



FROM DESIGN SERVICES TO STRATEGIC CONSULTING

**Improving Core Competence
of Finnish Design Consultancies**

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Designium, the New Centre of Innovation in Design, is built upon close collaboration between the University of Art and Design Helsinki, the University of Lapland, Helsinki University of Technology (HUT), and the Helsinki School of Economics (HSE). The cooperation also includes other universities, polytechnics, businesses and public organisations.

The purpose of Designium is to promote the development of national design policy and the internationalisation of Finnish design. Designium also promotes the transfer of new knowledge and expertise to the business community and, thereby, the international competitiveness of Finland.

Tekes, the National Technology Agency provides funding and expert services for the development of internationally competitive products and production techniques. The agency annually spends over 390 million euros in grants and loans to technology development projects. Technology programmes create new technological expertise in Finland in cooperation with businesses, research institutions and universities. The purpose of the programmes is to raise the technological competitiveness of Finnish industry in the key industrial sectors of the future. Currently, the agency has about 50 ongoing technology programmes.

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Preface

This study is part of the *Design 2005* technology programme. It takes a look at the business concepts of some leading design agencies, as well as their ability to respond to customer expectations. The study also includes benchmarking comparisons with leading companies in this field.

Customer expectations can be divided into concept design, product design, and strategic visions and services. Currently, the expectations appear to exceed the supply of the design agencies most clearly on the strategic level.

The cooperation between Finnish design agencies improved as a result of the project, and it also generated discussion about the general development needs in design.

The objective of the Government's *Design 2005!* programme is to improve the rate of design utilisation by Finnish companies. According to the *Survey of Industrial Design (2002)* conducted by the University of Art and Design Helsinki, the relatively small and narrow customer base in Finland has led to a situation where most design agencies offer an eclectic range of services meant to satisfy everyone, and there is little specialisation. 40% of the Finnish agencies in the survey were one-man enterprises, while another 40% employed 2-4 people. In 2002, there were only 6 agencies that were bigger. There is only one really large design agency in Finland. Indeed, the greatest obstacles to business development and internationalisation seem to be the small size of the companies and the general structure of the sector.

Increasing the rate of design service utilisation by Finnish industry from the current 17%, estimated in the survey, to the target level of 30–50%, set in the Government Resolution on Design Policy in 2005–2010, would create a considerable increase in the market potential of the design sector in Finland, as well as a need to speed up the qualitative and quantitative development of the sector.

The conditions for internationalisation would merit a closer study. Another fact that clearly emerged in the survey was the need to employ personnel with more varied professional expertise. However, with the current structure of agencies, opportunities for this are rather limited. Hiring new personnel is a great risk, even for larger businesses in this field. Perhaps the situation could be improved by implementing a model based on a traineeship system? Moreover, development of the design sector calls for investments, and another crucial question is, how to attract capital investors in this field?

I wish to extend my warmest thanks to the researchers at Designium at the University of Art and Design Helsinki and in the TAI Institute at the Helsinki University of Technology, as well as to the members of the Steering Group for good work and enjoyable cooperation.

Ilpo Santala
CEO, Design Forum Finland

Recommendations for Action and Summary

This project was conducted as part of the *Design 2005* technology programme of Tekes, the National Technology Agency of Finland. Project participants included six leading Finnish agencies specialising in industrial design: ED-design, Linjadesign, Muodos, 5-D, Pentagon and Studio Salovaarat.

The aims of the project were in line with the Government Programme for Design Policy, in which a core objective is to develop design into a major competitive factor for Finnish industry. This calls for efficient utilisation of design as part of the product development, research and innovation processes of the business sector.

Finnish design services must be able to respond to these challenges in the rapidly developing global markets. A key consideration for them is competition with international design agencies, which in turn calls for purposeful development of their core competencies and business skills. This project focused on the development of the core competencies of design agencies.

The project included a study of the cooperation between the participating design agencies and their clients, as well as the needs for developing it. An analysis was also conducted of a selection of leading international design agencies that serve the industry.

The results were not surprising. Finnish industry utilises design services mostly in product planning and development, that is, on the operative level. In general project management, on the so-called tactical level, as well as in strategic decision making, design and design services are generally still utilised fairly little in Finnish industry. However, industrial corporations, in particular, that have utilised design in their operations previously have developed a need to use design strategically as well, in innovation, concept development and brand management, for example.

