

"Design Thinking in Business Innovation represents a paradigm shift in Swedish design history. At last design students are realising the true potential of design as a business tool"

Jonas Lindberg Design Futures www.designfutures.org

"I am continually impressed with [their] presentation skills, and degree of professionalism. This material is very useful to GDHA in terms of the all important 'selling in'"

Ian Johnstone Senior Design Manager Glen Dimplex Design "Remotel has boldly explored the emerging fusion of design, innovation, branding and consumer insight. Their work carries all the traits of pure budding talent. Inquisitive, thought-provoking and well-versed in the tools that are evolving from nice-to-have into need-to-have. These guys will be going places."

Magnus Lindkvist Pattern Recognition www.pattern-recognition.se

"Remotel's project show how design can be made trustworthy in a strategic context by using the typical industrial ability to apply multiple perspectives to an issue"

Olle Torgny Industrial Designer

Abstract:

The world is undergoing change and the disintegration of the old economy is becoming evident. Production is moving to low cost countries and competition is growing fierce. In order to stay competitive, companies around the world recognises the need to become more innovative. In order to achieve this it is imperative to balance and compliment the linear business thinking that still rule the managerial body. Leading research in this area suggest that the key to innovation in business development lies within the creative thinking of the design field. This paper describes a joint master degree project that seeks to test these theories and develop methods and protocols to put them into practice. So the question is, what happens when one use industrial design as a tool to innovate business in the Creative Economy? The research group consists of four industrial designers from Konstfack, University of Arts, Crafts and Design in Stockholm and four marketing students from School of Business, Stockholm University. During the project we applied action research and introspection in a case study where new business strategies where formulated for a live company as our empirical base. The process proved more difficult but also more rewarding than initially anticipated and resulted in several new potential strategies for the company while providing valuable insight and experience in interdisciplinary team work in this field. This paper presents suggestions to how design thinking and business thinking can be combined in the process of developing business strategies and accentuates some of the skills and qualities that inherently drive this process. The collaboration investigates the synergy between designers and business managers and illustrates the potential in combining these competences to find new ways to create, re-define and develop businesses in the creative economy.

Key words:

Design management, industrial design, business development, creative economy, interdisciplinary collaboration, business excellence, design strategy, marketing strategy, design-driven innovation, design process, innovation management, paradigm shift.

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1 The Creative Economy

"Increasingly, the new core competence is creativity -- the right-brain stuff that smart companies are now harnessing to generate top-line growth. The game is changing. It isn't just about math and science anymore. It's about creativity, imagination, and above all, innovation."

- Bruce Nassbaum, Business Week

1.1 Introduction

These days many companies are struggling to adjust to the globalisation that has brought about a fierce increase in competition in many markets and an increase in outsourcing of production and services to low cost regions¹. With an increased supply of price competitive labour and the expansion of the knowledge industry globally, companies in the western economies are finding it progressively difficult to stay competitive². During the 20th century most companies successfully organized their business around the concept of linear, incremental optimization of a given business model such as re-engineering, supply chain management and most of all cost control. These are the traditional and fundamental theories that derives from the early days of the industrial revolution where companies where seen mostly as central driven organizations that seek increase in profit mainly through production and the evolution of existing business concepts³. In a market over flooded with products, characterized by stern competition and extreme cost effective production, in order to be successful a traditional business approach may not be enough anymore. These days most companies win by superior creativity and uniqueness.⁴

¹ Jerry Kathman, "Brand Identity Development in the New Economy", *Design Issues*, (2002:18), 24

² Anna Valtonen, *Six decades – and six different roles for the industrial designer*, (Helsinki: University of Art and Design Helsinki, 2005), 6

³ Sten Albertsson & Olof Lundqvist, *Marknadsföring*, (Stockholm: Bonniers Utbildning, 1997)

⁴ Philip Kotler, Kotlers marknadsföringsguide från A till Ö, (Sundbyberg: Pagina Förlag, 2003)

The radical development and growth of effective communication technology is changing the convention of doing business fundamentally. Customers have more information readily available while they are in turn subjected to a far greater amount of offers than previously. The traditional monolog between companies and customers is turning in to a torrent of exchange of information and opinions where trends are emerging in parallel and evolve at an ever faster pace. Marketers are witnessing the fragmentation of their markets and find it increasingly difficult to interpret or influence their target groups⁵. Therefore some of the major challenges facing companies today are the need for an increased speed and differentiation in production development, design cycles and foremost competitive response. These factors are driving firms to rethink their business models and initiate a fundamental business transition⁶.

If all your competitors have the same know-how and technology as you and can match your quality and price all while promoting their products and building their brand using the same channels, what remains to differentiate you from the rest? One answer is innovation; to be fundamentally innovative and different in the development of your business strategies and offers.

"Increasingly, the new core competence is creativity -the right-brain stuff that smart companies are now harnessing to generate top-line growth. The game is changing. It isn't just about math and science anymore.

⁵ Prof. Lars Dencik, "Förändring har blivit det normala", *Attention*, (20 `05:8), 106

It's about creativity, imagination, and above all, innovation."

In short: Due to the development of technology and shift in society the precursors for business are changing drastically. In order to stay competitive companies must incorporate creativity and innovation, thus giving rise to the concept of the Creative Economy. The question of how this can be achieved remains a current topic amongst business developers. Malin Orebäck, a senior designer and design strategist with an MBA in design management attempts to shed some light on the issue: "Briefly, it's about changing one's focus from the product to the overall picture, and getting more companies to include design in the actual business concept"

1.2 Theory

The theory that where developed during the early stages of the research states the following: The tools and methods that are commonly used in industrial design could be highly useful to innovative business management and might therefore become important for companies to master in order to stay competitive in the creative economy. So which tools and methods are we talking about?

- **Creative tools**: Innovative methods and tools for creative ideation and original thinking.
- **Visual tools**: The ability to visualise, concretise and communicate abstract concepts and strategies.

⁶ Roger Martin, "The Design of Business", Rotman Management, (2004)

⁷ Bruce Nussbaum, "Get Creative!", *Business Week*, August 1 (2005)

⁸ Susanne Helgeson, "To succeed or not...", Form Designtidskriften, (2004), 31

• **Structural tools**: The ability to recognize patterns and to structure seemingly confusing data and find the core of the issue.

We believe that in the overlap between strategic design competence and innovative business management competence, one can build truly innovative and competitive companies. This dictates that collaboration and working in cross disciplinary teams is crucial for success in the Creative Economy. So what will the position and function of a hybrid competence between marketing and design become? We believe that this potential competence will perform a number of functions:

- **Research**: Collect, interpret and present data with both consumer relevance and company issues in mind.
- Strategy: Identify formulate and visualize opportunities, strategies and visions.
- **Design Management**: Develop design briefs and manage design resources for complex product service systems (PSS).

Since these functions concern the overall direction and organization of a given company, they need to act on an executive senior management level. We think the most fruitful position for the creative business developer of this kind is as an equal part of a management group that has strategic responsibility. We also believe that there is much to be gained from formulating a methodology on how design methods in conjunction with marketing and management competence are applied in business development. By doing so it is possible to create a formula for a successful and repeatable innovation process.

1.3 Innovation

The term innovation is a term with many meanings and is used by different people for different reasons. Generally it refers to some sort of significant improvement such as a god idea or an invention. The view that an innovation driven company works with technical R&D as its foremost source of top-line growth and competitive edge is the most common. In business and economics the term refers to a number of areas such as products, processes, marketing, organizational and business model.

Regardless of the usage of the term, there are at least two different ways to approach innovation: incremental or radical. The former refers to the most common approach which tends to translates in to a series of steps along a technological trajectory. Within a given market the operators with similar business model put great effort into incremental innovation of several factors such as financing, production, technology, and cost-control. This is a necessary optimisation process of most businesses but translates into little difference in competitive edge¹⁰. Innovation of a radical nature is implies a new direction of thought in a given field. This project deals primarily with radical innovation that affects multiple aspects of how a company does business.

⁹ Brianna Sylver, *What does "Innovation" really mean*?, (Chicago: Institute of Design, IIT, 2005)

¹⁰ Frans Johansson, *Medici effekten - Revolutionerande insikter i skärningspunkten mellan idéer, begrepp & kulturer* (Stockholm Bookhouse Publishing, 2005),

1.4 Creativity

In order to become innovative an organisation must manage creativity. Creativity is used to define certain acts of association commonly found among the creative industries like designers and several other disciplines. These acts might include;

- Expressing ideas: The ability to easily develop and manage an abundance of associations and phrases when presented with a single word or image.
- Combining ideas in a new way: Developing a wide range of innovative solutions when asked to explore new possibilities for an everyday item.
- **Finding new uses for existing ideas:** Generating an original idea or solution based on a suggested existing idea.
- **Expansion**: The ability to work up a tentative idea into a practical solution.
- Focus and discrimination: Recognizing the central challenge within an approach to a solution, while discounting any distracting minor elements, and then evaluating the difficulties.
- **Perspective swapping**: The ability to suggest ways of viewing a known problem from a completely different perspective.

The majority of these activities depend on the ability to associate and create meaningful connections between seemingly disassociated phenomena. The ability or tendency to associate in a non-linear, divergent manner is referred to as having low association barriers¹¹.

¹¹ Frans Johansson, *Medici effekten - Revolutionerande insikter i skärningspunkten mellan idéer, begrepp & kulturer* (Stockholm Bookhouse Publishing, 2005), 52-72

Traditional management and business methods are ill equipped to deal with non-linear, intuitive or seemingly chaotic workflows and are struggling to implement these components in their organisation. The question of how this can be achieved remains a current topic amongst business developers, managers, researchers, journalists and others.

1.5 Design

Design can be defined as both a noun and a verb in the context of any creative activity. As a verb, design is the process of originating and developing a plan for an aesthetic and functional product or service, which usually requires considerable research, thought, modelling, iterative adjustment and re-design. As a noun, design is both for the final plan of action (a drawing, model or other), or the result of following that plan of action (the produced object). The philosophical description of design as an abstract noun refers to purpose, purposefulness or teleology.¹²

"We read everywhere about rapid and constant change and, therefore, the increasing unpredictability of the future. And yet, we have seen little in the way of tools and methods to manage that change effectively and proactively. The tools of traditional business planning start with the assumptions that maintaining the current state is the best strategy and that incremental growth is a satisfactory outcome. What if we can no longer base our future business on what has happened in the past? [Managing Change] suggests that organizations might look to tools

¹² (2005, October 25) Wikipedia [www document], URL http://en.wikipedia.org/wiki/Design

from the field of design. These tools can help business managers both to get in touch with their customers' (and other stakeholders') unarticulated needs and desires and to intentionally imagine and create futures based on the one thing that seems to remain relatively stable even in times of great change—human behaviour. When made a part of an organization's work processes and competencies, the tools enable the organization to embrace change as a normal part of managing their business."¹³

The industrial design process and methods are in part based around innovation and creativity and guides projects trough a fuzzy and chaotic reality while keeping a close touch with the end user. The process enables repetition with a predictable level of quality and allows the people involved in the project to work towards a result that remains undefined for the major part of the project. The methodology comprises of non-linear problem solving and encourages multidisciplinary team work. In a traditional industrial design processes the aim is to find one suitable solution to a given problem. The attitude is to never imply that you know the answer but to enter each project with an open mind and let the research inspire and guide you.

In this report the term design is primarily used to reflect its qualities as a business function. There are aspects of design that are not encompassed by the rubric of the creative industries, which instead are

¹³ Peter Coughland & Ilya Prokopoff, *Managing as Design*, (Stanford, Stanford University Press, 2004)

embedded in industrial and commercial organisations and practice. The design of complex, multifaceted product service systems such as mass transportation or medical equipment need a different approach compared to traditional product design. These examples are all components of a larger system the structure of which is also an important design aspect. These require many disciplines and competences, using research tools and methodologies that are proven and repeatable to be valid. Design work on these levels requires an understanding for not only material and formal properties, but also human dimensions and perceptions in terms based on knowledge and data as well as sensitivity and empathy.¹⁵

"The best results can be achieved by training general managers, marketers, sales people and engineers to understand design and designers to be aware of and understand the functions of these people. [...] As other strategic marketing tools become increasingly expensive, design in likely to play a growing role in the firm's unending search for a sustainable competitive edge in the marketplace." ¹⁶

¹⁴ Jan Landqvist, *Vilda idéer och djuplodande analys*, (Stockholm Carlsson Bokförlag, 2001)

¹⁵ John Heskett, *Shaping the future - Design for Hong Kong - A strategic review of Design Education and practice*, (School of design - The hong Kong Polytechnic University, 2003): July, 13-16

¹⁶ P. Kotler & A. G. Rath, "Design: a powerful but neglected strategic tool", *Journal of Business Strategy*, (1984)

1.6 What has been done in this field?

In the past 15 years or so, a number of authors and researchers have written at great length about the value of integrating design methodology in business management and have suggested ways in which this could be achieved. Several companies within the design and business management industry as well as regular consumer goods companies have also made attempts at putting these theories into action. In parallel, policy makers, design and business think tanks and national design centres are trying to create interest around design's impact on business and create tools to illustrate the benefits of using innovative methods in business, as for example The British Design Council (see fig 1). Lately the business management press has written several articles about the creative economy and its use of design methods as well as it's implications for the business community.



Figure 1: From "The Impact of Design on Stock Market Performance - An Analysis of UK Quoted Companies 1994-2003", Design Council, February 2004, p. 2, 19: Appendix 3: Chart 1

Distinguished authors in the field of the development of business management with a design twist have written books, articles and reports describing the underlying factors that affect the future of doing business. They all describe the need to become more innovate in business management and have determined that the methods used in industrial design are highly relevant to achieve that. Less has been written on *how* this is to be put in into practice which what this project focuses on. Consumer product companies such as *Proctor & Gamble* and *General Electrics* are in the forefront in infusing design methodology in their organization. Likewise, design consultant agencies such as *IDEO* (Palo Alto, CA, USA) and business strategy firms like *Doblin Inc*

 ¹⁷ Gabriella Lojacono and Gianfranco Zaccai, "The evolution of the design-Inspired Enterprise", *MIT Sloan Management Review*, (2004): Spring
 ¹⁸ Design Council, "The Impact of Design on Stock Market Performance - An Analysis of UK Quoted Companies 1994-2003", (2004): February

(Chicago, IL, USA) are focusing on how design methodology can be used to revitalize businesses.¹⁹ Most of these examples tend to see design mainly as way to innovate a given company's product development process. We intended to focus on the business strategy development aspect of design methodology in said context.

Throughout the project we have found examples in interviews, articles and books that have worked as inspirational material. These examples have been used as confirmations for the whole project theme, but also to guide us in what has been done before. For instance the Business Week article "Old needs, new ideas", mention examples like "Cirque du Soleil", Swiffer, PDA's and Birkis.

"The power of design and innovation can actually reshape an entire brand or the marketplace in which it exists. In the past, designers focused on making one new product. Today, they create a much broader story, an experience that consumers remember, which has far greater impact on the bottom line. In the new jargon of the Creativity Economy, this process is called "paradigm shifting." Old ideas about products and services are reframed and replaced by a new concept, a fresh sensibility. So old '60s Birkenstock sandals, reborn as "birkies," still have an ergonomic, ecological feel to them but appeal to another generation. Give it some thought, and you can come up with plenty of examples of paradigms shifting from the old to the new." ²⁰

¹⁹ Bruce Nussbaum, "Get Creative!", Business Week, August 1 (2005)







Figure 2: Old needs, new ideas. Birkenstock – Birkies and Filofax - PDA

The Danish business developer Mikkel Rasmussen²¹ at *Red Associates* gave examples where he, by focusing on user relevance and by mapping the actual context of Adidas indoor training shoes for women, managed to turn decreasing sales figures to profit. The problem was not, as Adidas thought, that the shoes lagged behind in technological finesse but rather that the indoor trainers lacked relevance for the users. For the consumers it was not about technology but about fashion. He also mentioned an example of another innovative business development namely iPod/iTunes. He implied that *Intel*, the computer chip manufacturer, developed the software known as iTunes to *Apple* in exchange for the right to provide the Central processing units to the iPod. By creating iTunes, Intel managed to create a demand for iPods and *Intel's* products. By doing so *Intel* didn't have to create their own consumer products, brand and sales channels in order to sell their already existing chip.

