging concepts and technologies, encompassing topics such as:

- Co-ordination of the design system and of all the elements that participate to the product lifecycle management in the extended enterprise,
- Models, methods and scenarios for design project management in a collaborative context,
- Concepts and models to formalise, to schedule and to co-ordinate collaborative design process,
- Coupled design of network of partners and product,
- Models and tools for integrated product and process knowledge to facilitate the co-ordination of engineering design process,
- Models, methods and tools for cross-organisational integration of product, process and organization model,

- Strategies, models and frameworks to manage the design system evolution and the networks of actors,
- Risk management and change management for decision-making all along design process,
- Decision support systems for coupled collaborative design and design engineering.

We welcome contributions from mechanical engineering, electrical engineering, mechatronics, automotive, aerospace and ship building, process industry, building and construction and services, as well as from other domains.

Deadlines are as follow:

Submission of full papers:	1 July 2008
First decision notification:	20 September 2008
Submission revised papers:	1 November 2008
Final decision notification:	15 December 2008
Estimated publication date:	February 2009

Submission and proceedings:

Manuscripts submitted to the special issue should contain original material not published in nor submitted to other journals. All PDF of the manuscripts should be submitted to:

Vincent.Robin@ims-bordeaux.fr