Internationally, a broad spectrum of services has developed around design, ranging from design management and strategic design to personnel and change management consultation services. All the surveyed foreign service enterprises employ experts from several areas of competence: management, technology, psychology etc., in addition to design. Characteristically, these activities are implemented following the principles of business economics and are akin to any other business consultancy services.

The study produced international and national data on development trends in design services and on the future needs of industry in the field of design. The key question for Finnish design agencies is, whether they wish to develop their operations from a business perspective, by commodifying their services and offering strategic consultation services to their customers, or to continue in their traditional role.

Developing design services from a business perspective requires that the services be commodified, which in turn can only be done if the agency is seen as a community, not a collection of individuals. For example, Finnish design agencies do not systematically analyse commissions and projects in groups, which is nevertheless the only way to secure learning and development for the entire community. Key personnel in the agencies do not sufficiently share their expertise within their own agency. What is undeniably positive is all the new business activity that has developed around design all over the world – but not yet in Finland.

Helsinki, 26 April 2004

*Eija Nieminen
Docent, D.Sc.(Tech)
Director in charge of the project*

Toimenpidesuosituks^{et} ja yhteenveto

Tämä projekti on toteutettu osana Tekesin Muoto 2005-teknologiaohjelmaa. Projektiin osallistui kuusi johtavaa suomalaista teolliseen muotoiluun erikoistunutta toimistoa: ED-design, Linjadesign, Muodos, 5-D, Pentagon ja Studio Salovaarat.

Projektin tavoitteet sisältyvät Valtioneuvoston Muotoilupoliittiseen ohjelmaan, jossa on keskeistä muotoilun nostaminen teollisuutemme merkittäväksi kilpailutekijäksi. Tämä edellyttää muotoilun tehokasta hyödyntämistä osana yritysten tuotekehitystä, tutkimusta ja innovaatioprosessia.

Muotoilupalveluiden on vastattava näihin haasteisiin nopeasti kehittyvillä globaaleilla markkinoilla. Muotoilupalveluiden kannalta on myös keskeistä pärjätä kilpailussa kansainvälisten muotoilutoimistojen kanssa, joka puolestaan edellyttää ydinosaamisen ja liiketoimintaosaamisen tietoista kehittämistä. Tässä projektissa on keskitytty muotoilutoimistojen ydinosaamisen kehittämiseen.

Projektissa tutkittiin mukana olevien muotoilupalveluyritysten ja heidän asiakasyritystensä yhteistyötä ja tarpeita sen kehittämiseen sekä analysoitiin erikseen valittuja johtavia, kansainvälisiä, teollisuutta palvelevia muotoilutoimistoja.

Tulokset eivät olleet yllättäviä. Suomalainen teollisuus hyödyntää muotoilupalveluja suurimmaksi osaksi tuotesuunnitteluun ja tuotekehitykseen liittyen, ns. operatiivisella tasolla. Kokonaisvaltaisen projektinhallinnan osalta, ns. taktisella tasolla, ja yritysten strategiseen päätöksentekoon liittyen hyödynnetään muotoilua ja muotoilupalveluja yleisesti ottaen teollisuudessamme vielä varsin vähäisessä määrin. Varsinkin muotoilua jo aiemminkin hyödyntäneissä teollisuusyrityksissä on kuitenkin syntynyt tarvetta hyödyntää muotoilua strategisesti, mm. innovointiin, konseptointiin ja brandinhallintaan liittyen.

Kansainvälisesti muotoilun varaan on kehittynyt varsin monipuolista palvelutoimintaa, kuten yritysten muotoilujohtamisen, strategisen muotoilun sekä henkilöstön ja ns. muutosjohtamisen konsultointia. Kaikissa ulkomaisissa palveluyritys-esimerkeissä on toiminnassa mukana asiantuntijoita useammilta osaamisalueilta: liikkeenjohdon, teknologian, psykologian yms. aloilta, muotoilun lisäksi. Leimallista on myös em. toiminnan liiketaloudellinen luonne, joka on läheistä sukua mille tahansa liiketoimintakonsultoinnille.