Fredrik Magnusson²², CEO *Propeller by Semcon*, gave us an interesting Swedish example that they worked with a few years ago. *Propeller*

²⁰ (2005, August 1). *Old need, new ideas* (Business Week) [www document]. URL http://images.businessweek.com/ss/05/07/oldnew/index_01.htm

 $^{^{21}}$ Interview with Mikkel Rasmussen, RED Associates Business innovation agency, (Copenhagen, September $28^{\rm th}$ 2005)

²² Interview with Fredrik Magnusson, CEO and creative director of Propeller Design by Semcon, (Stockholm, September 21st 2005)

created together with *Stoneridge Electronics* a future concept of truck driver's interface. *Stoneridge* had up until then been a sub contractor of truck panel components. Through the truck interface concept Propeller helped *Stoneridge* to realise that their competence were in truck interface solutions and not in supplying electrical components. By a change in strategy and a new way for *Stoneridge* to conceive them selves they went from being a product based sub contractor to a service based consultant.

Daniel Ewerman²³, co-founder of *Transformator*, gave us another example. They worked with a company producing diagnostic devices for testing cars (with the adherent software) who had great difficulties surviving in a fierce competition. By letting go of the their production and focusing on the software alone they created new business opportunities and could all of a sudden start to sell their services to their former competitors.

1.7 Reason for the project

Our initial reason to start investigate the role of the designer in the creative economy where the undefined notions of a gap between the traditional industrial design education and the signals that we where picking up from the industry. The education focuses on the industrial designer as a product developer that designs functional and aesthetic objects. Furthermore we had come to question the traditional approach of focusing on problem solving while disregarding the issue of formulating or identifying the actual problem. How can we find a

truly innovative solution if we always assume that this implies the design of a new tangible product?

The question for this master degree thesis is as follows:

What happens when one use industrial design as a tool to innovate business in the Creative Economy?

²³ Interview with Daniel Ewerman, Design strategist and co-founder of Transformator, (Stockholm, September 23rd 2005)

2 Research Methodology

"What we soon realised was that the issue stretched way further than just dealing with design as such. This meant that we had to widen our research to include more topics such as business development and economics"

2.1 Overview

We choose to work with an open, keen and extrovert attitude and made an attempt to look beyond the traditional industrial design scope. Since few industrial designers focus on business development, we decided that the best way to research this is to collect as much relevant background data as possible, form theories based on this, test these theories and evaluate the result. In more detail, this is what we did:

- **Reviewed literature** to get an overview on what has been done in this field and what is being discussed.
- Performed interviews to get personal opinions and a balance to the read material.
- **Attend conferences** to listen to the current debate and interact with designers and researchers from around the world.
- **Collaboration** with student from Stockholm School of Business, Marknads Akademien (MA) to investigate the benefits of interdisciplinary team work.
- Discussions to process our thoughts and get feedback on our discoveries and theories.
- **Action research**²⁴ to research what will happen when we use the work method in a live case.
- Drafting a work method for using industrial design as a tool to innovate business in the creative economy
- Case study with Glen Dimplex Home Appliances (GDHA)

²⁴ Interview with Ulla Persson, Ph.D.of Växjö University, School of Management and Economics, (Copenhagen, September 25th 2005)

2.2 Reviewing Literature

To get an understanding in how the design world has changed we started by taking in the recommended available literature and articles dealing with this subject. What we soon realised was that the issue stretched way further than just dealing with design as such. This meant that we had to widen our research to include more topics such as business development and economics. Due to the vast amount of literature we divided it amongst us in the group and presented it to each other. These discussions have been a productive way to understand and process what we've read at the same time as we could compare and test the various theories against each other.

2.3 Performing Interviews

One key element in our research was the constant communication with external and internal people relevant to the project. This communication is formatted as interviews but served as tutoring, feedback, inspiration and marketing as well. The founding motive to carry out these interviews was to gain further insight in how other disciplines are using design and creativity in business development.

We chose to interview representatives from fields that bordered to industrial design as well as fields where design and marketing overlap such as design managers, design researchers, advertisement agencies, marketing professionals, creative business developers and such²⁵. In this process we aimed for a wide range of people with a diverse background but with a specific connection to creativity and business development that we find interesting in our research. Since our knowledge of the operators in this field was rather limited, we

employed a strategy when each interviewee where asked to suggest other suitable people in their network that could provide valuable input.

Since we presumed that very few or no one were working with design methods in business development as we theorised, we set out to identify fields of expertise where creativity and innovation where used in relation to business development. These areas of interest where concentrated but not limited to the consultancy agencies in branding, advertisement, business development and strategic design. Academic institutions focusing on the overlap of management, marketing and design where also interesting.

The Interviews where semi structured, containing a general outline of questions and topics while allowing the conversation to drift²⁶. These encounters where much more fruitful that we had initially anticipated and served as a great source of inspiration. During each session a participant where designated to observe and take minutes.

2.4 Attending Conferences

We attended the ERA05, an international design congress that was held in Copenhagen, Denmark in October of this year (2005). Furthermore in November we attended the 2005 Future Design Days held in Stockholm. At these conferences we had the opportunity to listen to lectures and take part of recent research concerning design in the creative economy. We also talked to people in the field of design about our work and the got feedback and tips. The conferences was also a good opportunities to network and many of the people we met

²⁵ See appendix: List of Interviewees

²⁶ See appendix: Outline for Interviews

there have been valuable partners to bounce ideas off to get a second opinion trough out our work.

2.5 Interdisciplinary collaboration

We realised quite early on in our research that globalisation and the creative economy demand so much more from the companies and designers than previously. To be able to meet the competition companies have to make more complex designs and product systems. As a result of this the designers and the design profession are expected to adapt in order to live up to the new demands of the market. The designer in the creative economy have to be part of an interdisciplinary team that can create solutions to problems that goes beyond shapes, brands and colours. In order for design mentality and creative thinking to influence the whole of the company one of the designers' closest and most important colleague is the marketer who traditionally work on a business development at a strategic level. We felt based on our research and intuition that the synergy between our two professions would be one of the most important one to master. So parallel with the reading we started collaborate with four students from Stockholm School of Business, Marknads Akademien (MA). By doing this we had the opportunity to experience in first hand and try out our interdisciplinary theories as they were created.

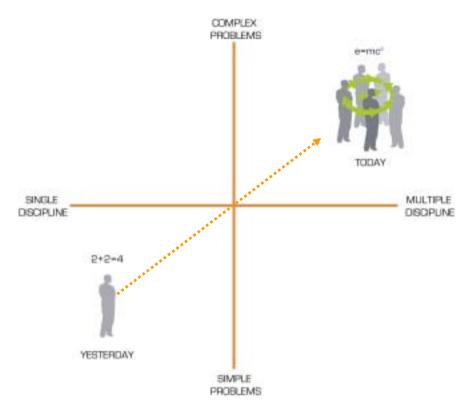


Figure 3: The changing role of designers and team composition

2.6 Discussions

Because we have been working in a group with for us new questions and problems the discussions we have had within the group have been of outmost importance. It took quite some time to define what exactly we were dealing with and we all had different ideas on how to tackle the issue. By having discussions we could process the thoughts and the information we had gathered and together in the group form ideas of our own. Because we all had differences in opinion the discussions forced us try out and question our ideas. These discussions also meant that we had to structure our thoughts and forced us to specify and concretise our ideas. Often this process made us perceive the topic in a new way and the discussions enabled us to take the problem to a new level.

The discussions got even more important when we started our collaboration with the MA students and the biggest challenge was to find a way for us to communicate. When you work with other industrial designers even if you disagree on something you still understand where they come from and how they think. When you start discussing the same issues with a person from a different discipline you immediately become aware of the differences in culture and way of thinking. We understood that the different disciplines didn't have the same sets of criteria when we discussed and evaluated the topics. What the ID students felt rather obvious could appear totally foreign for the MA students and vice versa. From time to time this barrier between the disciplines were rather frustrating but it forced us to swap perspective and by trying to understand the problem from more than one angle and by doing this we managed to create a much more nuanced image of the subject at hand. Our discussions were a great

way for us to start to understand the differences between the disciplines and by doing this we could also begin to use these differences in our favour. Sometimes the different perspectives and the misunderstandings could generate new ideas and thoughts.



Figure 4: A typical group discussion session

2.7 Action Research

In our case study we applied action research. Action Research is a type of applied research characterised by intervention in real world systems followed by close scrutiny of the effects²⁷. So we have when working with GDHA at the same time been both practitioners in the case and observers of the effects of our work method. In order to stay as objective as possible we have at each crucial stage of our project, within the group, assigned a researcher who's task was to observe and document what was happening and thus not getting too involved in the practical work. We changed the person being the spectator for every key stage so that everyone had the opportunity to act both as a practitioner and observer. The written documentation of our project has been both in form of written minutes after meetings and interviews and a journal in which we have written daily about the progress of the project and the experience we have gained. The writing has also served as a way to structure our thoughts and understand our work.

2.8 Drafting a work method

In order for us to implement design thinking in business innovation we felt that we needed some kind of work method. The work method we drafted was created to meet the needs that we had located in our research. It is based on all the information we have collected but also on the discussions we have had and the assumptions we have made on how marketers and designers could and should work together. The work method is a mixture of processes we picked up from our

²⁷Interview with Ulla Persson, Ph.D.of Växjö University, School of Management and Economics, (Copenhagen, September 25th 2005)

interviews with people like Mikkel Rasmussen from Red Associates, Anna Kamjou from No Picnic, Fredrik Magnusson from Propeller and from books and articles about companies like IDEO²⁸, Doblin Inc and VIA Design²⁹. We also added parts from our own experience from traditional industrial design methods³⁰ that we reckoned would be useful. So basically our work method is a collage of several different existing methods where we tried to paste together a useful work method to try and evaluate. The work method consists of three stages:

- Research phase
- Ideation phase
- Concretisation phase

The research phase aims at collecting relevant information and to create a foundation for the ideation phase. In the ideation phase strategic ideas and concepts are created and evaluated and in the concretisation phase these ideas and concepts are visualised and communicated. Between each phase there are "gates" where the conclusion of the previous phase is agreed upon and the guidelines for the next phase decided. The method is also graded with an abstract – concrete scale that shows the nature of the work in each stage.

²⁸ Tom Kelley, *The art of innovation*, (San Francisco, Currency, 2001)

²⁹ Kjems, Sune, "Developing design as a strategic device", ERA05, ICSID, Copenhagen, 28 September 2005

³⁰ Jan Landqvist, *Vilda idéer och djuplodande analys*, (Stockholm, Carlsson Bokförlag, 2001)

Note that the work method aimed at creating, visualise and communicate strategies. Therefore it didn't contain tools to actually implement the concepts and strategies. We treated the work method more like a rough model or a scaffold for our case work. We didn't force our work to fit the model but rather changed the work method whenever we felt it didn't fit the way we needed to work. So the work method we drafted at first changed a bit in the course of the project. We also assumed that the work method itself was not too important but rather the tools we used in it. It also served as a good way to visualise and communicate our ideas within the group but also externally to get feedback from our tutors and the MA students.

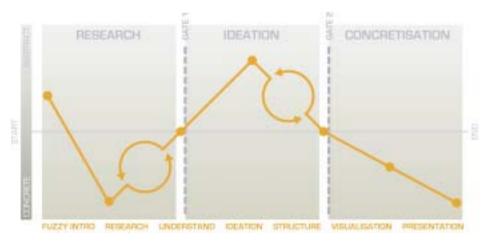


Figure 5: Graph describing the workflow of the Work Method

3 Case Study: Glen Dimplex Home Appliances

"We got the impression that GDHA was a company open for new thinking and we felt that we had a good opportunity to take our concepts quite far. From our experience the white goods market is rather stagnant and it would be interesting to see what changes we could suggest to make GDHA more competitive."

3.1 The company

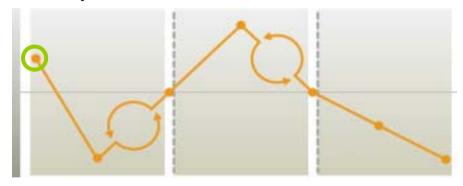
In order for us to try out our work method we decided to apply this method to a real life case where we could study the effects of using creative processes in business development and the collaboration between the disciplines. Our partner and case study in this part of the project was Glen Dimplex Home Appliances (GDHA). GDHA is part of the much bigger organisation called Glen Dimplex Group (GDG). GDG was founded in 1973 and is today the world's largest supplier of electrical heating and holds a prominent role in the domestic appliance industry worldwide. Glen Dimplex employs 8500 people and has an annual turnover of €1,5billion. According to GDHA, the reason for their fast expansion is their policy of brand building, product innovation and customer insight. Furthermore it says on their web page:

"The Group takes an international and entrepreneurial approach to managing its businesses, whilst avoiding a bureaucratic style of management. Building strong, vibrant and effective businesses is a fundamental business philosophy. These businesses are expected to operate to the highest standards of efficiency, quality and ethics, with a total focus on our customers needs. The Group's exceptional growth has been made possible by a "can do" attitude to business by its employees and the tremendous support which it receives from its customers and suppliers."

³¹ (2005, October 23) Glen Dimplex Group [www document], URL http://www.glendimplex.com

We chose to work with GDHA partly because they where interested in establishing a relationship with Konstfack. We got the impression that GDHA was a company that would be open for new thinking and therefore we felt that we would have a good opportunity to take our concepts quite far. From our experience we thought that the white goods (home appliances) market is rather stagnant and we felt that it would be interesting to see what changes we could suggest in order to make GDHA more competitive. Furthermore we were curious to work with a company from outside Sweden and to learn more about working internationally when we believe that this will be more and more common in the future when the world is becoming increasingly globalized.

3.2 Fuzzy Intro



Because some of the ID and MA students didn't know each other from before we took the opportunity to hang out a bit in order to get more acquainted. We called this phase "Fuzzy Intro". In this stage we started to discuss the project and here we realised that we had different ideas on how the collaboration and the project as a whole was going to work. The ID students were interested in doing a live case and explore

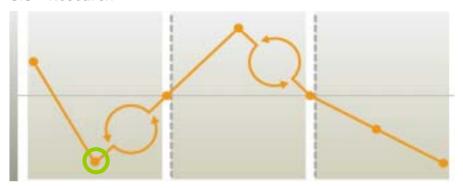
the possibilities of using design methods in other fields while the MA students were more interested in writhing about the collaboration.

What we did agree on was that the collaboration between our two disciplines should be in focus and by trying our theories in the case we could get valuable data. In order for us to further get to know each other and for MA to get an insight in some of the methods industrial designers work with we decided to have a small, one day, workshop together. This workshop was done before we had completed a proper research on GDHA but we felt that it would be interesting to se what would come out of it before we got limited by too many facts and social conventions. The day started with breakfast and a briefing. Then we had a session where we got to present an item that we had brought from home and that meant something special for us. It was really interesting to see what people had brought and because you got to hear the story behind all these personal things it felt like you also got to know the person a bit better as well. Some of the things that people brought had pure sentimental value while others were examples of clever technical solutions or gadgets that spoke to your comical side.

