

VISION BASED DESIGN - METHODOLOGY FOR DEVELOPMENT OF LONG TERM DESIGN STRATEGY

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ABSTRACT

We have been working with the challenge of making product design an active long term strategic tool for a company. Every company sells its products in today's markets, and today's products are results of earlier product design and development, market positioning, branding and identity development. The great challenge is to balance the forecasting of markets and technology with the development of the company and its brands.

To improve companies' innovation and value-add capabilities and competitive power in global markets, product design must be proactive. To ensure efficiency and continuity, basic strategies, platforms, identity and conventions are essential. Design should be incorporated as an essential part of business strategy, as a primary driver for corporate image and values, and as a premise for differentiation, recognition, consistency and correct market positioning. A good design strategy enables to extend the time to market by foreseeing future markets, focus your product design, and get a product portfolio adapted to market strategies and networks.

Keywords: Design strategy, corporate identity, market strategy, product design program, design management.

1 INTRODUCTION

The curriculum for Industrial Design Engineering at NTNU, Norway, has been restructured as a part of an ongoing globalization process. Going from a 5 year study, we now plan in a 3+2 year bachelor and master study. The bachelor will cover the fundamental design education and the master program will among others, contain design management and design strategy.

In our studio course *Product design 8- Design strategies*, (PD-8); we have tried to find a way to develop a company's design strategy by using a model for company development from the economic world, supplied with special skills from the design profession.

In the course we started by analyzing an existing company regarding its organization, identity, image, product portfolio and markets, and ended up with a SWOT-analysis. Using this as a common basis, several student groups were divided, and each group developed a new company strategy for the future. Each group started with a new strong vision reflecting a strong, long term trend.

Different tools are used to develop market strategies focused by the vision, relation strategies making the company's product a well integrated part of the market and so on. As an important tool to connect the vision to the every day plans, the company's values and identity is used.

Every step is evaluated by the group according to the theoretical criteria. The process is supported by a web tool, presenting the company and its strategies in one level, and the evaluation in another level. In the last part of the course we are focusing on the presentation of the main strategies, making a product design plan, and seeking a good way of transforming the vision and strategies into definite identity, including product design projects.

The presentation will:

- describe the methodology
- discuss how to transform strategies to product design program
- discuss the designer's roles in development of the company strategies, brands and identity
- give example from the PD-8 course.

2 METHODOLOGY

We have chosen a model for client oriented market development, the BASO-model [1]. It is a holistic model, integrating standard tools for development of each level. For the course we have a book describing each step, and a web oriented toolbox for development of the model. Each of the levels of the toolbox has a template for the solution, and one template for evaluation of the solution according to the theory and the value of the choices that have been taken.

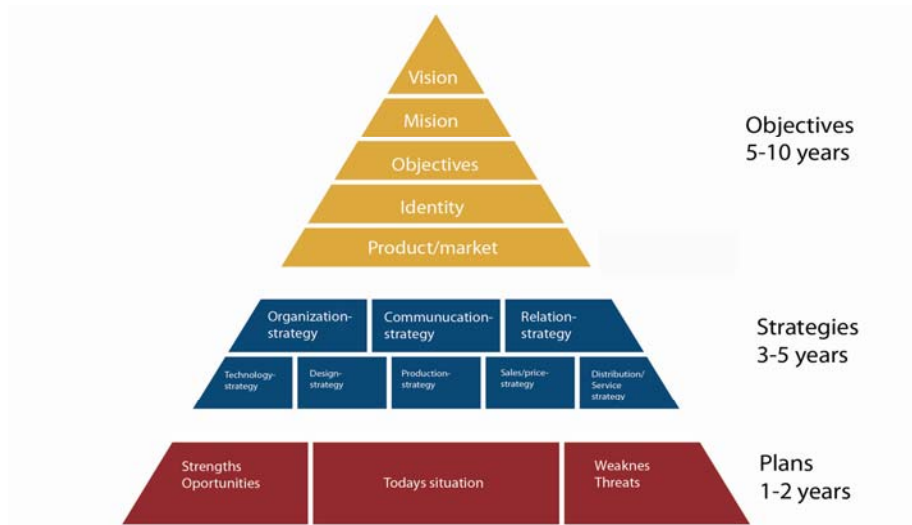


Figure 1. The BASO-model for organizing the company.