Tämä tutkimuksemme tuotti siis kansainvälistä ja kansallista tietoa muotoilun palvelutoiminnan kehityssuunnista ja teollisuuden tulevista muotoiluosaamisen tarpeista. Suomalaisten muotoilutoimistojen kannalta on keskeistä se, haluavatko ne kehittää toimintaansa liiketoiminnan ehdoin, ts. tuotteistamalla palveluita ja tarjoamalla asiakkaille strategista konsultointia, vai jatkaa perinteisessä ammatinharjoittamisen roolissa.

Liiketoiminnallinen kehittäminen edellyttää palvelujen tuotteistamista, joka puolestaan onnistuu vain, jos lähtökohtana on yhteisö - ei yksilö - toimistossa. Muotoilutoimistoissa ei esimerkiksi systemaattisesti ryhmissä analysoida toimeksiantoja ja projekteja, joka on ainoa tie koko yhteisön oppimiseen ja kehittymiseen. Toimistojen keskushenkilöt eivät riittävässä määrin jaa osaamistaan oman toimiston sisällä. Positiivista on ehdottomasti kaikki se muotoilun ympärille kehittynyt uusi liiketoiminta, jota maailmalta löytyy - ei kuitenkaan vielä Suomesta.

Helsingissä 26.4.2004

Eija Nieminen
Dosentti, TKT
projektin vastuullinen johtaja

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1. Background

This project and the accompanying study have their background in the main aims determined in the *Muoto 2005* design technology programme, financed by Tekes, the National Technology Agency. According to the preliminary survey, conducted by Designium, the main aim of the Muoto 2005 programme is [...] *to create new expertise within Finnish industry and thereby achieve significant increases in its competitiveness. The objectives of the programme include the enhancement of the competitiveness of Finnish industry through the application of design services in product development; comprehensive, long-term utilisation of design services from initial research to concepts for the utilisation of finished products; as well as global business operations, markets and user-friendliness.*[...]¹. This project is part of the Muoto 2005 programme.

To enhance the further development of Finnish design consultancies it is crucial that design be utilised in all stages of product and services development. Today, the strong role of a user-focused approach in product development processes means industrial design consultancies could have a more active role in the *front end* (i.e. the conceptual activities before practical design activities) of any product development process. By offering explicit service packages, improving and sharpening the service offerings, the major design consultancies could gain a stronger foothold in new business areas. However, the sole improvement in services is not enough; understanding of the consultancies' abilities in more than design services within Finnish industry should be improved as well.

The focal development areas in the Finnish design consultancies consist of several entireties, which should be further developed and researched. Research challenges include the strategic position of design in industry, development of new service concepts and the development of new types of business concepts in design services.

Previous studies

The *Survey of Industrial Design*² conducted in 165 Finnish companies from various industrial branches and in 30 Finnish design firms during 2002, showed that there are various opportunities but also challenges for Finnish industry and design firms. The survey clearly illustrated that the earning logic of design firms must be developed. Design firms often work in areas that should be considered belonging to the strategic level use of design, but that the payment is only received from operative level work (i.e. product design and the like). When resources are considered, the results suggested that the design firms themselves do not have multidisciplinary resources, and their networking consists of subcontracting. Hence, it was obvious the necessary support in developing earning (business) logics or plain credibility was not on the level of other consultancies, such as advertising or brand consultancies. The survey highlighted the fact that there are companies where the use of any design is scant or nonexistent. The use of design

¹ Nieminen, Eija and Juha Järvinen, et. al. Preliminary survey for National Technology Agency of Finland (Tekes) in the Design Technology Programme 'Muoto 2005', conducted by Designium. Muotoilun teknologiaohjelman esiselvitys. Helsinki 2002. Tekes. p. 3.

² Piira and Järvinen, Survey of Industrial Design in design service companies and customer companies 2002. Teollisen muotoilun toimialakartoitus. Helsinki 2002. Designium/Tekes 2002, p. 3.

should be increased in those companies on the operative level, whereas in more advanced companies the use of design on the strategic level should be improved. Also long-term systematic utilisation of design in product development should be increased. Moreover, the survey showed that the cooperation between design firms and their industrial clients should be closer and the compatibility of processes better.³

Research institutions

The research has been carried out by two teams.