After we sat down and analysed the "show and tell" session and we realised that this was a great way of showing our different ways of thinking and that there are various attitudes and ways of approaching problem solving. Next we had an initial brainstorming session. This was more of an exercise in creativity and we had a couple of themes to help us to keep on track. Theses themes were all remotely connected to GDHA's products like for example "What will the home be like in 10 years from now?", "How will we cook and eat in the future?", "In what situations do we eat?" When we later structured the result from the brainstorm we felt more at ease and we had realised that we will

not have a lack of ides at the end of the project. Because the brainstorm was rather general we split up in smaller groups consisting of one student from each discipline and together we worked on taking the ideas one step further. In these groups the discussions got more specific and we started to talk about how to solve specific problems etc. These discussions were great for getting to know how the different disciplines think and what in a problem solving process they would emphasise. The ID students were in general more visionary and didn't feel that it was necessary in this stage to solve all the details but rather pick out the concepts that for some reason felt good or could have potential. The MA students were more eager to fit the concepts in to business models and try to find the commercial benefit in them.. After the break out session we gathered and presented the results to each other. These mini presentations were the starting point of more discussions concerning how the collaboration should work and the differences in thinking between our disciplines. The intention with the second brainstorm session was to look at it from a marketing point of view and try to generate ideas on how GDHA could develop their business based on Kotler's four rules for a market leader i.e. expand the total market, expand their market share, improve productivity and defend its position. We soon realised that after half a day of hard work we were all rather tired and instead of letting our imagination loose the brainstorming turned into a rational discussion. We therefore decided to end our work day by sum up our work and wind down with a beer and pizza.

3.3 Research



The next station was the "Research phase". This is where we started to gather information to acquire a more accurate picture of what we are dealing with. This phase was divided into three stages namely:

- Company research
- Company context research
- User research.

The company research was a quite straight forward analysis of the information we had got from GDHA in form of for example annual reports, marketing surveys and data from their web page. To analyse the data we used tools like Five Forces³², and the SWOT analysis³³. We also wanted to ad workshops and interviews with key persons from various fields of GDHA like engineers, marketers, factory and office

³² (2005, December 20) Marketing Teacher [www document], URL http://www.marketingteacher.com/Lessons/lesson_fivefoces.htm ³³ (2005, December 20) Marketing Teacher [www document],

URL http://www.marketingteacher.com/Lessons/lesson_swot.htm

workers to the company research in order to get a feeling for the company as a whole, but due to lack of time from GDHA's side this was not possible.

In the company research phase we collected information about GDHA and its organisation. Company context research includes the market in which GDHA is acting and it's immediate competitors. Finally we did user research to get a deeper understanding on who GDHA:s customers are and how they act and think. We deliberately had an open mind when it came to research and we preferd to treat it more like guidance and inspiration rather than pure facts. We also feel that it is important not to narrow down the research too early when you then risk missing a lot of unexpected, valuable inspiration. For example, instead of just investigating the cooker market we also did research about people's attitude to their homes, kitchen and cooking habits. Buy doing this we managed to get a much broader picture of the user and we got a lot of information that would otherwise be lost. Furthermore we think it is important to mix different kinds of research and analyse them from different angles (design angle, engineering angle, marketing angle etc.) in order to get a better conception of the subject. We don't think you can make a fair and good business development proposal with one-sided information; therefore we have gathered both "hard" information like sales reports and customer statistics and mixed it with "soft" research like interviews, user observations and overall trend analysis.

3.4 Company Research

Together with the MA students we drafted a survey for GDHA where we asked them to send us information about their vision and strategies but also their view on their competitors, the market, trends, the future³⁴ etc. We also read all material we could get about GDHA for example annual reports and information from their web page in order to get a good understanding of the company.



Figure 6: The different brands in the Glen Dimplex Group

First we recognized that Glen Dimplex Group (GDG) is a global corporation managing 32 different brands dealing with everything from pool cleaners to cookers and radiators.

GDG growth strategy has been to purchase existing leading or well known brands. The last 15 years GDG have acquired at least 12 companies. Glen Dimplex Home Appliances is a sub-organisation under GDG and manages four brands all connected to the kitchen area. These brands are *LEC*, making fridges and *Belling Stoves* and *New World* making cookers and other kitchen related products such as cooker hoods and microwave ovens.

GDHA is the market leader on the British home appliance with a market share of 23 per cent. Their closest competitor is the Berloni group that has a market share of 21 per cent. GDHA's brands are well known, Belling for instance has a brand awareness of 66 per cent. Glen Dimplex own vision is to remain the leading cooking appliance manufacturer in the UK and ensure they remain a profitable organisation. In the information we got from GDHA we realised that

³⁴ See appendix: Questions for Glen Dimplex

they want their three cooker brands to appeal to different target groups and therefore send out different signals. They compare their brand Stoves to BMW and talks about the "Product for the serious cook" and "Top of the range functions". Belling and LEC are compared to the Ford Mondeo and are supposed to be the affordable family brand. New World is the Fiat of cookers and is the brand that gives you good value for money. New World is aimed for the younger crowd. When we did our research we realised that GDHA is rather transparent and it is hard to detect the differences between the various brands. All the cookers were rather similar in their appearance and when we browsed the web pages we felt that they all sent out more or less the same signals.







Figure 7: Cookers from Belling, Stoves and New World all similar in appearance.

We then performed a brief overlook of the British cooker market and compared the looks and prices of the home appliances. We realised that the whole market is rather streamlined and the variations in looks and prises between all the brands were rather slim as well. All the brands had a low price cooker as well as more expensive ones and they all seem to be competing for the same customers. Even GDHA's own

brands cannibalised on each other and we felt that there's a competitive situation within the brand portfolio. One of the exception on the cooker market is the AGA stoves offering old style, enamelled gas cookers around £2500. The cooker market seems to be rather stable and none of the players are doing much to stick out. They are all competing by pushing the prices, offering new functions and promoting their brand in various ways. By occupying a large percentage of retailer shelf space and by being the market leader GDHA can assure that at least one out of four products sold will be one of theirs.

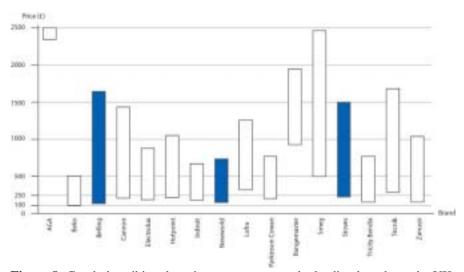


Figure 8: Graph describing the price range amongst the leading brands on the UK market

In our interview with GDHA it was mentioned that their competitors could be divided into two categories, the internal and the external. The internal competition comes from GDHA's direct competitors on the cooker market, for example Eletrolux, Smeg and Rangemaster.

The external competitors are the other markets which compete for the consumers' disposable income, i.e. holidays, automotive and furniture. As a company GDHA have made the most out of the fact that they manage three cooker companies by using scale benefits. Having a common call centre and service team for Belling, New World and Stoves GDHA can make their services more efficient and cheaper. They also stock over one million spare parts making that enables them to fix almost any cooker or fridge.

3.5 Company Context Research

We felt that it was important to know the field in witch GDHA exist and what role the company is playing. To understand this we researched the company context. This phase was divided into thee areas:

- **Trend analysis** where we wanted to obtain an overview of the market and where it is moving.
- **Retailer analysis** to understand how GDHA's and its competitors products are being sold and in what context they are displayed and experienced.
- **User research** to get a deeper understanding of the thoughts and need of the user.

3.5.1 Trend analysis

By introspection, reading magazines, researching internet resources, interviews, etc. we assembled a general kitchen and cooking trend analysis. This was a way for us to feel the pulse on society and understand the general direction of the market. We started by listing and discussing the household, cooking and food trends we had spotted. We felt that the interest for food and cooking had increased in the last decade and one sign of that is the growing flora of cooking shows and cookbooks. We also noticed that because people travel more they are more interested in global cuisine. Today it is not so uncommon to have sushi for lunch, a panini in the afternoon and cook Thai food for dinner. The national boundaries of food are slowly being erased and today hamburgers and pasta feels just as Swedish as "brunabönor med fläsk" (brown beans with bacon). At the same time as cooking is getting increasingly popular there is a parallel counter trend as well. Some people are not interested in cooking at all and see it just as some thing you have to do, a must. These people are hardly using the kitchen for cooking and their diet consists of ready made food, restaurant food and take-away. Because people in general are more stressed and have difficulties making time, a lot of fast food alternatives, like Mc Donald's and ready meals have surfaced. As a counter reaction to the fast food trend a slow food movement has emerged where cooking is allowed to take time and the emphasis is on enjoying the groceries, cooking and the eating. People are also thinking more about their health and the environment and therefore nutritious. organic, low fat food is getting increasingly popular. Furthermore we have notices that for many people food has become a way of showing their status. For them it is important to show that they know the origin of the olive oil, the history of the dried ham, the best wine to a certain cheese and who makes the very best truffle oil.

In order to get a feeling for present fashions and trends and see how homes are portrayed in the media we researched the top trend setting interior magazines. By reading magazines like *Elle Interiör*, *25 Beautiful Homes*, *Livingetc* and *Plaza Interiör* we managed to capture the atmosphere of the glossy world and got an insight on what image companies want to portrait to their customers. The magazines mainly described the atmospheres in various homes by showing interiors and surroundings as well as home appliances and products. The magazine were not focusing on kitchens alone but we felt that we got a good overview and we came to the conclusion that it was important not to treat the kitchen as a separate phenomenon but rather look at the home as a whole.

The kitchens in the magazines varied from country style to minimalist architectural and clean, functional and colourful kitchens. Designer products were frequently shown in the inspirational sections of the magazines. The trends are moving towards more professional equipped kitchens with elements from both large scale kitchens and restaurants. One obvious sign of that is that the traditionally white home appliances are being challenged by white goods in stainless steel, mimicking professional restaurant equipment. Furthermore a lot of the new white goods products were marketed by presenting new features like steam ovens, induction heating and fan ovens. Over all we could spot an increase in the interest for the kitchen and its rising importance in showing your social status. We felt that the images portrayed were only of the most exclusive and fancy kitchen and not the kitchens that the majority of people actually use. On the other side these images are more like haute couture and we interpreted them like the avant-garde of ongoing kitchen trends.

3.5.2 Retailer analysis

One of the best ways to get an understanding of how GDHA's products are being sold was to visit a selection of white goods retailers. Our intention was to see what the retailer world looked like at the same time as we tried to experience it from a customer's point of view. We visited both home appliance stores selling white goods (*Elgiganten* and *Power*) and shops like *Marbodals Kök*, selling whole kitchen interiors and *DUKA* selling household products. By visiting various shops dealing with kitchens and home interiors we could easier compare their different angles, tactics and take on how they present, sell and relate to their products. With an open mind we observed and tried to find patterns in the way the customers and personnel acted. We also acted like customers interested to buy white goods to understand in what way the sales persons tried to sell us the products.







Figure 9: Household appliances on display at Elgiganten

The first two places we visited were *Elgiganten* and *Power*. They sell a wide range of products ranging from personal home computer to HiFi equipment and kitchen where. In the shop there is an emphasis on the products as such and they are presented solitaire, draw out of their context and displayed without any backup. They were presented lined up on a podium and in the kitchen section there were 30-40 cookers

on display next to each other. It felt like the decision process was made very rational when all the cookers were clearly showed and it was easy to compare their performance and looks.

The dialogue between us as buyers and the sales person later transformed into a discussion about the products and the customers in terms of who buys the different products and what they ask for in a white goods. It become clear that most people are looking for performance and they are not too concerned about design. Furthermore we felt the consumer was very much in the hands of the retailer when the consumer's knowledge of the products in general was limited. Usually the consumer only have a vague idea of what they are looking for (e.g. "We are looking for a cooker that is environmentally friendly"), so when the customers are asking for the best dishwasher it is very much up to the vendor to guide the shopper to the appropriate product. A lot of the times the seller is bias though when they are steered by factors like profit margins etc. If the customer thinks that the price of a product is too high the retailer shows them another "good" dishwasher with a lower price. Basically it's difficult as a layman to know if the seller truly is giving you the best alternative.

As a contrast to the home appliance store we visited *Marbodal Kök*, a kitchen interior shop. Their shops are more like showrooms where they have built up small display kitchen interiors to demonstrate the products in context. There's no particular focus on specific products, instead *Marbodal* tries to convince their customers by building up atmospheres that they can relate to. The decision to buy will therefore be based more on emotions rather than reason, while their target group are less sensitive to price. It also felt like a bit more exclusive

retail space and there was a closer contact with the sellers and they gave a more reliable impression to their customers.

To end the session we visited *DUKA*, a household product store that sells plates, mugs, cutlery, vases and other home and kitchen related goods. Here we limited the study to observations of the customers and the retail interior. In *DUKA* one doesn't need help from a sales person to decide what to purchase as the products are more of commodities as compared to white goods. When you buy plates at *DUKA* it is more of a personal purchase and it is something that you want to decide on alone and the products are talking to your emotions and they have a function that is easy to understand. Because the products at *DUKA* are of a much simpler nature compared to cookers and fridges, the decision process is much more straightforward.

3.5.3 User Research

A crucial part of the research was to not only understand GDHA and its competitors but also to really get to know and understand their customers. We felt that if we managed to do this we would then be able to create solutions that were truly useful and relevant to not only GDHA but also for GDHA's consumers and end users. We felt that quantitative researches, like surveys, were important but we would only get the answers to the questions asked. To understand the users unarticulated needs was equally important and to do this we had to scrutinize our target group. We therefore decided to do both surveys and user observations. In addition to this we also asked people to take photographs of their homes to give us a better picture of how people live, think and act.

3.5.4 Surveys

Even if GDHA is producing home appliances we felt that it was important not to narrow down too early in the project. We felt that the best way to get some concrete research data to start with was to conduct a survey and ask people about their feeling towards their homes in general. By asking questions about the home rather than the kitchen or kitchen appliances we assumed that we stood a better chance to identify overall trends, feelings and needs instead of isolated facts about the kitchen. We decided that the easiest way to get quantitative research data would be to e-mail a survey with open questions³⁵. This way we could get quick answers from people from all around the world. We drafted a questionnaire where we asked people about their feeling towards their homes and also why they think so. In addition to the written answers we also asked them to take photos that correspond with each of the answers. This survey was then emailed to people in our collective network. We did actively try to get a range with people from various age groups, nationalities, gender and social classes; however we emailed as many as possible and hoped for a massive response. Of course we were fully aware that this medium and the way we conducted the surveys would not give a response with scientific accuracy, when we only reached out to the ones that have access to internet, a digital camera and the know how to operate them both.

When all the surveys had been returned we started to organise the written answers and categorise the pictures. All the answers were then analysed, compared and put together. To get a collective perception of peoples opinion; key words from the respective questions from all the surveys were put together. The best source of information was in

³⁵ See appendix: Survey questions

general the attendant question, i.e. Why?, Where?, When?, etc. Here people tended to open up a little more and if you analysed these answers you could get a much better insight into the respondents' true feelings. It was during the process of analysing the surveys that we started to see similarities and patterns and by reading all the surveys collected we got a feeling for people's general opinions and a better understanding for their wants and needs.