In the course PD-8, we bring in an existing company, and analyze its situation today, ending up with a SWOT analysis. This is done in plenum, and all students have the

same basis for the further work. Then we divide them into small groups with 3-5 students in each. Each group will act as the board of the company taking all decisions in the reorganization of the company. The groups will mark up their choice of focus in the SWOT, and bring in a new vision for the company. Then the groups develop all the objectives, identity philosophy and different strategies, all focused by the vision and based upon the chosen factors from the SWOT analysis.

As a final part of the course, every student take the leadership of the “new” company by developing a design program and a future design plan, and present the “NEW COMPANY”, using the design of the presentation itself to visualize, exemplify and communicate the company’s new identity.

3 IDENTITY

Identity is used to translate the vision to the company, the market and integrate it with product development activities.

Working with identity, we are handling Company identity, Product identity and Brand identity. Olins [2] set up a model where companies are expressing their identity through products or services, environment, people and communication.

How should the company products and services appear?	How should the surroundings of the company appear?	How should the company communication appear?	How should the people within the company appear?
Functionality	Structural architecture	Graphic elements	Behaviour
Design	Offices	Publications	Dress regulations
Packaging	Receptions	References in media	Service department
User manual	Sales base	Advertising	Serving staff
Technology	Factories	Publicity	Salespeople
Interaction	Vehicles	Information	Management

Figure 2. Elements of the company’s definite identity, Parr [3], based on Olins [2].

We divided the identity development process in an abstract part, which was decided early in the process. Values and philosophies formed the basis of mission development, and a definite part was done after the choice of market segment and user groups.

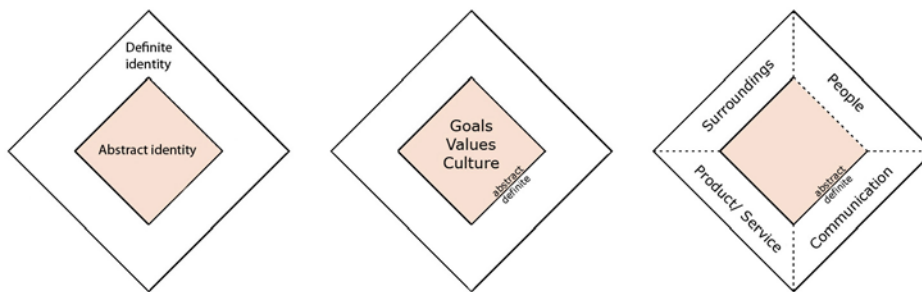


Figure 3. Abstract and definite company identity, Parr [3], based on Olins [2].

We worked intensively to obtain consistency for the identity, between abstract and definite identity, and between all elements of the definite identity. During this phase, the vision is used as a strong guidance.

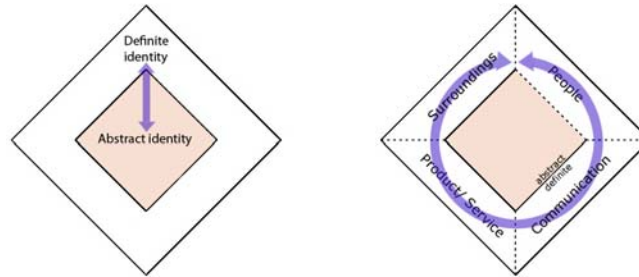


Figure 4. Consistency of identity, Parr [3], based on Svengren[4]

Important decision-making in the identity definition is the choice of brand philosophy and structure.

4 TRANSFORMATION OF STRATEGIES TO PRODUCT DESIGN PROGRAM

Having made the vision, mission, abstract identity and strategies for the company and its value chain, we started with developing a product design program or a product convention map. This is a summary of all the strategies as boundaries, definite product identity map, definition of market and user decisions as a general specification for future design projects, and a part of future design briefs. Elements from Karjalainen [5] and Warell [6] were used in this part, whereas Parr [3], [7] and Pettersen [8] developed new materials and adapted design students to this phase of the process.

