
Émergence de concepts inspirés de portfolios structurés d'images

Vincent Bousquet*¹

¹ENSAM – École Nationale Supérieure d'Arts et Métiers (ENSAM) – France

Résumé

In the product design processes, the inspiration step takes place between the formalization of the problem and the concepts selection. It is highly dependent on the designer experience during the preliminary design phases. Innovation can also come from Internet (biggest database available for free). But designer needs to face the difficulty of the profusion of results. The work done propose and test an inspiration method by images analysis. This is applied to a research of innovative pliable mobility solution.

The formalization of the problem brings out keywords founded in the requirement specifications of the system. These keywords are grouped in corpus of similar family by semantic merger. Every identified corpus specifies a field of information. The convergence is done while associating these various fields in order to target a specific concept solution. The quality of the request is estimated by the relevance of the results obtained.

The semantic space quality and width associated to a field, bring out numerous different concepts of solutions. We can then subdivide and group these new lexical fields to target more specifically a concept of solution.

By selecting, analyzing and classifying the results, we can build a knowledge base for the problem resolution compatible with the product requirements. The results of inspirations are classified and ranked. Finally, this knowledge base is exploited using functional analysis, design heuristics and evolution trends of technical systems.

*Intervenant