- Designium, the New Centre of Innovation in Design, at the University of Art and Design in Helsinki
- HUT TAI Research Centre, an independent research unit at Helsinki University of Technology concentrates on developing new solutions aimed in improving the competitiveness, profitability and productivity of industry.

In light of previous research and the high expectations placed on this study a cross-scientific approach was selected. The research has therefore been conducted by the two teams in order to create a multiplicity of views and disciplines to research design consulting that has a supplier, purchased substance, and a customer.

Both teams were working on the subject from their own starting points. Designium, besides being responsible for the coordination of the project, concentrated on the development of the strategic utilisation of design. The HUT TAI Research Centre was responsible for the development of the new business models for the Finnish design consultancies in this project.

³ Piira and Järvinen, Survey of Industrial Design in design service companies and customer companies, Teollisen muotoilun toimialakartoitus. Helsinki 2002. Designium/Tekes 2002. p. 3.

2. Objectives of the Study

The main objective of this study was to improve core competences of Finnish design consultancies by

- Presenting and developing new service models for design consultation
- Defining the level of design utilization in different industries through categorisation (to operative, tactic and strategic levels).

This study approaches the problem of improving the design consultation from three different viewpoints

- International design consultation benchmarks to determine new service models
- Finnish design consultancies to determine profiles for the design consultation business
- Customer companies' point of view to define the level of design utilisation in different industries.

The aim was to develop new, versatile service concepts for the consultant partners, design consultancies focused on industrial design in Finland. The study aimed at improving their business and international market-shares. Furthermore, the project plan called for the aggregation of views, opinions and experiences from industry concerning the strategic value of design in increasing their current competitiveness.

The goal was to learn about and enhance the integrated utilisation of design in different levels of company decision-making to support the competitiveness of Finnish industry.

3. Definitions

In this report design refers especially to industrial design. This is because the participating companies (design firms) produce industrial design services and most of their client companies are users of industrial design and in some cases, other design services as well, but not vice versa. In the following section some key definitions and application areas of various design disciplines are described.

Design, especially industrial design has versatile applications in industry, trade and services. As a result, there are various definitions, about the nature and content of design. In fact, the vast variety of design disciplines and comprehensive applications have resulted certain fuzziness in determining the content of design. Generally, design is something a designer does. However, a more elaborated definition is needed for research purposes.

Design as a term⁴. Design covers the process, the trade the final product; design includes thinking and planning in order to give shape to things in a way that they can be manufactured, used and, finally, destroyed.

Design is moving from the existing to the preferred.

Design as a profession⁵. As a profession design covers industrial design, arts and crafts, design management and interior design as part of the entity, where architecture is normally excluded. Graphic design also partly fits in this entity, especially concerning organisational communications, for example, targeted at businesses in industry, trade and services and at public sector organisations. (Industrial design also includes ceramics, glass, textile and fashion; however, these design disciplines are not included in this study).

Business related design includes: industrial design, communication design and interaction design.

Design as a process⁶. Planning that integrates the physical qualities of a product with aesthetic and ethical considerations, balancing the commercial and immaterial values.

The object of design may be a product, a service, communications, the living environment, and a corporate or organisational identity.

⁴ Summary of design definition in Scandinavian countries in 'Establishing the basis for the elaboration of the Estonian design policy measures'.

⁵ *ibid.*

⁶ *ibid.*

Design works within a humanistic tradition that is between product and man; and to an increasing degree with digital and human interaction.

Design rarely works on its own, but as a part of multidisciplinary interaction bringing together technology, marketing, sales (disciplines) and as well as visionary thinking and practical solutions (hierarchy).

Focusing on producing better products or services has resulted in quality levels generally going up, noticeable differences becoming smaller, and the influence of intangibles on people's overall perception of companies and products growing⁷.

Design consultation. Victor Seidel from Stanford University has defined client-consultant interaction levels, in his research *'Moving from Design to Strategy: The 4 Roles of Design-Led Strategy Consulting'*⁸:

- Design communication from the client to the consultant, the design brief and related meetings and documents
- Adding client's strategic goals to the discussion without two-way communication
- Two-way discussion about the client's strategic objectives.

Strategic partnership. Comprehensive design services necessitate cooperation with other design disciplines or subcontractors. Strategic partnership as a model means that the industrial corporation is connected to other subcontractors through a strategic partner.