5 THE DESIGNER'S ROLES

Small and Medium Size Enterprises, (SME's), in Norway are using designers in a small scale. [9], [10]. Rismoen [9] says it is important to have engagement for design on the top level of the company to get effect of using designers.

Our experience from PD-8 indicates that use of designers in the management and planning process, will achieve good results generally, and is particularly successful with the work of identity and product design and development. Designers are skilled at holistic thinking, user orientation, the identification of abstract criteria and transformation of criteria into concrete solutions. The same model has been use for marketing students and there is a significant difference in the holistic thinking and the focusing on product development and user orientation.

Our goal is to train the designers' skills to take part in the companies' management. The development of definite company and product identity is a task which includes different challenges, where different design professions are needed. Development of a product design program will ensure consistency between abstract and definite identity and in time, give a more efficient product design process and a shorter time to market.

6 EXAMPLES FROM THE COURSE

In 2004 we worked with a producer of electrical heaters as company case. 12 students made a common analysis of the existing company, and then divided into 3 groups. Each group then developed a “NEW COMPANY” beginning with a new vision.

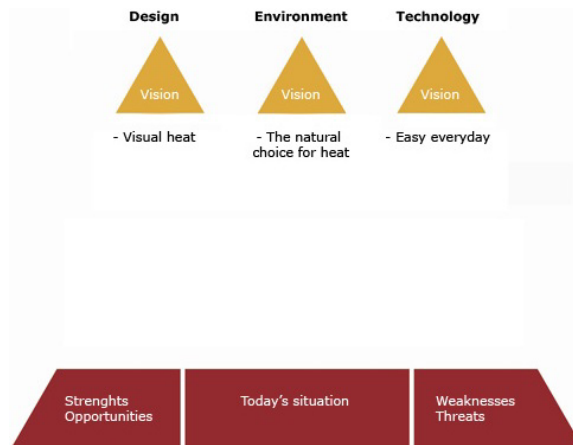


Figure 5 Three groups, starting with three different visions.

The groups made a framework of three future companies with totally different profiles, in three different markets. Three new companies that could have collaborated more than competed. All of the new companies seemed to have a realistic and bright future. A vision based company and product design seems to be an efficient way of focus development efforts.

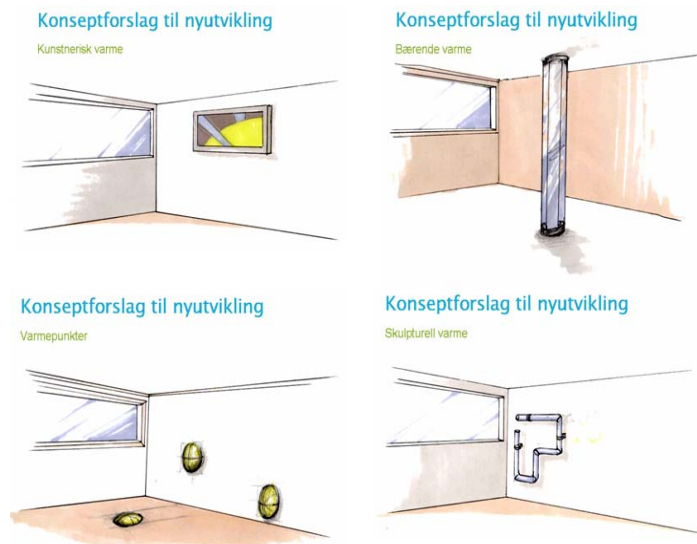


Figure 6 Sketches of possible products for the company with vision “Visual heating”, made by Silje Evensen.

7 CONCLUSION

Using the vision as a strong focusing force in reorganizing a company seems to be a promising methodology to obtain an efficient and proactive product design and development.

Experience shows that different visions generate different design strategies leading to different company development. Use of the BASO-methodology seems to be a tool for companies to make plausible future scenarios for long term decision-making. The scenarios are based on today's situation, are well focused, easy to evaluate, and a solid platform for future product design and development.

The model seems promising to fit SME, and during 2006 we will try out the model in full scale.

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