

How a GroupWare based on a knowledge structuring method can be a collective decision-making aid: the MEMO-Net tool

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GroupWare tools enable the structuring of collective debates, particularly collective decision-making processes. Tools usually used for decision-aid are synchronous ones (cf. Group Decision Support System), whereas one cannot miss asynchronous GroupWare that enables different decision-makers distributed in time and space to take part in the decision-making process.

Tools that provide this help have to make materialize the arguments exchanged between these decision-makers, and by this fact they provide a decision-aid based on the description problematics (B.Roy), as opposed to synchronous GroupWare that is most concerned by the problematics of sort or choice. As far as our researches are concerned by the introduction of cooperative work tools in technical projects (design, maintenance) and the study of NTIC (new technologies of information and cooperation) that permit networking without spatial or temporal constraints, we are then in this line.

We began our researches with an empirical work whose aim was to understand how long-standing collective decision-making processes progress in design projects. We were then able to identify the limits of existing models and methods (particularly Design Rationale ones), since solutions in the debates as we saw them were not directly exposed but came out at different abstraction levels or took shape of constraints. We have then built the ABRICo method in which decision takes place in two symmetrical problematics: on the one hand the design of a system and the other hand its diagnostics. The first step of the decision-making is then the comprehension of the functions or the aim of the system before involving in the means that have to be implemented for designing or repairing the system.

In the design problematics, the first step consists in identifying the aims of the system and the constraints on the functions that this system has to satisfy before building solutions' propositions. In the diagnostic one, the first step consists in identifying the failing system's functions before suggesting remedies for the default.

In the MEMO-Net tool, we intend to make this method usable by a group of experts who play a part synchronously or asynchronously in a collective decision-making process via a network in the context of the development of GroupWare tools. We have also tried to offer a "user-friendly" interface, even if that meant hiding some of the theoretical concepts. In this presentation, we will expose the first elements of our theoretical surroundings and the MEMO-Net tool with some examples.