3.5.5 Photos

The pictures were printed and labelled so that they easily could be matched to the right question and person. They were then laid out on a large surface and categorised into groups corresponding to the questions. When all the pictures were displayed we could immediately recognise trends and we started to move around the photos within each group to form new sub groups. For instance on the question on where people worked in their homes we could early on spot a number of categories. One category that often worked from home and had a designated well thought through area in their homes for this. Another group worked more sporadically from home and did so wherever there was space. All the pictures sent by younger people dealing with where they work in their home featured computers while older people considered household duties as work too and sent photos of kitchens where they cook food and sewing machines etc. Because one part of the group was rather familiar with the survey and the answers wile the other part saw it with fresh eyes it became apparent that we looked at the pictures in different ways and this became the start of some interesting discussions and observations. The ones that looked at the pictures without any information about the answers behind felt that the photos gave them inspiration and room for intuitive interpretation. By just looking at the pictures people started to speculate and make up

their own stories based on what they saw. When the key words from all the answers and thus the background to the pictures were presented that shone new light on the photos and the interpretations could be connected to the facts. So the photos and the text complemented each other. In the pictures you could see the answers to the questions but also its context and surrounding while the text gave you hard facts behind your interpretations giving your conclusions depth and substance. A lot of the times we got more information from examining the background in the pictures rather than what was in focus. Not only gave the mass amount of pictures and answers a lot of concrete information but also a subtle feeling for how people live, act and think and that became something that we feel coloured all the concepts, ideas and decisions we made in the project.

3.5.6 Interviews

The internet survey focused on letting people tell us what they like and dislike in their home. Even if the outcome of this was very informative we still wanted to ad user observations and interviews in order for us to really understand the users and what is relevant to them³⁶. Therefore we arranged to perform face to face interviews and user observations in addition to the surveys. The aim for these interviews and observations were to try to pick up the users unarticulated need. With years of experience from industrial design projects we have realized that it is often hard for consumers to verbalise their feelings towards commodities. People have a tendency to adapt to their products and work around their flaws.



Figure 10: Examples of photos from our internet survey.

People are also in general not used to think at how products could be improved and have therefore a hard time to verbalise their wants and needs. When you on the other hand observe people you can read their body language, track their patterns and pick up the subtle signals that goes lost in an interview or survey. A couple of years ago one of us was working on a project trying to solve the problems customers had with dispensing and transporting washing detergent by redesigning the packaging. In surveys it showed that people were in general pretty happy with the package and couldn't really imagine any improvement. When user studies were performed the need for a redesign clearly showed. People had created their own ways to compensate for the lack of functionality in the package, by tearing and folding the package to facilitate the dispensing and crafting their own tools for measuring the

³⁶ See appendix: User interviews.

detergent. When we did the qualitative research we also took the opportunity to ask more specifically about the kitchen and the kitchen activities. We tried to get a spread of people in different ages and stages in their life, everything from 61 year old women living alone to 80 year old couples and a family with a six and eight year old child. When we performed our interviews we also observed them in action cooking food or heating up buns and making coffee. The observations, moods and feelings that we picked up were then written down together with the answers from the interviews.

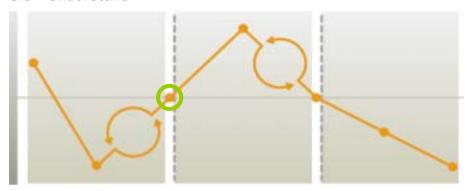
3.5.7 Summery

We realized through our user observations and interviews that even if most kitchens look the same and were equipped similar the way people use and relate to them varies a lot. A 63 year old man living alone has other demands and needs from a kitchen than a family with kids or a student. What our interviewees had in common though was that they all felt that the kitchen was an important place and it is used for more than just preparing and eating food. The kitchen is also the place for sorting the economy, work, painting, discussions, socializing, taking important decisions etc. For some of the people we talked to the kitchen were their favourite room and the heart of the house. The kitchen seemed to be extra special for families with children living at home when it serves as a meeting point and a lot of the family interaction takes place here. The kitchen is transferring from a room to prepare food in to a room to hang out in. The TV and the lounge chair are slowly finding their way into the kitchen. People's relation to cooking and eating are also varied a lot. For some people, mainly those who live alone, food is just a must. They said that they felt that cooking is social thing and didn't enjoy making food for them selves. Others found cooking fun, inspiring and a way to relax. One quite obvious trend that we spotted was that there is no consistency of people eating fast respective slow food. A lot of people tend to eat fast food, ready meals and cook quick dishes when there is a lack of time or when they are alone. On the other hand the same people really enjoyed cooking on weekends and like to spend more time in the kitchen and more money on good groceries to make a gourmet meal. When the people we interviewed talked about their kitchens very few spoke about the products as such but the discussions were more about atmospheres and functions. Most people felt that they needed more storage space and bigger working areas. Furthermore a lot of the interviewed wanted the kitchen to be a warm cosy place for hanging out and for socializing. Most people had worked out their own patterns and routines to make their kitchen duties more efficient.



Figure 11: Interdisciplinary teamwork

3.6 Understand



In the stage called "Understand", we processed all the gathered data together with the company and come to a common conclusion. We did this through reasoning and discussions with MA and using tools such as SWOT analysis and Five Forces. The result of our understanding phase was then put together in a presentation to GDHA for comments. The conclusions was both articulated in form of statements like "People are interested in cooking rather than stoves as such" and questions like "Are the retailers doing GDHA's brands justice?". With the conclusions we tried to narrow down the problem area and by presenting it to GDHA we wanted to ensure we are working in the right direction. It was important that everyone did agree in this stage because the conclusions we drew here was to determine the course of the project.

3.7 General Conclusion from Research

- A general trend towards blurring the line between the kitchen and other parts of the house.
- The trends to not have a fully equipped kitchen, all meals are purchased at takeaways.
- A market with low differentiation
- A general rise in interest for home decoration, furnishing and home improvement
- There is a strong and well documented correlation between real estate transactions and investments in home appliances and refurbishing.
- When people invest in homes their perception of cost changes, partly due to the overall costs involved as well as due to the increase in personal motivation to achieve a satisfactory home environment.
- When shopping for homes, the decision is more emotionally driven. People are rational but also looking to fulfil their dreams to a certain extent.
- People are less prone to accept substandard or worn equipment when moving, compared to after some time when one has gotten accustomed to it.
- There is a general low degree of differentiation in style and price in the market for white goods
- A generally greater interest in the personal overall interior atmosphere as a whole rather than focusing on individual pieces of home appliances according to user studies.
- There are clear signs of emerging parallel trends with a growing focus on the kitchen and cooking as a social event.

- An equally important general trend is the lack of time and means to cook, shop for groceries and host social events for consumers.
- Long commutes and limited living arrangements in urban areas give rise to new life styles and business opportunities.
- The white goods market has a limited number of sales channels and few means of communication to the target audience.
- A growing focus and interest in new and global coking, food, recipes, etc.



Figure 12: Fast food – Slow food: Two parallel trends.

3.8 Research Gate



In order to move on to the next stage in the process we felt that we needed to agree on the research conclusions. To do this we decided to put up some common criteria to work as a filter and to check the conclusions against. We called this filter the "Research Gate". This dialogue between the disciplines enabled everyone to mutually draw conclusions from the research in order to establish the facts, set the criteria and point out the goals for the case study. We tried to narrow down vast amount of information to an amount easier to grasp. We also tried to visualise and concretises as mush as possible to describe complex information like core competence, company structure, user relevance and company vision, in an quick and efficient way. The Research Gate is also a way to exclude future misunderstandings and make sure that GDHA agreed with our conclusions.

We felt that the conclusions couldn't be too far of though when we they were based on our actual research made by both MA and ID students. We had some discussions in the group where we as critically and objectively as possible scrutinised our conclusions. With both the

design and the market point of view we tried to make the best out of it. After discussion and feedback from tutors we decided to follow through to the ideation phase and leave the research phase. We did however feel that more extensive feedback from GDHA would have been valuable when the risk of taking decisions on possible arbitrary knowledge could have consequences later on.

3.9 Ideation



In the check point "Ideation" we wanted to create as many solutions possible to solve the problems detected in the research phase. By generating unconventional solutions, we opened up for a wide range of new directions and possibilities that would not have come up though normal logic reasoning. In the ideation workshops we used methods like brainstorming, scenario building and quick visualisation. In this stage we believed that it was very important to work cross disciplinary when people with different skills and background tend to think differently. If people are open minded and dynamic a multi disciplinary brainstorm can really take problem solving to another level where the participants motivate and inspire each other. We believe that one of

the most important tools the designer use to generate creative solutions is brainstorming.

"Brainstorming can be done either individually or in a group; in group brainstorming sessions, the participants are encouraged, and often expected, to share their ideas with one another as soon as they are generated. The key to brainstorming is not to interrupt the thought process. As ideas come to the mind, they are captured and stimulate the development of better ideas. Brainstorming is used for enhancing creativity in order to generate a broad selection of ideas in leading to a unique and improved concept.

"It is a means of enhancing divergent production, aiming to facilitate problem solving through the maxim *quantity breeds quality*. The greater the number of ideas generated, the greater the chance of producing a radical and effective solution.

In a group, it is often emphasized in brainstorming sessions that you should put criticism 'on hold'. Instead of immediately stating what might be wrong with an idea, the participants focus on extending or adding to it, reserving criticism for a later 'critical stage' of the process. The assertion is that when suspending judgment, you create a supportive atmosphere where participants feel free to generate unusual ideas. However, persistent respectful criticism of ideas by a minority dissenter can reduce groupthink, leading to more and better quality ideas."³⁷

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³⁷ (2005, December 5) Wikipedia [www document], URL http://en.wikipedia.org/wiki/Brainstorming

Furthermore when in a brainstorm there is no ownership of the ideas but a good session with many interesting new leads as a result is always thanks to the teamwork. It is always good to write or draw all the ideas and suggestions down so that all the participants of the brainstorm can see them and get inspired of other ideas. Often a project consists of many brainstorming sessions to address different issues or solve details of a concept.

3.9.1 Traditional design ideation

We did our brainstorm sessions both together with the marketing students and on our own. In our first session we started very general and open minded, just as we do in "normal" industrial design ideation when we develop products. We deliberately didn't set up any limitations and we didn't want feel that the research conclusions would restrain our creativity. Instead we reasoned that the fewer things holding us back would result in even more creative solutions. When we didn't have any guidelines the mentality of the group was that "anything goes" and this actually made it rather hard to be creative and innovative. We realised that many of the ideas were useless when they didn't have any connection to our research conclusions and of no relevance to GDHA or their end users. Furthermore after the brainstorming session it was very hard to objectively evaluate the ideas when there were no set of criteria as a reference.

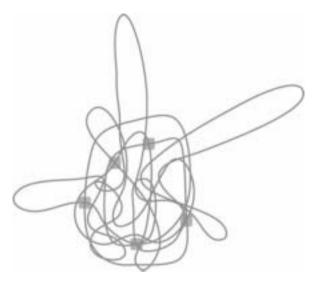


Figure 13: A model representing traditional design ideation

3.9.2 Framed ideation

We soon realised that we needed some kind of structure in order to keep the ideation on the right track. Therefore we developed something we called "framed ideation", for our second ideation session. This time we set up a lot of criteria based on our research and clearly defined our playing field before we stared our brainstorm. The result of this brainstorm was that we felt too restricted and it was hard to come up with innovative and new ideas when we had so many factors to take into consideration.



Figure 14: A model representing framed ideation

3.9.3 Composite ideation

In our third ideation phase we developed a tool that would give us enough framework to keep us on target at the same time as it would give us room to be creative. This "composite ideation tool" listed the major factors that we had to take into account when we created a new business opportunity. Namely: the company competence, the user relevance, the future factors and the outer factors. When we later tried to use the tool we realised that we all had different understanding on how it should be used. Instead of an ideation process we spent time on trying to agree on the purpose of the tool and what important factors should be in it for it to work as it was intended to. When we finally started the brainstorming we had so many restrictions that every new idea immediately got rejected due to the unclear nature of the work tool. We later discovered that this model served as an illustration of the ideation process rather than helping it.

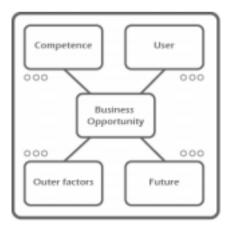


Figure 15: A model representing composite ideation

3.9.4 Start-point ideation

Therefore we decided to just intuitively start brainstorming to see what would happen. After a while when we analysed our brainstorming result we started to see patterns in our ideas and we detected a couple of common factors that we saw as great inspiration for our idea generation. We had managed to create seven different mentalities, or start points, on how you can think when one brainstorm to innovate business. These start points were:

- New playing field same competences (capital)
- Same playing field new competence (capital)
- Impact outer factors influencing your playing field
- User focused ideas
- Service focused ideas
- Change the "rules of the game"
- Benefit from competitors products

To explain what we mean with the different mentalities we will use a fictive company called "Burt's Boatbuilding Company". They produce wooden sailing boats but have had a hard time lately when the trend is to buy plastic boats. People in general think it is too much work maintaining wooden boats:

New playing field – same competences (capital) for Burt's Boatbuilding Company would be for instance if they stopped viewing themselves as experts in building boats and realised that their expertise are in shaping wood. Then they could use that competence to start making wooden interiors for houses or garden furniture.

Same playing field – **new competence (capital)** could be if they saw that their competence laid in building boats and learned to make plastic boats to meet the public demand.

Impact outer factors influencing your playing field — Burt's Boatbuilding Company generated a renewed interest for wooden boats by creating a prestigious sail race for wooden boats only.

User focused idea – They realise through user research that the hardest part of maintaining a wooden boat is scraping the hull. With this in mind they create a wooden boat which hull is significantly easier to scrape.

A Service focused idea would be if the boatbuilding company with every wooden boat they sold offered a service where they offer to take care of the maintenance for a fee.

Change the "rules of the game" – Burt's Boatbuilding Company developed a new lacquer making wooden boats superior to plastic boats.

Benefit from competitor's products – They rebuild part of their property to a marina and rent out the berths to sailors. The more boats sold the more business in the marina.

We started the following brainstorm by just going through the conclusions from our research to ensure that we had that in the back of our minds. Then we looked at our starting points and formed questions to generate ideas. For example; "What could GDHA do to make money from their competitor's products?", "In what way could

GDHA change the 'rules of the game' in their favour?" or "In what other fields could GDHA use their knowledge in heating appliances?" When we used these different mentalities as starting points for our following ideation phase we and realised that they were very inspirational and at the same time as they gave us a framework and a direction they were vague enough to let our creativity flourish. The concepts we came up with were rapidly communicated in catch phrases, scenarios and quick sketches. Some of the ideas for GDHA that we came up with using this new method were:

Same playing field – Same competence: GDHA could use their knowledge to produce cooling/heating units for cars for example cup holders of mini fridges. They could also develop equipment for cooling the components in computers.



Picture 16: GDHA could provide cooling or heating cup holders.

Same playing field – New competence: If GDHA acquired knowledge in the computer area they could develop "smart", connected white goods opening the field for the new generation of cook wares.



Picture 17: What would happen if GDHA merged computer technology with cooking appliances?

Impact outer factors influencing your playing field: Since buying new white goods is rather expensive GDHA could by offering favourable loans to their customers ensure that they are less apprehensive to buy.

User focused ideas: In our research we discovered that people eat more "on the go". GDHA could create portable white goods to meet these needs.

Service focus: Cookers, freezers and fridges are just tools to facilitate cooking. By being more service focused GDHA could provide a chef rental service for people who have no interest or time for cooking. Another idea was that GDHA arranged food theme trips to various countries where people could learn more about new food thus raising the interest for food, cooking and cooking appliances.





Picture 18: Possible GDHA services, rental cook and food travels.

Change the "rules of the game": What would happen if GDHA gave away their products for free? In one of the concepts we developed other ways for GDHA to earn money by charging their customers every time they used the appliance or finance the products by advertising.

Benefit from competitor's products: Today most home appliances are run by gas or electricity. If GDHA could provide the power used for cooking they would also benefit from their competitors products.





Picture 19: By providing the cooking energy GDHA could benefit from all people cooking.

The concepts stretched from GDHA showrooms to financing banking and smart cooling/heating packaging. We realised during our ideation that what began in one starting point often merged with other areas and the most interesting concepts often involved solved several different problems. When we had finished the ideation phase we were all very happy with the results and we felt that we had numerous of interesting concepts to continue with.