Strategic design use is engaged in corporate strategic decisions, such as which product portfolios to expand, in, which technologies to invest and which new markets to pursue.

Strategic design knowledge supports the corporation's strategic level decision-making related to e.g. design-driven innovation, making visionary concept design⁹, and to brand signature (visual identity, look & feel, harmonisation, etc.)¹⁰ and corporate identity.

⁷ Fennemiek Gommer Mdm, Partner, Scan Management Consultants

⁸ Victor Seidel, Department of Management Science and Engineering, Stanford University. *Moving from Design to Strategy: The 4 Roles of Design-Led Strategy Consulting*. 2000. Source: *Design Management Journal* Vol. 11, No. 2

⁹ Keinonen and Jääskö ed., *Tuotekonseptointi. Teknologiateollisuus* 2003. Pages 41 -46.

¹⁰ Picoud, Phillippe, Design director, Decathlon. *Decathlon design in DMI The 8th European International Design Management Conference, Barcelona Spain 2004 Conference proceedings*.

4. Methods and Project Design

4.1 Data Collection and Analysis

The conclusions are based on the work of the two working teams to observe the research problems from different directions.

The data consists of the series of interviews in participating six design consultancies, their client companies (23), benchmarking data, contemporary design literature, and reference material. For benchmarking purposes, a set of international design companies were chosen according to different service concepts. The interviews were conducted during autumn 2002, winter and early spring 2003. The data was also collected during two workshops organised for the design consultancies during this project.

In order to discover the key development areas in future design consultancies, not only were the design consultancies' opinions considered, but also the client's. This allowed locating the key problem areas more precisely and answering the main questions, i.e. what design practices are used and how to improve them for the future.

4.1.1 Benchmarking

Benchmarking is described in research literature as a study, in which researchers search for the best practises in certain industry, organization or business area. These practises are then utilised to improve practises in companies or policies being benchmarked.¹¹ Successful benchmarking affects the content of action, quality and the way in which competence is developed in the companies¹². Hence, benchmarking addresses production or working processes that should be improved. In benchmarking, similar organisations from the same industry, but with superior processes are identified. Alternatively, in a more challenging benchmarking process, benchmarks from different industries can be selected. Detailed measurements and analysis of the selected processes are carried out. These results are then utilised in the development of the company in question.¹³

In selecting the benchmarked companies two basic methods have been used. Firstly, we have attempted to find companies that represent the four recognised orientation categories of design consultancies, i.e. business, product, craft and brand design.¹⁴ Secondly, these benchmarks have been chosen because of their clear and successful presence in the field of technological and creative industry. Thirdly, these companies have been presenting their processes and service offerings in a clear and understandable way, hence, successfully enhancing their ability to convince new potential clients.

¹¹ Karlöf, Bengt and Svante Östblom: Benchmarking. Tuottavuudella ja laadulla mestariksi. Jyväskylä 1993. Weilin+Göös, p. 7

¹² Järvinen, Juha and Ilpo Koskinen: Industrial Design as a Culturally Reflexive Activity in Manufacturing. Helsinki 2001. Sitra/UIAH. p. 54

¹³ Karlöf, Bengt and Svante Östblom: Benchmarking. Tuottavuudella ja laadulla mestariksi. Jyväskylä 1993. Weilin+Göös, p. 7. 33-34

¹⁴ Based on Dr. Marco Steinberg's (Harvard University) definition in his presentation at UIAH 19.03.2003

4.1.2 Interviews

Interview was chosen as the main research method. This was seen as a practical way in collecting information in order to determine the focal issues of design needs and the possible problem areas in the Finnish industry. Moreover, our choice of method was further limited as the aim of the research was to examine *design practises* in order to find clear and understandable ways of presenting design as a competitiveness- increasing factor.

The amount of literature covering the customer-design consultancy relationship is still quite small. It can be argued that the best knowledge of these realities is still in the heads of those who wrestle with these matters every day. Moreover, the existing literature and articles depicting theories of the customer-consultant relationship tend usually to represent the design consultancies' point of view. In this study, we wanted to form a more coherent view of this relationship by untangling the clients' opinions as well. Our binary approach allowed us to make comparisons. Thus, it was possible to identify many of the weak spots and identify development targets more accurately.

