



SYSTEMIC APPROACH AS A MULTI-CRITERIA DESIGN METHOD: HEALTHCARE R&D CENTRE APPLICATION

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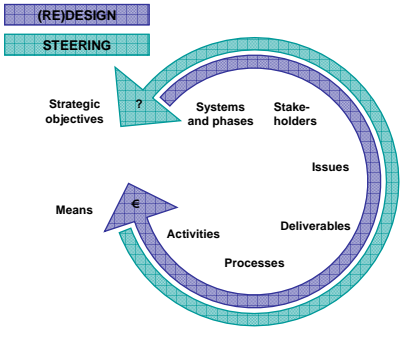
Introduction: motivation and objectives

Companies' performance has become multi-criteria; the performance can be for example scientific, societal, ethical or economical performance. In this context, companies that plan to create a new organisation or department have to think ahead all these strategic objectives to fulfil. The article presents a systemic approach for the multi-criteria design of an organisation.

Work methodology: the SCOS'D method (Systemics for Complex Organisational Systems' Design)

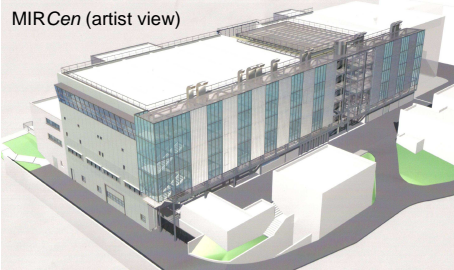
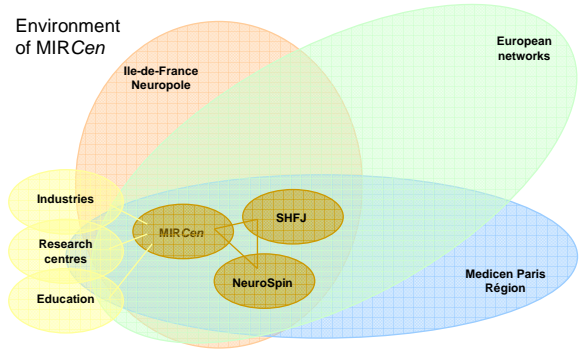
The SCOS'D method is a method based on systemics of (Le Moigne, 1999) and on the SCOS' approach of (Bocquet, 2007) used to work with the actors in companies.

This method aims at designing a new organisation (or at re-designing an existent organisation) from the strategic objectives and the expectations of all stakeholders. It leads to the establishment of the processes and resources necessary to reach the initial objectives.



Case study: MIR Cen (Molecular Imaging Research Centre)

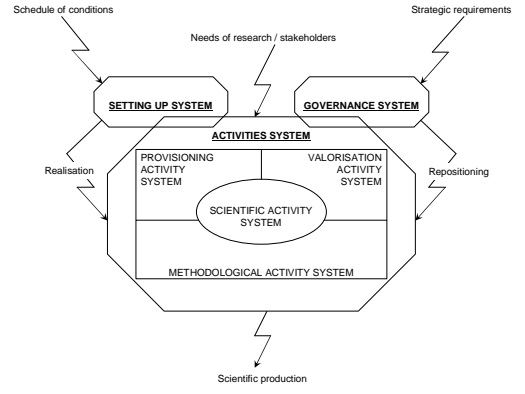
The principal case of study is the integrated research centre MIR Cen, developed by the Commissariat à l'Énergie Atomique, located in its complex environment.



MIR Cen is a research centre in preclinical imaging whose opening is foreseen in June 2008 in Fontenay-aux-Roses (92 – France); it regroups multiple skills and has for principal objectives the scientific excellence and the innovation.

Results

Systems and phases decomposition



List of the stakeholders and of their issues and deliverable

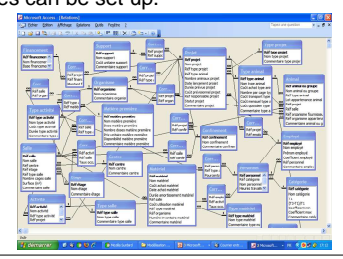
- Customers:** Who does the activities system use bring an added value to?
 - Final customers: Who is this use intended to?
 - Shareholders: Who invests (time or money for example) in this use?
 - Employees: Who realises the activities system use?
 - Mankind: What is the contribution of this use to the society?
- Environment:** In which environment is the activities system use located?
 - Competitors: Who are the competitors of this use?
 - Suppliers: Who provides the necessary elements for this use?
 - Market: What is the market of the activities system use?
 - Mankind: Which society constraints does this use have to respect?

Necessary processes and resources

Then the necessary processes and resources can be set up.

The SCOS'C² tool (Systemics for Complex Organisational Systems' Command and Control)

This tool consists in a single database which regroups all the necessary data and synthesis to help for the decision-making and the management of the research centre.



Conclusion and perspectives

In this paper we present an exploratory research on a multi-criteria design method for organisational structures, called SCOS'D. Based on a systemic approach inspired from the works of Jean-Louis Le Moigne, this method enables to integrate all company's stakeholders' points of view and expectations in order to design an organisational structure. Furthermore, this method could also be used to manage the evolution of the organisational structure and to follow its performance.

We have developed this theoretical proposition thanks to the beginning of the MIR Cen's design. This work has three principal perspectives: to develop the study case and improve the first model with other study cases; to set up values indicators that are comparable between themselves and representative of the reality; to value the impact of such designed organisations on global value creation for a company.

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