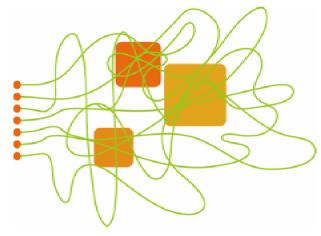


Figure 20: A model representing start-point ideation

3.10 Structure



The purpose of the "Structure" station was to gather the vast amount of possible solutions and start to find patterns, connections, systems and directions. Here we analysed and evaluated our material with the help of evaluation tools, discussions and by comparing the ideas to the research results in order to narrow down the ideas to a manageable amount and sort out the irrelevant concepts.

We had numerous ideation sessions and after each one we always tried to structure and analyse the outcome. By mind mapping and categorising we visually ordered our ideas and by doing this could find connections, clusters and themes among the various concepts. The structure gave us a better overview on what we were doing and we could point out interesting themes and areas we felt we needed to explore further. So at the same time as the structure phase narrowed down and focused our ideation results it also inspired to additional, more specific, ideation phases. This ideation-structure loop continued till we felt that we had reached a solution refined enough. When we

structured the concepts we also had more time to explain the ideas and discuss them more in detail. We took this opportunity to critically judge the concepts and used the research conclusions as criteria. Even if some individual ideas were not interesting they sometimes had qualities that, combined with other concepts, led us to new ideas and boosted our creativity. Because MA hadn't been with us in some of the ideation session we made quick visualisation and created scenarios in order to communicate our ideas with them. This helped us to further refine and concretise our concepts and forced us to define them in order to convey them to the marketing students.

In one of our final stages of the ideation-structure loop we had narrowed down our concepts to twelve. We felt that most of them had interesting qualities answering to the customer and business demands from the research. What we didn't feel though was that any of the concepts were good or interesting enough. They would on the one hand solve some of the problems but we felt that we hadn't explored the area enough and we wanted to try to take the ideas one step further.

When we started to arrange them we realised that many of them had similarities and immediately we organised them in three main groups³⁸. The three groups had different themes. One dealt with GDHA changing their focus from their products as such to the atmosphere and the experience of food and cooking. The second one dealt with that by looking at people's convenient lifestyles and by changing the conception of white goods one could reach out to new target groups using new sales channels. The general idea of the last group of

³⁸ See appendix: Structured ideas

concepts was for GDHA to develop a service or system that would benefit both their company buy selling more home appliances and a collaborating partner. When we saw the concepts organised in groups we immediately started brainstorm and crossbreed the ideas within each category and all of a sudden we had created new hybrids of our old ideas. These hybrids combined the essence of the original ideas and formed three new, much stronger concepts and the more we worked on them the more defined they became. These concepts were called:

- "Glen's Kitchen"
- "New Home, New Kitchen"
- "The Fridge as an Interior Detail"

The three new concepts were then defined by building scenarios around them. By doing this we could live and experience the concepts and find the benefits and shortcomings of each idea. We also once again checked them against our research results. This last stage of ideation was preformed by the industrial designers alone. The ID students were quite happy with the three concepts but when the MA students took part of the results they were not as thrilled when they had a hard time understanding the benefit for GDHA. We realised that for the ID students who were rather familiar with the concepts and their benefits they were rather obvious, but for the MA students the concepts felt like three random ideas that had no clear connection to GDHA as a company today. ID had a much more visionary approach and a good feeling about the concepts while MA tried to evaluate them with business models and tools. In order to further assess the ideas and to try to find a method that both disciplines could use and evaluate the concepts we decided to draft a vision for GDHA.

3.10.1 The company vision

To be able to evaluate the concepts and to fit them into a context we drafted a new company vision. This vision would act as a framework and guideline for our concepts and give us a context to place the concepts in to explain how they fit in to GDHAs overall strategy. This was important in order to communicate the concepts between the ID students and the MA students. We started by going through the data we had. The vision that GDHA sent us was quite simple.

"Our vision is to remain the leading cooking appliance manufacturer in the UK and ensure we remain a profitable organization"

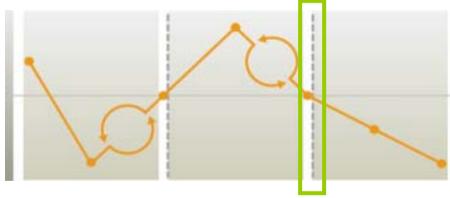
We felt that this vision was a bit vague and could fit any market leading company in the UK. MA suggested looking into Kotler's recommendations for a market leading company:

- Expand the total market
- Expand their market share
- Defend their position as market leader

ID realised that all the concepts they had generated dealt with one or more of these things but with these guidelines it was easier to analyse, evaluate and present the ideas to the marketing students. We felt that these were three good corner stones to build on but in order to define what this could mean for GDHA we decided to brainstorm and reason around what the company could do in terms of expanding the total market, expanding their market share and defend their position as a market leader.

We also listed the advantages of each concept and explained why we, based on the research conclusions, believed in the three ideas. By doing this we forced ourselves to even more critically analyse the concepts and when we listed the benefits we realised the importance of using the right selling arguments in order to convey marketing people. When we presented the concepts the second time we felt that we managed communicate our ideas much better and the MA students accepted the concepts. We decided that MA should go through each of the concepts and ad what ever selling argument they felt that we had forgotten. By evaluating the concepts from two angles we had a fruitful critical discussion and managed to create more complex solutions and concepts. We also succeeded in sharpen our arguments in order to sell our ideas.

3.11 Ideation Gate



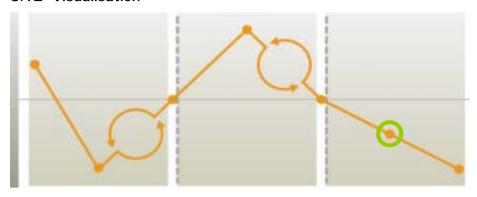
To move into the visualisation phase, the structured material needs to be tested against an appropriate set of criteria. This process, called "Ideation Gate", determined if the structured material was relevant and suitable. If the material didn't meet these said criteria it had to be discarded, restructured or modified.

We realised that it was a problem that we didn't have a tool or method for the evaluation process and this made it hard for the ID and MA students to communicate why they believed and doubted certain concepts. In order to find a way to judge the ideas that would accommodate the both disciplines knowledge we tried a tool called the RACES framework³⁹. In this method we checked the various concepts against given factors in relation to GDHA. These factors were Resources, Acceptability, Consistency, Effectiveness, Sustainability and Overall. For each of our concept we wrote a comment on how this concept would work for GDHA in regards to the factors. We also graded the comments from low to high in order to get some sort of measuring system⁴⁰. We realised that once again the MA and the ID students thought differently and things that were graded low to medium by MA could be graded high by ID. We noticed that it wasn't the grading that was important but rather the comment. This was a good way to structure and get an overview of the concepts and it started a lot of discussions where we had to verbalise and explain how we perceive the various ideas.

⁴⁰ See appendix: The RACES framework

³⁹ Haberberg, Adrian, & Rieple, Alison, *The strategic Management of Organisations* (Harlow: Pearson Education Limited, 2001), 463-477.

3.12 Visualisation



The visualisation phase aimed to effectively communicate the relevant information to the receiver. The medium for this may of course vary depending on the nature of the project and the said information and the receivers may also react differently to different types of visual presentations. Therefore it is imperative to chose appropriate media according to whom you are presenting to and what kind of concepts you try to convey. The aim for the visualisation was to efficiently communicate the concepts and to minimize the possibility for misconceptions and differences in how the concepts were perceived. Fredrik Magnusson comments on this during an interview, "If a board of directors read a written text that describes an abstract business strategy they could easily agree based on what they have read. On the other hand the text will be interpreted in as many different ways as there are members in the board and the view how the strategies will be implemented will vary a lot 41". To read a compendium of written text

In our case we had to decide what we should communicate and the best way to do it. We realised that for GDHA it is important to not only show how the various concepts work but also to stress the business opportunity and the potential benefits. Since we present and suggest new strategies we needed to make the whole concepts understandable and appealing. The concepts should be easy to interpret and the risk for misunderstanding of the contents should be minimised. We decided to make three animated short films that would describe the concepts and become our media of storytelling. The reason we chose animated short films was that it gave us room to dictate what and how the concepts were shown and that we could more easily explain the ideas through these stories, scenarios and information text than if we would have used only written text. Another advantage with creating the animation was that they would be self explanatory and wouldn't need anyone presenting or explaining them. This minimizes the distortion of the information when it is passed trough the company and we don't have to rely on someone with GDHA to remember exactly what the purpose of each concept was in order to explain to his colleagues. Moreover we felt that creating animations felt like a more creative way to convey our concepts than presenting mood boards or a PowerPoint show.

is also very time-consuming and a lot of the details in the document is lost due to people don't have the time to read it thoroughly. To visualise abstract ideas and make them more tangible is a quicker, easier and more effective way to communicate. With a more concrete image of the concepts we aimed to create an arena for fruitful discussions and this in turn would ensure that everyone is working towards the same goal.

⁴¹ Interview with Fredrik Magnusson, CEO.Propeller Design, (Stockholm, September 21th 2005)

When we had defined the concepts we started to make scenarios and stories in order to explain the ideas. Based on the user relevance and the business opportunity in each concept we created situations and persons in order to emphasise and visualise this. To ensure that people would not focus on the details in the films instead of the actual message we created an animation style stripped from all unnecessary details. For instance, instead of showing persons in our animation we chose to show monochrome silhouettes. This way we also minimised the risk of cultural misunderstandings when details and certain attributes can be interpreted differently depending on what country or culture you're from.

Based on the scenarios we created storyboards for the animations. With them we got a better overview of the stories and we could start to discuss around each concept. These storyboards were later showed to the MA students and they had some input on other things we should also try to fit into the films as arguments for the concepts.

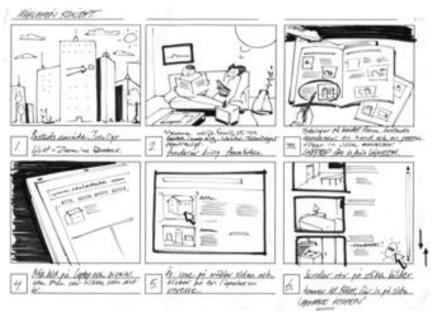
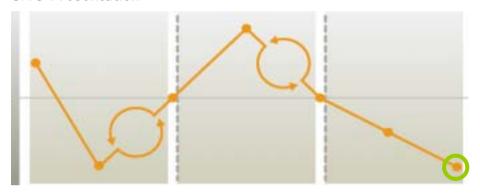


Figure 21: Storyboards proved to be an effective way of communicating.

When we had all the storyboards we could identify specific problems in explaining the concepts and add the scenes that we thought were missing in the story. The greatest problem was to get all the information we wanted into the films. We needed on the one hand to tell a story explaining the how the concept worked and the customer relevance at and the same time stress the business benefit. We agreed to let the actors and scenes describe as much as possible of the user relevance and to ad text to emphasise the business opportunities and explain the things that was hard to convey visually. We chose to use text instead of a narrating voice to ensure that the message would get across even if you watched them without sound.

3.13 Presentation



The Presentation phase has the purpose of delivering the best possible base for making the best possible executive decisions. In order to achieve this, the material must deliver only the most relevant information and successfully communicate the essence of the concepts. Every person involved in the decision process must gain full understanding and insight in these concepts to be able to make a well informed choice. The presentation can be divided into a three level structure with an initial point of interest, a part of insight and a part of deeper understanding. This is to keep up the interest and guide the observer in the process of your case.

4 Case Results

"By changing the focus from cooking appliances to the cooking experience, or rather from a product focus to a user focus, GDHA can redefine and expand their business accordingly."

4.1 Overview

The results of the case include a new vision for the company as well as three different strategic concepts to illustrate the vision and give concrete suggestions of how to achieve the vision and their goals. The three concepts were presented as short animated films but in this report we will present them as scenarios with text and pictures. We will also after each concept end with a conclusion with the strategic benefits. The vision is the conclusion of the market research and should represent a strategic target area. A much needed in depth research and evaluation is needed to put any of the concepts in to live action. The concepts should be perceived as direction as well as a foundation material for management to be able to make strategic decisions.

4.2 Vision

We believe that GDHA need to redefine their vision as a home appliances company to be competitive in the future. This is a considerable undertaking and the concepts that where developed are designed to illustrate the vision and the scope of the potential strategy. We believe GDHA should create innovative and relevant experiences for their customers. To be able to do that they need to deviate from the image of a cooker producing company and transform in to a company that supports users with relevant experiences, products, services and systems for cooking and preparing food. They have to reach the customer outside the kitchen; in the living room, bedroom, on their way to work, at work etc. They have to become "Glen Dimplex – Everywhere". In our research we amongst other things found that the users of home appliances were more interested in the result of the products – the time spent with friends or family preparing and enjoying food. Our suggestion of new vision is:

"GDHA shall become the home appliance brand that makes all the difference through relevant user experiences"

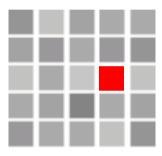
By changing the focus from cooking appliances to the cooking experience, or rather from product focus to user focus, GDHA can redefine and expand their business accordingly. By focusing on their customers and their everyday needs regarding cooking, eating and food GDHA would quite naturally follow the trends and detect new business opportunities.



Picture 22: The kitchen and living room are merging; cooking is considered entertainment and the slow and fast food movements. Three consumer trends that could generate new business opportunities for GDHA.

Furthermore by not seeing themselves as producers of stationary products and services but rather as a company that offers products and services independent of place GDHA can widen their market. GDHA should also work for changing the overall conception of home appliances from products that is being rarely bought and seen as investments to articles of consumption. One way of doing this could be to erase the border between white goods and interior decoration/home furnishing.

In order for GDHA to expand their market share we felt that the most important thing is to differentiate their brands from their competitors and become relevant to their consumers. On the stagnant and homogenous white goods market there are good possibilities to do so. With some new thinking and by changing peoples conceptions, GDHA could easily become the more exciting and innovative actor on the home appliances market thus attracting new customers.



Picture 23: GDHA and the rest of the white goods market have a low degree of differentiation. By making minor changes to GDHA's products and business offerings there are great opportunities to stand out as the more interesting brand.

By creating new ways of reaching their audience, for example by using other media or appear in new contexts, GDHA could create new connections with their customers and change the way their brands are conceived. Our research showed that for most people the brand of their home appliance was not of great importance but rather the products use and the emotions connected to using it. Therefore we reckoned that the best way to become important to the customers and differentiate is to focus on the experience of the products rather than the products themselves. By doing this GDHA can create a much

stronger connection to the customers and create the brands that is truly relevant for the consumers.



Picture 24: GDHA are dependent of their retailers to reach their audience and have thus little control of how their brand and products are displayed, conceived and sold.

Furthermore we believe that GDHA could strengthen their position on the market by taking control of their sales channels. By doing so they are freer to launch new things when they don't have to start by convincing the retailers to sell their products. Furthermore they can then exercise influence over how their brands are presented and strengthen their brand identity.

One of the most difficult scenarios for GDHA would be a fresh new comer, stirring up the market gaining market shares on differentiation, a phenomenon called a rising star. In order for GDHA to defend their position on the market we believe that they need to create an innovative culture within the company by encourage their employees to new thinking and nourish creative ideas. If GDHA invest in dynamic company strategies and a deep understanding in their target group they can prepare for the changes in the market and faster adapt to the consumers opinions and needs. By changing their approach to business GDHA can defend their position on the market and even create their own rising star thus dictating the new rules for the market and their competitors.