The interviews were conducted in a semi-structured manner, and lasted, typically, from 40-50 minutes to two hours. All interviews were tape-recorded and transcribed later. While a questionnaire guideline was initially written, it was decided that the interviews should be kept as informal (e.g. in the form of discussion) as possible. The advantage of a semi-structured interview is that if the interviewee can express him or herself more freely, the important issues are more likely to be covered. In addition the interviewer could simultaneously check, correct or augment the information just heard. Hence, the questionnaire was used merely as a guideline to ensure all relevant issues were covered.

Interviews in client companies. Between autumn 2002 and spring 2003 the series of interviews were arranged to gather information and to understand consultancies' clientele, the operating environment and the practical circumstances in which design firms work. The interviews were also conducted in order to obtain information about the sectors where design has not yet been playing an active role.

In all, 23 design consultancies' client firms from various areas of industry and services were contacted. All firms were selected from lists which, in turn, were based on discussions with and suggestions of the participating design consultancies. During the project, the design consultancies were asked to write a list of six companies, from which three should be clients or former clients and three such companies with which there has not been, for some reason or other, any cooperation. A more detailed selection was not seen necessary, as during the listing process it became obvious that the selection of clients and possible clients clearly represented the focal industry areas Finnish design consultancies currently serve. The industry sectors of the customer interviews represented:

- Machine-building and metal industry (machinery components and systems, boat building)
- Medical equipment (Intensive-care and other hospital/laboratory equipment)
- Vehicles (tractors)
- Consumer products (household and office utility goods).

Among the companies were experienced users of design services, as well as companies with less or little experience in using design services. The majority of firms (15) were current or former clients of the participating consultancies. Some interviews were arranged with firms who had not yet been clients of the consultancies. To further enrich the data, some additional interviews were carried out in other business areas, e.g. the banking sector. Some interview requests were turned down, mainly due to timing reasons. In all, 23 interviews were conducted. The interviews at customer companies were targeted to the upper level of decision-making and management in order to form as detailed a picture as possible about the use and desired focus areas of design in the companies.

In all, six design consultancies¹⁵ participated in the project. The consultancies were interviewed during winter and spring 2003. Similarly, as in client companies, the interviews were carried out in a semi-structured manner. In addition, further data, information and various other details were collected during the meetings of the project's advisory board, which consisted of the participating consultancies' CEOs.

4.2 Workshops

John Feland III, Stanford University, Center for Design Research

A two-day workshop for the participating design consultancies was included in the project. This was arranged during September 25th-26th 2003, and led by *John Morgan Feland III*, a notable researcher from Harvard University's Center for Design Research. The aim of the workshop was to illustrate new and progressive ways of conducting design processes and enhance the consultancies' abilities in locating new areas of business possibilities. From the research point of view, the workshop provided the research team a wealth of information and new data.

The two-day workshop focused on methods that could assist the participating design consultancies in achieving their full potential in global markets. The workshop was divided into two full-day sessions. During the first day, as an introduction, Feland created an overview of the US product design market and the evolutions thereof. The aim was to attempt to understand the reasons for successes and failures some companies have had and explore the challenges firms face in the global marketplace. Having laid this foundation for the workshop, Feland moved into more detailed exploration of trends in the global marketplace, how these impact the product design industry and how these could help Finnish firms to create new opportunities. The foundational understanding of markets was then used in exploring methods that could be used in increasing the profitability of Finnish Design firms, by moving up the value chain and expanding into new markets, beyond their traditional clientele.

¹⁵ The participating consultancies were 5D-Muotoilutoimisto Oy, Linja Design Oy, Studio Salovaarat Oy, Muodos Oy, Pentagon Design Oy and ED design Oy

The second day began with Feland's presentation of Stanford University's Center for Design Research. He shed light to the groundbreaking practises methods and tools used in design research and in product design in CDR. From this general section Feland then moved in presenting an array of rules to govern the "chaos of innovation", i.e., how brainstorming sessions could be further enhanced by using some simple rules. The focus of the workshop was then moved into finding techniques from other sciences, e.g. social sciences, and using value mapping and analysis of the value webs in order to create a more comprehensive approach in design. The use of value mapping enhances creation of such products that address the needs of the entire value chain, and not only the end user. Finally, Feland presented how the use of Innovation Impact Map helps in finding potential opportunities for innovation. The workshop concluded with a closer examination of examples of Stanford's research projects, aimed in finding new ways of assessing potential design strategies.

