

Project Proposal – BA / MA / IDP / Projektstudium

Existence of Dominant Design Ideas? or Identification of “Breakthrough solutions”

20. Oktober 2009

Problem

In the 20th century, many leading industrial companies generated, developed and commercialized the ideas for innovations in self-reliance. Nowadays, companies are increasingly rethinking the fundamental ways of managing their innovation activities. Opening up company's traditional R&D processes for other resources for innovation becomes more and more important. In this context, idea and design contests are one of the most promising ways of integrating customers into the innovation activities of companies. They are a promising means to generate a large number of ideas within a short period of time, providing various views and solutions for a certain topic.

However, the problem with a large quantity of ideas is that companies and innovation teams do not know which ideas they should further progress. Often it is the case that many ideas seem to be promising and interesting, but none of them turns out to be a real breakthrough solution. While no single idea provides a breakthrough solution, the analysis (aggregation, clustering, combination, etc.) of all ideas could lead to some essential findings which may lead to one single so-called dominant design which helps to specify how future real breakthrough innovation may look like.

Task

The goal of this thesis is to explore whether dominant designs can be derived from a large number of ideas ($n > 100$) submitted in a real-world idea contest and how these dominant design ideas may help to describe and to define how the next top-selling product such as the Apple i-Phone has to look like.

Students have to get familiar with dominant design theory and to deduct characteristics which may help to identify dominant ideas. In the scope of the thesis an idea sample of 590 ideas that have been submitted during the OSRAM LED-Light idea contest (www.led-emotionalize.com) should be analyzed. During the thesis, the author shall develop and/or apply some IT based routines and algorithms which allow to explore the contributed ideas (similarities – use cases, technology, features, applications, customer segment, etc.; frequencies; relationships) and derive some dominant or sub-ordinate ideas from it. Besides the automated exploration of the ideas, the author shall interpret the results and map it with existing theory. To validate the findings, the identified dominant ideas shall be presented to an expert panel as well as some peer members which are asked to determine the actual appeal and potential of these ideas.

The master/diploma thesis can be written in German or English.