4.3 Concept 1: The Fridge as Interior Decoration

The concept aims at pushing the boundaries and challenges the conception for what a home appliance is. The fridge concept is a small movable cooling unit meant for the living room. By experimenting with shapes, material and appearance we want to create a fridge that appeal to people's imagination and emotions rather than their rational feelings. The target group for the fridge is people who care about interior decoration trends and instead of being sold in white goods shops the fridge is supposed to be marketed in home furbishing stores. The fridge will serve as a complement to an existing fridge and is designed to hold minor food stuff like fruit, beverages and snacks. Furthermore the fridge will double as an attractive light source and a wine/champagne cooler. By its unique design and functions it will clearly differentiate from any existing mini bars or small fridges on the market.





Picture 25: Because of the features of the fridge in concept 1 it will appeal to a new target group and reach them thorough new sales channels.

4.3.1 Concept 1: Scenario





Meet Steve. He has a found interest in home decoration and home styling. In his own apartment he has a good mix of design furniture and products which he thinks describe him well. Today he has some spare time and is relaxing with latte at the local café in on of the more trendy parts of the city. He's browsing some lifestyle magazines to catch up the latest trends. Inspired of the content he walks to his favourite interior shop to look for some furniture.





In the shop he found some interesting products, but one thing in particular catches his eye, a fridge. Steve immediately falls in love with the fridge and it is nothing he has seen before with its round egg shape, the interesting materials, the funky patterns and the subtle lighting of the product. "This would fit perfectly in my living room. I got to have it!" he thinks and decides to buy it. Back in his apartment Steve's curious on how the new furniture piece going to fit in to his home and he spend some time moving it around the apartment. He realises that he can have it next to the bed side table in the evenings, so he don't need to go all the way to the kitchen for water in the middle of the night.



He can use it on the balcony deck for sunny days and by the sofa when he's having a movie night. He often invites friends over and this will be the perfect conversation piece. He fills it with a couple of bottles with water, some fruit and a Coke.

4.3.2 Conclusion of strategic benefits



Brand builder: By challenging the conceptions of household appliances and reaching out to customers through new sales channels GDHA can attract attention and be perceived as an innovative and progressive company thus building their brand.



New sales channel: The concept opens up new sales channels and means to communicate to the selected audience and find new target groups.



Rising star: Opens up to the possibility of creating a new rising star on the market challenging the competitors with new concepts.



Follows trends: The concept lives up to the ongoing trend where the living room is merging with the kitchen. The concept gives GDHA an opportunity to prototype a new market where home appliances and home decoration merge.



Identification: Create a stronger connection to consumers since home decoration communicates on a different level as compared to white goods. Customer can relate to the product.



Differentiation: By creating a product that differs from conventional fridges GDHA can easily differentiate on the homogenous home appliances scene.



One more product: By offering a different product it is possible to sell a product to a consumer that already has a fully equipped kitchen and a functioning fridge.



High profit margins: Because the product is sold on emotional values the cost for the consumer is secondary. This means that GDHA can increase their profit margins on this products compared to traditional home appliances.

4.4 Concept 2: New Home - New Kitchen

Our research made clear that there's a strong and documented correlation between real estate transactions and investments in home appliances and refurbishing. Therefore a lot of people take the opportunity to invest in new white wares and they are less prone to accept substandard or worn household equipment. When people are investing in their dreams and future their decision process tends to be more emotionally driven and their perception of cost tends to change. We believe that this is an opportunity for GDHA to introduce their products.

The "New Home - New Kitchen" concept is an internet based application that presents available options for kitchen renovation when potential customers are browsing real estate specifications at an agency's homepage. When the potential buyer is browsing the photos of various homes, next to the picture is a photo of the kitchen, presented with an option to upgrade it. An interactive application in the interface allows choosing several different new styles and versions of upgraded kitchens as well as individual modifications made by the user based on the GDHA range of products. The potential buyer will hence get a teaser of how the kitchen could look like if upgraded. The cost of this upgrade can be integrated in the house mortgage and is financed to a low monthly cost and is therefore perceived as very affordable. When the customer is signing the papers to buy the home the reel estate agent will have the information on the clients preferred kitchen and present the option of the upgrade and the additional monthly mortgage cost. Since GDHA has a wide range of brands,

styles and prices is would be possible to create custom made upgrade propositions to fit most target groups. Behind this concept there's collaboration between GDHA, who will provide the white goods, the reel estate firm with their web site and a bank, sorting out the loan for the customer.

4.4.1 Concept 2: Scenario





In a residential area close to the city Cara and John lives on the 5th floor in an apartment house. The house is located in a pleasant area and most of the residents are commuting to town for work. Cara and John are thinking of moving closer to town to have more time at home and closer to work. Right now they are both into there careers and social life.





They are looking in the paper for different alternatives in closer contact with the city central. They believe that they are going to need a whole lot of new interior solutions as well, a new and improved kitchen, washing and cleaning facilities. In the paper they get a good over view on what's on the market and decides to look at the net for some specific objects. On the net they find a broker firm has a new thing that includes a kitchen upgrading. It means that on the home page they can customize there kitchen after the offering of the GDHA product collection, which covers everything from cookers, stoves and fridges. The offering even includes a remake of the existing interior to something that fits the apartment, the new home appliance and the couple.







When entering the homepage the can easy follow the interface to what in the end will lead up to a total conclusion of what the apartment will coast and how much more it will coast to upgrade it from its present condition. The ability to change and try out different alternatives is possible for Cara and John to do at home. They are looking around and find a couple of interesting objects to choose between.

They feel that the need to see three different apartments that seam to match there sense of taste, but they feel that there search on the net lead to some good prospects. The following Sunday they meet the real estate agent and he is well aware of what they are looking for. He brings out the outlines for the business deal and Sam and Robin recognize the figures from the web and they discuss the changes in the kitchen. Cara and John likes the easy access of the web service and the ability to try and change there future home before they move in. The package deal makes it easy for them to calculate there future economy and what kind of deal the bank is offering. Happy about their new future plans and the new interior changes they can rest for now.

The "New Home – New Kitchen" concept opens up new possibilities for GDHA to be seen in the right context and thereby reach and communicate to a susceptible audience through a new sales channel. By letting the potential customer explore and visualize the possibilities with a new kitchen and present it in a relevant situation GDHA can increase the chance that the customer will invest in new household appliances and insure that GDHA products will be top of mind. GDHA can gather valuable information about consumer wants and needs in connection to real estate, income and other key socioeconomical data. Furthermore this concept allows GDHA to expand their total market share without changing their current business model GDHA as a market leader. Since GDHA is the market leader and administer well known quality brands it is an attractive partnership for the real estate agencies and the other parties involved. Since the white goods market is so homogenous and GDHA has products in all different price ranges and styles GDHA can cater for most customers needs.

4.4.2 Conclusion of strategic benefits



New sales channel: GDHA have, by using the internet and not the home appliance shops, in this concept found a new way to reach their customers.



User relevance: Reach the audience in the critical context when they are susceptible for new offers.



Expand market share: By presenting GDHA products to customers in a relevant situation using alternative sales channels GDHA increases the chances of customers buying their products instead of a competitors.



User data: The excess market data that could be gathered from the site could provide valuable information about consumer wants and needs in connection to real estate and income and other key socio-economical data.



Relation to user: By allowing the potential costumer to explore the possibilities in the context of their own home, the chance increase that that person will find personal motivation to invest in new products.



Attractive collaboration: Since GDHA is the market leader and administers well known quality brands it is an attractive partnership for the real estate agencies.

4.5 Concept 3: Glen's Kitchen

"Glen's Kitchen" is a kitchen rental concept designed to make your whole cooking experience as smooth and enjoyable as possible. To meet the needs of the often stressed urban citizens we have created "Glen's Kitchen", a restaurant franchise created by GDHA. The idea is to let you enjoy cooking and eating with your friends without having to worry about shopping groceries, cleaning you home or doing the dishes.

For the user the "Glen's Kitchen" concept connects the two parallel trends of slow and fast food. The concept is offering the benefits of slow food with all the convenience of fast food. This restaurant will be a place to meet up with friends and family and is designed so that you can create a nice and personal atmosphere to relax in. The focus is not on eating as such but rather on the whole experience and joy of cooking and preparing a meal together. By offering a wide variety of recipes and instant access to groceries it encourages trying new cuisines and increases the interest for cooking. The concept reduces the stress factor when you don't have to worry about planning, shopping and transporting the food or cleaning the house and doing the dishes.

For GDHA "Glen's Kitchen" will generate an interest in cooking which in turn will lead to an increase in the sales of cooking appliances. By not focusing on the kitchen appliances as such but rather on the atmosphere and the joy of cooking GDHA can use "Glen's Kitchen" to create a positive feeling for their brand and an interest for their products. So at the same time as it is a restaurant it's also an interactive showroom where GDHA can ensure that people meet their products

under perfect and happy conditions. The "Glen's Kitchen" concept is also a good opportunity for GDHA to market new products and get valuable consumer feedback. The restaurants are also an excellent foundation for developing more complex product service systems and an opportunity to establish connections and start collaborations with companies in adjacent fields for instance food whole sale. By making "Glen's Kitchen" a franchise GDHA don't have to worry about not having credibility in the restaurant business when the restaurants are run by skilled entrepreneurs.

4.5.1 Concept 3: Scenario





Anna is a hardworking urban woman. She loves to socialise with her friends but find it hard to make time last. She loves to hold dinner parties and has a keen interest in cooking food but has never time with all the preparations it means. To still be able to cook for her friends Anna has booked a kitchen on the "Glen's Kitchen" web site. On the web page she can choose how many persons you are going to be and what time she wants to eat. The "Glen's Kitchen" restaurant is situated in the city centre to make it easily accessible for everyone.





This is perfect for Anna when she instead of going home to prepare the dinner can go straight from work. In the restaurant lobby Anna meets her friends and confirms the booking with the head waiter. He also assists Anna and her party in choosing a menu on a touch screen. The interface allows them to pick dishes based on country, ingredients, cost, level of cooking skills, allergies as well as it suggests what to drink with the food. Once they have chosen dishes all the ingredients are prepared and put in their rented kitchen. Meanwhile Anna and her friends have time to have a relaxing drink in the bar area of the lobby. When the kitchen is all set the head waiter escorts the party to their room.





The room resembles a modern and stylish kitchen and has an open design with a cooking, eating and lounge area. It is equipped with the latest of cooking equipment in form of knives, pots, pans and of cause Glen Dimplex white goods like fridges, fans and cookers. In the fridge Anna find all the ingredients she'll need to cook the meal as well as whine and beer and other beverages. On a screen she can follow the recipe and all the guests can under cheerful conditions join in preparing the meal. Because "Glen's Kitchen" supplies Anna with all the necessary ingredients she has seized the opportunity to cook exotic Thai food. She would normally not make this at home because you

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wouldn't have all the items for it. While some of the guests are preparing the dinner the rest sets the mood by turning on the music, laying the table and lighting the candles.

The dinner is eaten and everyone is having a fantastic time. Anna feel relaxed and is happy that she won't have to clean up and do the dishes afterwards. When the dinner is finished Anna and her friends return to the restaurant lobby to pay. Some of the guests were impressed by the food and asks the head waiter for the recipe. He gives them a print out and informs them that all the other recipes are on the "Glen's Kitchen" web page.

4.5.2 Conclusion of strategic benefits



Product placement: Concept allows GDHA to promote their brand under controlled and positive user experiences.



Difficult to plagiarize: A composite offer such as this is more difficult to plagiaries compared to a solely product orientated offer.



Follows trends: Concept capitalizes on the parallel trends of slow and fast food when it caters for both needs. Furthermore this offer might be perceived as healthier and of higher quality or value as compared to regular take out food or some restaurants.



Self supporting: A concept that is potentially self supporting financially. Proportionately low initial start up cost.



Interactive showroom: The concept serves as interactive showroom and promotes home appliances and cooking. An arena for showing and testing new products.



User data: Valuable feedback and market research data: choice of food types, cooking style, etc.



Experience: Create a stronger connection to consumer's trough experiences and interaction in an attractive and relevant context.



Supports core business: An opportunity for GDHA to branch out while supporting one's existing business.

5 Case conclusions

"The breakthrough for us as a group during appeared when we started to communicate using concrete and visual tools. This doesn't necessarily imply that the business students are less creative or that the design students are too conceptual but rather that during certain phases, communication is a key issue."

5.1 Research phase

We feel that it was good to start off by getting to know each other and deliberately keep the field open straight from the beginning of the project and not jump to conclusions. We found that in the research phase there was a lot to gain from working interdisciplinary and in general we had few difficulties cooperating. This was because we felt that all the information we gathered was of importance and by taking part of the other disciplines research result we gained a greater insight into the case and it served as great inspiration. The company and market information from we got from GDHA was very useful, and the MA students could with their knowledge and tools extract a lot of valuable information that the ID students would have otherwise foreseen. The information that MA delivered created immediately loads of ideas and spin off effects in the group.

By adding user studies, interviews and qualitative data to the more rational company research we managed to get a good understanding and feel for of not only GDHA as a company but also their end users and context. We think that understanding the user is very important when working on a strategic level and that the end users should always be taken into consideration when creating new strategies. When it comes to research ID treated to a greater extent the information like guidelines than MA did and tried to interpret (or read between the lines) the research instead of viewing it like pure facts. The research was something ID used to base their ideas and concepts on at the same time as it served as inspiration. For instance, the different ways *Marbodal* and *Power* choose to display their white goods didn't inspire us to create a new better white goods store but was rather an inspiration for various concepts where the emotional and not the

rational values should be in focus when GDHA's customers choose products.

We would've preferred to involve GDHA more in the research phase to get to know them better and show them the way we work but also to check our research conclusions with them. We did however make sure that we always presented our results and progress by putting together power point presentations and writing emails. We also ran all our conclusions with our tutors to make sure that we were on the right track.

The common feeling towards the result of this research phase was genuinely positive. Since there was a will and interest from both disciplines to learn more from one and other there was no conflict embedded in the pursuit for more information and better understanding. By doing research form both a marketing perspective and a design perspective we feel that we managed to broaden our research and get a better coverage. From an ID perspective it was rewarding to get a deeper knowledge of the business side to the research and take part of the research tools the marketers use.

5.2 Ideation phase

In the ideation phase the differences between ID and MA became more apparent and we had some difficulties cooperating. We did agree on the research conclusions but had different ideas on how to use this information.

ID realised that they had to change their mind set in order to come up with strategic concepts. As industrial designers we are taught in school to solve problems by creating new products and little focus is on

understanding the greater business context. The ideation techniques taught in Konstfack are not geared to generating complex business offerings. When these techniques were used in our case the result often ended up with rather straightforward product ideas. We understood that it is crucial to have some sort of scaffolding in order to efficiently brainstorm but in order to get out of this rut we had to develop a new ideation tool that could steer us in the right direction at the same time as it would give us enough room for the designers to do what they are best at, being creative. We called this tool "Starting points".

It also became apparent the differences in how the disciplines work in order to develop ideas and solve problems. The MA student had a more rational and straightforward approach and considered the ideation phase very straining when it was to them rather abstract and didn't have any clear structure or goals. The ID student on the other hand felt that the chaos in the ideation phase was important for the out come of the concepts and didn't want to jump to conclusions by hurrying the process or pick the first idea that came to mind. Furthermore we realised that it takes great skill to brainstorm. For the ID students brainstorming is a natural part of the design process and something that is practiced continuously. For the MA students on the other hand the ideation processes industrial designers conduct was new, therefore the structure, purpose and methods seemed confusing.

