Financial Risk Assessment for Manufacturing Control Problems under several industrial Constraints

(Leasing, warranty, logistic, subcontracting....)

Proposed by:

- Dr. Zied Hajej Lorraine University, Metz France
- Dr. Sadok Turki– Lorraine University, Metz France
- Prof. Nidhal Rezg-Lorraine University, Metz France
- Dr. Askri Tarek Lorraine University, Metz France

Short presentation:

Nowadays, the fierce competition between enterprises has led many of them to revise their maintenance and production or service strategies. In fact ameliorating the situation of an industry requires certainly reducing costs and maximizing the customer satisfaction. These two goals cannot be achieved without a good management and a good know how while making decisions. These decisions are generally associated, at least, with three levels of the hierarchical planning process: strategic, tactical and operational levels. Maximizing the profit is the main objective in the manufacturing sector. Thus, cooperation of various activities such as production and maintenance is necessary in order to achieve this objective. Within the last few years, the financial risk in the case of a problem of optimization of production and maintenance have drawn the attention of academia and manufacturers. This risk is due to various factors: failure of the machine and their repair, stock-out, means of transport...etc.

From this point of view, researchers as well as practitioners are invited to propose new studies in this frame and to present industrial cases related to the integrated maintenance problems under constraints. Research related to the keyword below is welcomed.

Keywords

- Risk Assessment for Manufacturing
- Reliability and maintenance
- Spare part inventory management
- quality
- Supply Chain Management
- Prognostics and Health Management
- Optimization in logistics
- etc..

 $\textbf{Contacts:} \ zied.hajej@univ-lorraine.fr, \ \underline{nidhal.rezg@univ-lorraine.fr}, \ \underline{nidhal.rezg@univ-lorraine.fr}, \ tarek.askri@univ-lorraine.fr$