Feedback. To further enrich and deepen the data, the project's UIAH research team arranged an interview with John Feland. The aim of the interview was to make conclusions from the workshop. The interview was taped and transcribed. Conclusions are presented with the conclusions of the overall study as independent chapter.

Harri Andersson, SVP and Director, Boston Consulting Group (BCG) Finland

Harri Andersson from BCG's Helsinki office (business consulting) gave his view in a workshop covering the subject of the consulting business.

For the workshop Andersson had studied the existing results of the design consultant and their customer studies.

Design consultant companies were able to discuss important factual questions during the several-hour-long workshop. Andersson discussed his conception of the state of the art in the design consultation business and made suggestions for new approaches in design consultation services and business, relating to his practical experience from business consultation.

Director Eija Nieminen from Designium had a subsequent conversation with director Andersson to draw conclusions from the workshop.

5. Results

This section deals with the key results of the project.

In the results chapter, the common business concepts of design consulting are presented. This view is then elaborated with a presentation of a set of benchmark companies, all of whom have refined their business concepts. These consultancies have often ingeniously integrated new areas of science, traditionally less familiar in the design connection, into product development, thus creating a successful design business. From section 6.3 onwards both the contemporary services and business profiles of Finnish design consultancies are dealt with. We then conclude this chapter (section 6.4) with an overview and analysis of the use of design services of their client companies and refine the various expectations the client companies have, when design services are concerned.

5.1 Benchmarking Case Studies

By Juha Järvinen, Designium, University of Art and Design in Helsinki

This chapter presents four different-types of consultancies, mostly foreign, the majority operating in USA, and Europe and Asia. These cases have been used as benchmarks.

All benchmarks selected for this research project present significantly clearly organised design and other creative processes and services.

5.1.1 Typical Design Consultancy Business and Service Concepts

In the following section some typical characteristics of different types of consultancies offering design services are described. Although the borders between types of consultancies are today becoming increasingly blurred, there are still various factors especially in the service palettes with which the crucial differences can be indicated.

Product design oriented firms. Firms focusing entirely to product design base their business in creating new concrete products for their clients. The product design firms offer services in industrial design, manufacturing design and nowadays, often engineering as well. The processes are usually singular in nature and rather short. Billing is on a lump sum or on an hourly basis. The process begins with a design brief with the client. After a closer study of the design problem in hand the process proceeds with primary sketching, illustrations, hand renderings, 3D modelling and model making, ending up in a presentation of the process results to the client. The role of the designer is to visualize ideas and control the actual design process. Designers rarely take further actions from this stage onwards, as the products are typically intended into production and the brief has already contained the required guidelines.¹⁶ Being rather “traditional” way of operating, this process is a widespread practise and identifiable in most industrial design consultancies.

¹⁶ Järvinen, Juha and Ilpo Koskinen: *Industrial Design as a Culturally Reflexive Activity in Manufacturing*. Helsinki 2001. Sitra/UIAH. pp. 32-36

Craft and styling oriented firms. Firms combining craft and design base their business in producing designs that carry a high standard of workmanship and uniqueness. It can be argued; this type of firm is the archetypical form of a design office, employing individual designers with an artistic approach, all working on their own projects, all creating new products for various clients. Team work is rarely used. As in “ordinary” product design firms, also here invoicing is on a lump sum or on an hourly basis. These firms offer services in concrete design and styling, but rarely concept creation or other services of non-tangible nature. This business concept is common in small studio-type or very small (1-3 designers) consultancies. Typically, the larger ones of these type of consultancies work with clients producing high-end designs, such as lighting, furniture, jewellery, glass, tableware, but also large-scale styling objects such as sports cars produced in small numbers.