The ideas the different disciplines came up with also differed a lot. In general one could say that the industrial designers were having more innovative ideas, often based on intuition and less founded in hard core facts and economical models, while the business students came up with ideas based on research facts but somewhat less creative. For example, one of the concepts the MA students opted for suggested integrating furniture from the living room into the kitchen. A concept

based on current trends but with limited innovative height and only based on the consumers articulated needs. ID on the other hand suggested a restaurant/showroom concept where GDHA would develop an interactive showroom that would give feedback on new products as well as generating an interest in food and cooking and act as a brand builder. A concept based on research conclusions and gut feeling. The MA students were also more product focused and often suggested concepts that could be implemented rather close in time. A lot of the times the concepts generated by MA were alterations or additions to already existing products while the ID students tried to come up with new, never seen before concepts. Maybe it is a result of the different mentalities between ID and MA when a successful case for a designer is to come up with a groundbreaking idea while for the marketer it is more important to economically justify the decisions. It could also have to do with the ability to live into the different concepts. Perhaps the ID students found it easier understanding, experiencing and seeing the benefit of the visionary concepts while the MA students found it easier grasping and calculating the more concrete concepts.

The collaboration between MA and ID also made it obvious that we have different ways evaluating concepts and ideas. These difficulties where rooted in a different view on "rules" and how they should be addressed. During the phase of structuring the ideation material, the business students could easily evaluate the marketability or business impact of a particular concept while the designers re-developed the concepts from initial scaffolds to realistic business concepts. The business students tended to judge the concepts as being far too conceptual and alienated from the case company's current business activities, while the designers saw the final concepts as somewhat to

similar to existing concepts and therefore lacked a clear business edge. This became a major challenge and a significant hurdle to overcome. The ideation phase was in need of certain adjustment to suit the two different disciplines. Since the project was kept in a fluid state for the majority of the time span to stay flexible, the definition of the goal or vision blurred and it proved difficult to evaluate the ideation material. The lack of a set communication methods internally also led to a low sense of common ownership of the ideas. A need to illustrate a nonlinear method using linear models to communicate to all arose. In terms of difference in mind set between the two disciplines, the designers had a driving force to always surpass what exists and take the next step while the business students feel a need to keep a high business bearing. This phenomena turned in to a discussion about "Playing it safe or not".

Furthermore we had difficulties communicating within the group, especially between MA and ID. This was because we didn't fully understand the differences in the way the disciplines think. Another reason was that we didn't have the same idea on the outcome of the case. In order to communicate better in the future we believe that we need to get to know each other better and have a more defined common goal for our project. Furthermore we realised that by visualising and explaining ideas through scenarios and sketches we have a much better chance to understand and communicate ideas both within the group and externally. Having different ways to work, different values and different ideas about the product about to be created, it can be impossible to work together. To understand each other and the different functions of marketers and designers is

essential⁴². However, if the will to cooperate exists these hurdles can be overrun. People with different skills and background tend to think differently and if people are open minded a multi disciplinary brainstorm can really take problem solving to another level where the participants motivate and inspire each other. Clear communication is important, but most necessary is and a true willingness for cooperation. We believe that it is important for both ID and MA to take actively part of the ideation and the structure phase. By doing this the evaluation of the concepts will be more balanced and the decisions will be more established in the group. We felt however that there's a need for a tool or method that can bridge the gap between the disciplines so that the concepts can be evaluated both from an economists and a designers viewpoint.

5.3 Concretisation phase:

In the beginning of the concretisation phase we discussed how to continue on. It became evident that we used varying methods and evaluation tools and therefore had difficulties in understanding each other. As a result the design students started to concretise ideas with very little written documentation using storyboards and other visual materials. This supported a more productive and concrete discussion. There where however concerns regarding the seductive qualities of the visualisation and whether or not this could be unproductive or even misguiding internally. The outcome of the process materialised as composite business concepts rather than product concepts. These concepts tended to consist of a central business opportunity that supported the current activities while expanding into new ones while

providing an edge in either marketing or positioning. The nature of the concepts where perceived as hybrids rather than compromises and had attained and kept qualities of both conceptual height as well as certain long term business bearing.

Creating the visual material for the GDHA case forced the ID students to explain the concepts by the help of a scenario and a user. It was a new way for ID to work and we realised that that you have to think in a different way to express your ideas with moving pictures. It was rather hard to create a good natural story and still manage to get all the necessary facts across. On the other hand we believe that a good animated film can explain a complex concept more accurate than a written text. The animation took much more time and effort than we first expected and it is considerably more work to make a film with 10 scenes than 6. We also realised that the storyboards we made for the film served as an easy and quick way to communicate ideas and in a future project we would like to try to only use them to explain concepts. This was also a good way to test the concepts and communicate for out side judgements and comments. Once again we came to the conclusion that visualisation is a great way to communicate and concretise.

So the breakthrough for us as a group during the concretisation phase appeared when we started to communicate using concrete and visual tools. This doesn't necessarily imply that the business students are less creative or that the design students are too conceptual but rather that during certain phases, communication is a key issue.

⁴² Philip Kotler and Alex Rath,"Design: A Powerful but Neglected Strategic Tool", *Journal of Business Strategy*, (1984), autumn.

6 Discussion

"There is little doubt that creative and empathic will play a major part in business in the near future. It is difficult to say how this will be organised or how long it will take. It is safe to say that it is happening and that the companies that have succeeded in this have an edge and are influencing their industries."

6.1 The project

The principal aim of the project was to develop and test a method for how one can apply design thinking practically in business development. This was done to answer the question of what really happens when you put theory into practice: What happens when one use industrial design as a tool to innovate business in the Creative Economy?

Throughout the process of testing the method in the case, many unforeseen issues arose and have influenced the effort of developing the work method. In retrospect we have started to draw conclusions from our experiences and make assumptions with regards to the *reson d'etre* of the work method and its potential benefits.

6.2 The work method

The work method that we set out to test underwent changes as the case progressed. The resulting work method contains the new phases and features that we discovered throughout the project. We soon realised that this is a work in progress and that it may be a continuous project. Furthermore there is a hefty process that begins after the presentation of the material that includes critical managerial decisions and further testing and market research.

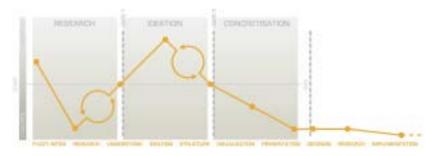


Figure 26: New and improved work method with implementation phase added.

What are the main qualities of the work method itself and how does it compare to those methods commonly employed when developing businesses?

Primarily these activities present opportunities to stay competitive. The level of differentiation that can be achieved with these methods is a fundamental must in today's competitive market. Further more, a business offer that differentiates on multiple levels with systems of products and services is much more difficult to plagiarise as compared to individual products. Unlike many other creative processes, these methods are iterative and can be repeated with a predictable level of quality. There are potentially costs that can be saved by putting more resources into the early stages of strategic ideation and planning since costs tend to increase greatly the further a product or strategy is developed. With a closer and more empathic relationship to the customer, the company stands better chance at producing attractive and successful offerings and finding better means to influence the market. By gaining more relevant information and make crucial deductions from prototyping and observations, one can hit the target more accurately and avoid costly failures. Visual and concrete ways of communicating both internally as well as externally brings unity and direction that can improve productivity and build a better brand. A dynamic and flexible strategy allows for the quick responses that the market demands and encourages innovation and embraces change.

Collaboration and the meeting of disciplines is a key component in the method due to the complex nature of the task. The knowledge and tools simply doesn't exist within a single discipline as of yet. The meeting of disciplines also tend to result in more and better material. The two separate disciplines of designers and business managers also

tend to play different parts in the process and complement each other well. Since the scope between designers and marketers seems to trigger exciting concepts, the process is explicitly constructed to accommodate both designers and managers and feeds off the interplay between different qualities such as: Intuition and rationalism, creativity and structure, quality and quantity, emotional and economical.

The method is designed to produce new and innovative corporate visions and strategies while most existing tools to develop businesses are designed to focus primarily on the optimisation of an existing business model. Further more it is intended to come in early in the strategy development process rather than during product development. If a business needs to be innovative in order to stay competitive the innovation process needs to address a wider scope than individual products in order to become effective.

The process focuses on identifying the core business opportunities to build concepts from rather than creating isolated solutions. When an identified need is combined with suitable resources in the company and the market conditions are favourable, a business opportunity can be defined. From this opportunity many concepts and products can be produced, thus creating systems of products and services. This seems to have a greater financial potential as compared to stand alone solutions and individual products.

The use of the *Start Points* tool to facilitate the ideation process and it ensures a clear bearing to the business development. Unlike many other ideation methods that rely on topics to steer the outcome, the starting points doesn't frame the ideation process, but rather promotes it to deal with strategies that develop potential business opportunities. The resulting is an un-bound ideation process with a focus.

Most business development processes deals with the consumer in one way or the other. Traditionally this process is founded on a quantitative approach with a sweeping relation to the people who constitute the market. Many of the research and structuring methods employed by designers supports an empathic customer centred approach that focuses on user relevance. We argue that this give rise to viable concepts with a strong link to the realities of the market.

When all parties from all disciplines have a part in developing a concept, it is easier to accept, especially if the concept breaks the mould for what is usually done in a given field. Furthermore, the following process of implementing and developing a process is usually more successful if the participants feel a sense of engagement, ownership and understanding for the concept. It seems that the cooperative nature and give-and-take approach creates a sense of common intellectual ownership and understanding of the strategy that promotes a successful realisation of the concepts.

Business management have a tradition of communicating using written text such as memos and reports, but also graphs and models. These communication tools leave a relatively high degree of room for interpretation as compared to a more visually orientated material and concrete physical models and mock-ups. A human perspective such as a described in a scenario seems to allow for deeper understanding and relation for the receiver of the information. To incorporates a visual development strategy that aids the internal and external communication and therefore speeds up the process, creates unity and limits the room for misunderstanding.

Most commonly used processes employed in business management or to develop technical solutions tend to be sequential and linear. These methods are developed to produce a predictable outcome and ensure a high quality and are highly suitable for optimising products, services and systems. If the process is strictly defined from the very beginning, one must know the nature of the outcome beforehand, thus eliminating the opportunity to create something new. In the method we attempt to promote a fluid and dynamic process that employs parallel processes and a non linear work flow. This seems to produces an outcome with a higher degree of innovation as compared to traditional business management.

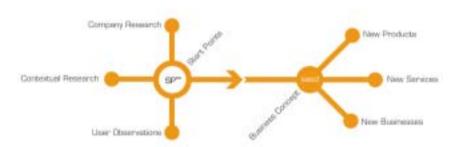


Figure 27: Outline of the workflow of the method

One of the significant differences in traditional design or business development processes is the relationship to the task or the problem at hand. Most commonly the task is to solve a problem or, even more common, work with a specified assignment. These could be a problem such as: "we need to target young people age 15-24" or "we need a new product/webpage/billing routine". These can be referred to as working with framed problems. The challenge is to deal with undefined problem were both the opportunity and problem might be unknown. This can be called to work with unframed problems and this

requires a different mindset and work method that we have attempted to achieve.

6.3 The Results

The potential of the work method depends on the nature and qualities of the outcome. It is difficult to judge new concepts commercial potential without further market research and prototyping, but one can draw certain conclusions that can guide the decision to investigate a concept further or change approach.

The process results in a vision for the company that represents a target area or direction. To achieve this target, a number of activities are developed in the form of strategic business concepts. Each concept supports and develops different aspects of the business or brand and may include different components such as new business areas, product categories, services and systems. The concepts should be supported by the company's current resources and be consistent with its history and continuity. Further more the concepts are intended to be effective and work efficiently with the company's current structure while promoting a sustainable business direction. All these are weighed in to create the most advanced yet acceptable solution.

The result differs from traditional business strategies on a few key points. Primarily they tend to redefine what a company is and what it does with regards to the company's capacity and market conditions rather than the company's current perception of what they do. This allows the company to be competitive trough innovation rather than optimisation. By defining new markets rather than primarily competing on saturated existing markets the company can gain a competitive edge and achieve a higher degree of differentiation and a stronger brand image.

6.4 The Team

Interdisciplinary teamwork can be utterly fruitful but seem to require great skill and can be a taxing task. In retrospect it dawned on us that there was much to be gained in working interdisciplinary in this field but that it was more to it than simply mixing different people in a room and expect them to perform. There was an inherit need for genuine determination and willpower amongst the participants for the process to become productive.

In each stage of the case project new situations arose, creating new sets of challenges. Each time situations occurred where the advantages and the scope of the team became immediately apparent. Equally often the project seemed to stall or stagnate due to the striking difference in opinion between the designers and business people. In many cases the return on effort was difficult to perceive in the heat of the moment, but become obvious in retrospect.

Having different ways to work, different values and different ideas about the product about to be created, it can be impossible to work together. To understand each other and the different functions of marketers and designers is essential. However, if the will to cooperate exists these hurdles can be overrun. People with different skills and background tend to think differently. If people are open minded a multi disciplinary brainstorm can really take problem solving to another level where the participants motivate and inspire each other. Clear communication is important, but most necessary is a true willingness for co-operation.

In the face of all these difficulties on must wonder about the main benefits and rewards. The simple fact is that the knowledge and tools that you need to deal with these issues doesn't exist within one discipline. That's the practical issue of the resources needed. With regards to actual quality and diversity of the ideation material, truly cool stuff happens in the intersection between disciplines, cultures and people. In this meeting of ideas and knowledge, the number of new combinations increases exponentially which is a factor that has the potential to improve the success rate of the process⁴³. A team is generally much more innovative than an individual, given that the group dynamics function well.

6.5 The real world

One can speculate on why design and creative processes have a difficult time to become integrated in corporate structures. To bring any benefits and gain noteworthy effect in a company the creative processes must be accepted by middle management. For this to happen, it must be made clear that these activities are equally important as other main activities and disciplines. Senior management must probably send a clear message to recognise creative processes. In a corporate world that could imply assigning the creative development of the company its own specific budget apart from marketing and R&D. A new generation of managers that may have a deeper insight in the importance of design and creativity will in time change this situation. The question is if companies can afford to wait for this to happen by itself?

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The most obvious obstacle to implementing a management style that encourages innovation is the nature of the existing organisation itself. Since most business structures are centred on optimising the existing model, it will most likely prove difficult to gain support for a strategy that deviates from that. Most methods that promote creativity or innovation contain elements of what seems like chaos and there is a lack of established methods to measure the bottom line effect of these activities. This makes it difficult to justify creative methods since the majority of the established methods of evaluation are linear and quantitative.

Many of the issues that arise in the interaction between the designers and business managers derive from differences in education and way of thinking. These differences are most likely the very same reasons why these alternative business methods have such a hard time to become accepted in the business sphere.

One can't help to feel that it is time for the business sphere to finally take the next step, embrace change and apply them selves to understand the creative sphere. Realistically it will probably fall upon the design community to develop tools and the language required to bridge the disciplines and enable the crossover of creativity and business.

6.6 The road ahead

How should a company act when creating new strategies or developing existing strategies to become successful? What is needed to produce winning strategies? If innovation and creativity is the name of the game to produce top-line growth and stay competitive, how can one go

⁴³ Frans Johansson, *Medici effekten - Revolutionerande insikter i skärningspunkten mellan idéer, begrepp & kulturer* (Stockholm Bookhouse Publishing, 2005)

about it? We argue that some of the skills, qualities and strategies that inherently drive this process can be describes as follow:

Empathy: People with a principal skill in combination with understanding and empathy for other disciplines (sometimes referred to as T-thinkers) allows for original insight in the world while enabling you to build better teams. This insight facilitates stronger connections to your audience.

Intuition: It seems highly effective to rely on a certain amount of intuition at specific key phases in the process. This trust seems to bring out more diverse ideas and encourages an empathic relationship to the people that you are trying to understand. It is equally important to verify and evaluate these intuitive conclusions using linear and more traditional tools and methods.

Observation: An issue that tends to resurface is the advantages of direct observation rather than traditional surveying in some circumstances. Observations from the real world will hardwire in to the market and draws power from actual user relevance. This also seems to facilitate the identification of unarticulated needs and wants from the consumers.

