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Editorial

The international congress CIGI'2009 was held on May 10–12, 2009 in Bagnères-de-Bigorre (France). This congress is organized every two years, alternatively in France and in the Quebec province of Canada. It allows worldwide researchers to present their works on industrial engineering area in French language. The theme of this 8th edition was "interoperability and integration". Beyond specific sessions gathering works on the interoperability science, broader themes were discussed, including works addressing organizational and human aspects within distributed supply chains. Aspects such as risk management, distributed product design, project management methods and integrated tools were also particularly discussed. Four articles presented during the CIGI'2009 congress have been selected for this special section of the International Journal of Production Economics, entitled "Anticipation of risk impacts and industrial performance evaluation in distributed organizations life cycles".

Nowadays, within the current globalization, companies are increasingly facing strong constraints which may be difficult to solve. They must, for instance:

- be efficient within instable economic environment,
- be competitive with regards to other companies,
- rapidly develop and produce innovative products,
- control their processes all along the product life cycle,
- manage large supply chains distributed all over the world,
- reach strategic and operational objectives.

In such a context, project management permits to define and control the different activities launched during the life cycle of the product, but also of the organization. The success of the realization of these projects needs high anticipation capabilities. At the early stages of the development of a project, it is necessary:

- to evaluate the risks and their impacts,
- to perform the early phases of the projects taking into account their influences on the downstream phases,
- to anticipate future cooperations between actors in order to manage the identified risks,
- to take into account distributed constraints for the development and management of projects within the context of supply chains,
- to develop models in order to evaluate the performances with regards to the defined objectives.

In order to be more efficient, such anticipations and constraints may require decision support tools, processes and methodologies for decision makers. Thus, this special section gathers four articles that address these problems.

The first article, entitled "A decision-making tool to maximize chances of meeting project commitments", by T.H. Nguyen, F. Marmier and D. Gourc, describes an approach that permits to evaluate the impact of risks anticipating their potential effects for projects of management of innovation, with the goal to meet the project commitments. The proposed tool is a probability-based approach that permits to determinate the risks and to evaluate their effects on the satisfaction of the cost/delay couple of objectives.

The second article, entitled "Interactions-based risk clustering methodologies and algorithms for complex project management", by F. Marle, L.A. Vidal and J.C. Bocquet, analyzes the interactions between identified risks within a project. Clusters of risks are defined in order to facilitate the future cooperation of actors of the project and thus, to improve the management of these risks.

In the third article, entitled "Design for rebirth (DFRb) and data structure", by C. Mascle, the authors propose to rethink product recycling, based on a general integrated methodology that permits to develop a product taking into account, early in the product life cycle, the objectives and constraints of its end of life. The data and information required for facilitating the reuse of a product (or a part of product) during its end of life are defined and collected all along the life cycle. Thus, the approach anticipates at the early stage the downstream activities, improving sustainability.

In the fourth article, entitled "A framework for analyzing Supply Chain performance evaluation models", by D. Estampe, S. Lamouri, J.L. Paris and S. Brahim-Djelloul, a framework allowing supply chains managers to choose a model for the evaluation of their supply chain is described. A methodology for characterizing the type of supply chain is proposed and grids allow decision makers to choose the most efficient evaluation model. Thus, carrying out such a methodology anticipates the future control and performance evaluation of a supply chain, making appropriate and early choices.

We hope that these papers, which have highlighted some methodologies and tools for enhancing industrial performance, are representative of modern industrial approaches, aiming at helping companies for taking up current challenges.

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