Prototyping: To test, build and experiment seem to aid the process at different levels. In an ever more unpredictable market this activity seems to provide the most valid data. No strategy can be verified until it is launched. To test small scale and collect real feedback saves money and generates results. Mistakes are often as insightful as success. It seems preferable to change the concept as you go along rather than to go for a lengthy development process and then aim for the perfect global launch.

Storytelling: By presenting issues in a credible context and situation and explaining complex problems with comprehensible examples, one can communicate more effectively both internally and externally. The user relevance can be made more apparent by expressing issues in terms of human interaction and people in a credible scenario.

Visualisation: In interdisciplinary groups, communication is a key issue since language and perception differs. Much effort went into creating a common understanding for the issues at hand. When we attempted to go from abstract to concrete, visualisation proved most helpful. The most rewarding discussions arose when concrete issues where on the table.

Flexibility. Don't have fixed strategic targets, get a target area or vision for direction and keep the process liquid. If you can imagine the result from the very beginning the result probably won't be much of an innovation. In terms of organisational management it seems better to change before you have to. Keeping the project fluid for as long as possible without loosing direction or momentum seems to generate the most interesting results. This appears to be the hardest part to apply when working in disciplined structures with a rigid, clearly defined work process.

Creative teamwork: Creativity is born in the meeting of minds where ideas and knowledge collide. In a productive environment with mutual understanding and respect, working in teams with appropriate disciplines and can become the number one driving force for innovation in you organisation. Willingness to change is a strong point,

even if it means plunging the team into temporary confusion. Break the rules to rule the game.

Focus: Different disciplines often have a predefined type of outcome for their process. When the team stopped focusing on their traditional deliverables, the efforts of the team shifted to the significant issues at hand. To change from looking at products and start looking at the core subjects proved most productive. The team concentrated on the actual problems and not traditional solutions and develop business opportunities around them instead.

6.7 The next step

There will always be a great demand for talented designers that solve problems, care for the user and shape the objects of tomorrow that inspires desire and beauty. There is also a growing demand for people with design skills to guide and lead innovation in business in the time ahead. It is far from certain thou that industrial designers will be the ones to lead this evolution. This challenge may call for different skills and qualities besides those found within the design discipline and the traditional design education. Other disciplines in the market are picking up new skills to master design and innovation while designers are changing slowly.⁴⁴

The designer must become a true team player and become a productive member of a multi disciplinary group that solves complex problems and creates new opportunities. The designer has an

⁴⁴ (December, 2005), *NextD Mindscapes* [WWW document]. URL http://www.nextd.com/03/index.htm

opportunity to go from being the judgemental authority on one's turf to being the supporter and facilitator of multiple ways of thinking

- Go from being a single discipline that solves limited problems to being less discipline specific and solve multifaceted complex problems in systems.
- Go from being craft orientated to being knowledge orientated and learn new leadership skills.
- Go from being exclusive to inclusive by externalising your process. Decode the traditional design communication and speak out.
- Learn how to deal with unframed problems and deal with unknown results.
- Truly know *what* to do rather than to focus exclusively on knowing how to do it which means going from being content driven to process driven.
- Go from solving problems to solving problems and generate opportunities.

The next step for strategic business design might be an evolution in to total business design in cooperation with venture capital where companies and brands are created purely from creativity, capital and unarticulated needs. The design studio could become a brand mill and be financed by licensing concepts to entrepreneurs or cross over and become the entrepreneurs themselves.

There is little doubt left that creative and empathic qualities will play a major part in how business is done in the near future. The logical evolution of the managerial body since the industrial revolution is to bring in a new discipline in the board room as the market and society

evolves⁴⁵. It is impossible to say for certain how this will be organised or how long it will take. It is fairly safe to say that it is happening and that the companies that have succeeded in this have an edge and that they are influencing their industries. We have grown stronger in our conviction that the industrial design discipline has much to offer in this transformation while we have become more aware than ever of the enormous obstacles and difficulties in changing the perception of how business can be done. Communication is emerging as the lowest common denominator of the hurdles in the meeting of minds in the pursuit of the next rising star.

Get creative or perish!

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⁴⁵ Interview with Mats Tyrstrup, Associate with Klaraberg Business Advisors and professor at the Centre for Advanced Studies in Leadership at the Stockholm School of Economics, (Stockholm, November 7th 2005)

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8 Appendices

8.1 List of Interviewees

Company/Organisation

Syntes Design Syntes Design

Pattern Recognition	Trend forecasting, MBA
Dinki	PhD. Student Design
	Management
NoPicnic	Design Manager, MBA
Ergonomidesign	Designer MFA, Design
	manager, BFA
Propeller Design	CEO, Designer MFA
Differ	Brand strategist
Transformator	Design strategist,
	Designer MFA
CBS	PhD. Design
	Management
Red Associate	Business Developer,
	Associate
Electrolux	Senior Designer,
	Designer MFA
JoLine	Designer MFA
POC	CEO, MBA
Yahoo	Design Strategist,

MA PhD Design
Management
McKinsey Associate MBA
Cordial Business Advisers Designer MFA

Konstfack Professor, head of department Industrial

Design

NoPicnic Design manager,

Designer MFA

Designer BFA Designer MFA

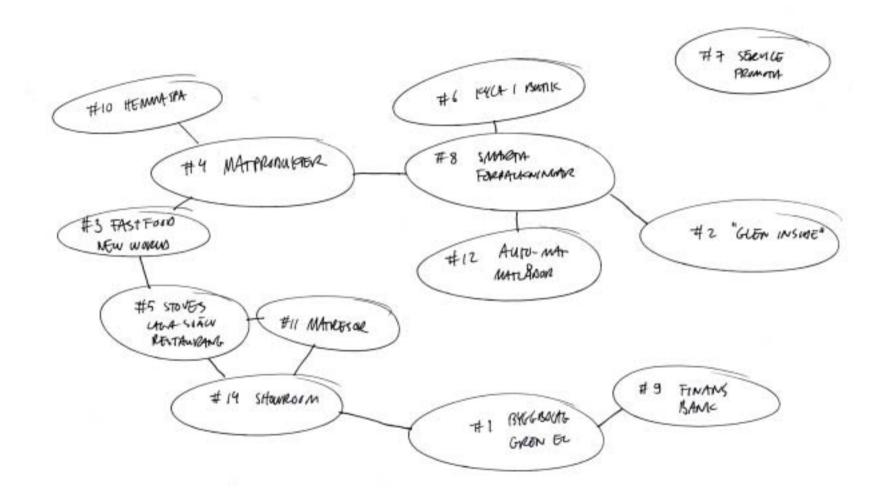
Designer MFA

Titel/Position

8.2 Outline for Interviews

- A brief introduction of us as a group and a short background
- A short presentation of our project and our theory
- An introduction of the interviewee such as; background, previous experience, current function or occupation and such
- The main portion of the interview was spent on topics such as:
- 1. How the interviewee used design related skills or tools in their work.
- 2. The development of their area of business.
- 3. The future of the design business
- 4. Any recommendation of how to continue the project
- 5. Relevant literature or people that we are recommended to look in to

8.3 Structured ideas



8.4 Questions for Glen Dimplex

Vision

What is your vision?

How do you use that vision?

How do you change your vision according to the changes of the world?

How do you communicate your vision internally and externally?

How did you create your vision?

Strategies

How are you working to reach your vision/goals? What is your next step after tomorrow? What do you see as you "playing field"? (area in which GDHA are active)

Economics

How do you earn money? What is your main source of income?

Resources

What do you see as your core competence?
How much productions are owned by GD?
What is your geographical spread?
What kind of distribution are you using (external, internal) Do you see this as a problem?

Are you ahead of your competitors in technical aspects, innovations, distribution?

Organisation

Is GDHA UK more or less independent from GD Group? What is the work relation within this group? What is the history of the board/executive personnel?

History

How important is the history of the company? Do you incorrporate your history in your development process, products/business?

Consumer/user

Why do the customers buy your products?
What needs do your products primarily fulfil?
Who are your customers? (social, geographical, age, lifestyle etc)

Is there a difference between how you see the target group and the real customers?

How do these people "behave"?

What does Mr Smith think of your brand?

What do your customers think of your brand?

Do the customers think you are one brand or several?

How does this in that case affect your company?

Do you believe that there is a difference between your buyers and end users?

Retailers

What kind of retailers and sale channels do you have?

Do they have their own stores?
What do they sell except from your products?
Do you have your own stores?
How do you use "your" space in the stores?

Marketing

How do you reach your target groups?
What kind of marketing activities do you have?
Which marketing channels do you use?
What are your price strategies?
What do you know about your customers?
How do you find out about them?
Do you have any large potential customer group that you know of?

R&D

How do you work with R&D? (processes, routines, climate, resources, goals etc)

Are you doing user studies? How?

How do you use the information?

How do you come up with new briefs for product development? (For example the ones that you gave to us initially.)

Who writes the design briefs?

Do you buy research data externally?

Products

Do you have a product icon? The strongest product in your portfolio?

What is your product history?

What is your view of your product portfolio?
How does it compete with your competitors?
Do you have your own product expression?
Which values do your products express?
Do you have any unique products that no other competitor has?

Do you sell any services or knowledge based products?

Brand

How many brands are used in this case?
What is your brand image? (for every brand in this case)
What is the strength of the brands?
How do people experience them?
Do they have different experiences in different regions/countries?
Do you have any "brand builders" in your portfolio?

Are you aiming for a common brand trait amongst your subbrands?

Do you have any joint ventures with other brands? What are the weaknesses of the brands? If you where a car brand, which brand?

Trends

What do you see as the most up to date trends in you field? What other major trends are there in the world today? (economical, behavioural, opinions etc) Who do the analysis?

Competitors

Who are your competitors?
What are their products?
How do they positioning them selves?
What other companies have an influence on you?
(Substitutes, i.e. car companies are in competition with public transport)
What are your unique selling points?

Other questions

What is the blind spot of GDHA? What kind of information do you lack? (i.e. consumer needs, actual buyer vs. user etc)

8.5 The RACES framework

Table 1: RACES framework for the evaluation of ideation material⁴⁶

Option/Concept	Resources	Acceptability	Consistency	Effectiveness	Sustainability	Overall
Real Estate Agency	Small changes in production or investment in resources. Initial investments but low running costs.	Small change in business idea or organization. New sales channels are commonly in high demand.	Low difference in production – Similar type of products. Low change in brand values.	Solves the issues of finding new sales channels and the ability to present their products in a highly relevant context.	Easy to plagiaries and have low entry barriers. Doesn't create a long term head start if successful.	Low risk with a relatively high entry cost with a high potential profit. New partnership is the main issue.
	MEDIUM	HIGH	HIGH	HIGH	LOW	
Interior Products	Same basic type of product but a new segment. No current retailers. A new brand process is expensive.	Still the same type of product but a new type of variation. Doesn't interfere but complement the current main activity	Strong differentiation in product style, but well in line with a strategy of modernization and development.	Takes the step in to new sales channels and may respond well to an unarticulated market need. Uncertain outcome.	If successful this will ensure a great market advantage. High Entry barriers and reasonably difficult to plagiaries due to brand issues.	High initial investment with high potential profit. Difficult to copy but likewise hard to implement. Running costs and continuous development issues.
	LOW	HIGH	MEDIUM	MEDIUM	HIGH	
Franchise	Only resources for some equipment.	Probably low internal understanding to embark upon such market.	They deliver the same facilities: cooking. But in different environments.	If they succeed with offer a greater cooking experience they create differentiation and a new business opportunity to gain profit.	If this is realised properly this could generate profit by its own.	Hard to get immediate internal acceptance, it has to be seen as a future scenario to broaden the company portfolio.
	LOW	LOW	MEDIUM	MEDIUM	MEDIUM	
Glen Inside	They have the expertise but not the infrastructure required to implement.	Outside of the kitchen but reasonably similar in product category and function.	Strong differentiation in product type, but well in line with current activities.	Few changes in distribution and activities. B2B as a subcontractor. New products and new partners.	Low volumes and reasonable low differentiation. Reasonably easy to plagiaries.	Supports a significant increase in brand awareness. Low profit margins and high risk. Interesting mainly as a brand strategy.
	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	

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⁴⁶ Haberberg, Adrian, & Rieple, Alison, *The strategic Management of Organisations* (Harlow: Pearson Education Limited, 2001), 463-477.

Option/Concept	Resources	Acceptability	Consistency	Effectiveness	Sustainability	Overall
Financing	No knowledge but high equity. Needs a strong partner to organize.	No previous experience of handling capital. No interface with customer. May increase sales.	Low credibility as a financial institute. No previous tradition of direct marketing and little customer relations.	Low potential profit and limited brand implications. High barriers and few immediate advantages.	Fierce competition in the finance sector. Difficult to remain competitive and/or profitable	May result in an increase in sales of current products but is connected with high risks and low potential profit.
	LOW	MEDIUM/LOW	LOW	LOW	LOW	
Smart Packaging	They have some expertise but not the infrastructure required to implement.	It's a step towards consumer needs, but it's hard to fit in traditionally. Uncertain if the customer will see the connection to the brands.	Probably a high credibility for cooling and heating packaging, but not it will move them outside the kitchen.	High potential for the fast food movement. Uncertain if there is profit in such an unknown market.	The low knowledge in the packaging market might cause problems. But if it's successful this will create a wider belief in their technology capacity.	It's a rather logic brand extension, but it needs new competence to implement it. Maybe a food or transportation company joint venture to fulfil.
	LOW	MEDIUM	MEDIUM	MEDIUM	LOW	
Third Hole - Infrastructure	No knowledge, some resources.	Hard to take a step into a market and technology they don't manage today.	Far from their core competence. It impacts the ones impacting them.	Very long-term staking and many factors to correspond. Uncertain how and when to make profit.	It a great step into the homes, but how does it generate money?	A far fetch that might be profitable. Hard to see the reason for finance so long-term staking.
	LOW	LOW	LOW	LOW	LOW	
Food Trips	No knowledge, no resources.	A long step and little profit.	Potential brand awareness strategy and a need for global products. But hard to create the connection to the core competence.	Uncertain effect of outcome. Could create great brand experiences.	Hard to make a strong connection to what the core competence.	Might create satisfying emotions towards the brands. But it's hard to foresee the effects.
	LOW	LOW	LOW	LOW	LOW	
Concept Kitchen	May be a need of new technology. Difficult to produce high level with a low culture of innovation.	Natural step to be on the edge of their competence.	A constant concept development will probably help the development of their standard range.	Low profit on high end products. But could be brand builders. Low durability, constant delivery of concept sis needed to uphold the image.	Hard competition in the design concept area. If successful it can create product and brand attention.	If it's done right is it an effective short strategic. In the long time it's a must to direct the concept towards a clear goal.
	HIGH	HIGH	HIGH	MEDIUM	MEDIUM	

8.6 Survey questions

Take a digital photo of...

And write a sentence or two about it.

- ...where you work in your home.
 (Why do you work here, what do you do, good things, bad things etc)
-where you relax in your home.
 (Why do you relax here, what do you do, good things, bad things etc)
- ...where you spend the most time in your home.
 (Why do you spend a lot of time here, what do you do, good things, bad things etc)
- ...what you like the most in your home (for example product, room, detail).
 (Why do you like it?)
- ...what you like the least in your home (for example product, room, detail).
 (Why do you dislike it?)
- ...where you socialize in your home.
 (Why do you socialize here, What do you do, etc.)
- ...your favorite home appliance. (Why is this your favorite appliance?)

8.7 User interviews

Questions for interview:

Age:

Sex:

What do you miss in your kitchen?

What does the kitchen mean to you?

What do you use the kitchen for?

If you were to buy a new kitchen, what would you think about?

How often do you cook? How/what do you cook?

What would you dream kitchen be like?

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