Brand design/business consulting oriented firms. Brand design firms base their business in creating completely new brands, products, services or operational models. The processes are usually continuous and create long-term partnerships. The approach to the client’s problem usually begins with comprehensive analysis of the current situation. Characteristically, the clients’ interest groups are extensive (such as end-user clients, shareholders and employees) and hence the front-end research requires a variety of methods and abundant work. After the analysis, measures are taken according to the needs determined in the analysis. The measures consist of e.g. re-positioning and reshaping the company’s brand compared to the rivals, creating new products to support the brand and creating a plan for communicating the resulting reforms. Advanced methods and tools in brainstorming are used to accelerate the actual creative process. In these types of companies projects are executed in teams consisting of various professionals, designers, business experts, human factors specialists, sociologists, psychologists, marketing analysts and the like.

It should be noted that today the more advanced industrial design consultancies have also added similar services to their product lines, thus creating more complete service packets for their clients, starting e.g. from product design and finishing in complex and comprehensive consultation or development plans covering all areas of the client’s business. This arrangement has resulted in some influential, internationally successful companies (such as Fitch) to appear in the contemporary business consultancy/design scene.

5.1.2 New Design Consultation Service Concepts

In addition to the services our case companies currently offer, various novel types of concepts have been suggested.¹⁷ Many of these concepts integrate new areas of knowledge, traditionally less familiar in the design connection, to product development. Examined from the humanities point of view we may notice that such knowledge related to cognitive psychology, educational aspects or other human centred research in general is making its way to design consultancies. Additionally, identity and brand designs created by design teams are becoming household practise in the broader scope in design businesses.

¹⁷ For this, see articles in DMJ Vol 14., Number 3, 2003

5.1.3 Benchmarked Design Consultant Companies

Overview. The benchmark consultancies have been chosen for several reasons. For example, IDEO was selected because of its novel and ground-breaking role in offering a multi-disciplinary creative process in the usually *fuzzy front end*¹⁸ of the design process, and having a unique process approach in the actual design process as well. Frog has been selected because of its ability in coping with a wide diversity of clients in industrial design and because of its strategy of using wide publicity. Moreover, all our benchmarks can be induced as *well-regarded* in their services. Gemser and Van See (2000) describe these as firms that “offer front-end strategic services aimed at, for example, finding new business and product opportunities, providing a road map for the establishment of a corporate identity or bringing new products to the market faster [and are] in general, better paid than ‘strict’ product services”¹⁹

The data of benchmarked consultancies has been collected from literature and internet. Additional data has been collected during discussions with the CEOs of the participating design consultancies. It is noteworthy, that there are still few literary sources covering contemporary design processes in detail²⁰.

Benchmark companies: description of business and design processes. The importance of presenting the consultancy’s service on offer as clearly as possible should be strongly emphasised. Potential clients are located, approached and persuaded to cooperation only if they have been convinced the consultancy’s service is suitable to their needs. Any haziness in this may lead to a situation where the valuable potential client is lost. This is even more crucial when a breakthrough to a new business area or a completely new client is in question. In order to avoid such occasions, many business consultancies (such as LippincottMercer) pursue to present and outline their services in the simplest form possible. Illustrative graphics are vividly used to support this aim.

Benchmark 1. Strategic design and business consulting: IDEO

IDEO’s founder Bill Moggridge started his first design consultancy in 1969 in London. Called Moggridge Associates, the consultancy’s successful activities resulted in the opening of second office in San Francisco in 1979. This office was established to support the rapidly-expanding computer industry in California. Moggridge-designed *GriD* laptop computer (1980) was one of the first successful laptops. Later on, IDEO’s key players have been reinforced with many influential persons, most notably IDEO’s current CEO David Kelley, Associate Professor of Mechanical Engineering, in the University of Stanford. It was Kelley with whom Moggridge joined his forces in 1990. As a result Moggridge’s firm and Kelley’s design consultancy called David Kelley Design were unified and the company was renamed IDEO.²¹ Currently IDEO employs hundreds of people in their Palo Alto, San Francisco, Chicago, Boston, London and Tokyo offices. In order to ensure the client’s specific needs are covered, the multi-disciplinary teams are case-specifically built according to the design brief.

¹⁸ The “fuzzy front end” - the transition from articulating market opportunity to setting goals before extensive resources are committed [...] This preliminary phase tends to be urgent, uncertain, highly interdisciplinary, and nonlinear in nature. (quote from article by Mike Tennity: What clients want in consultants, DMI Journal, Vol. 14 No. 3, The New Profile of Design Management Consulting, Summer 2003)

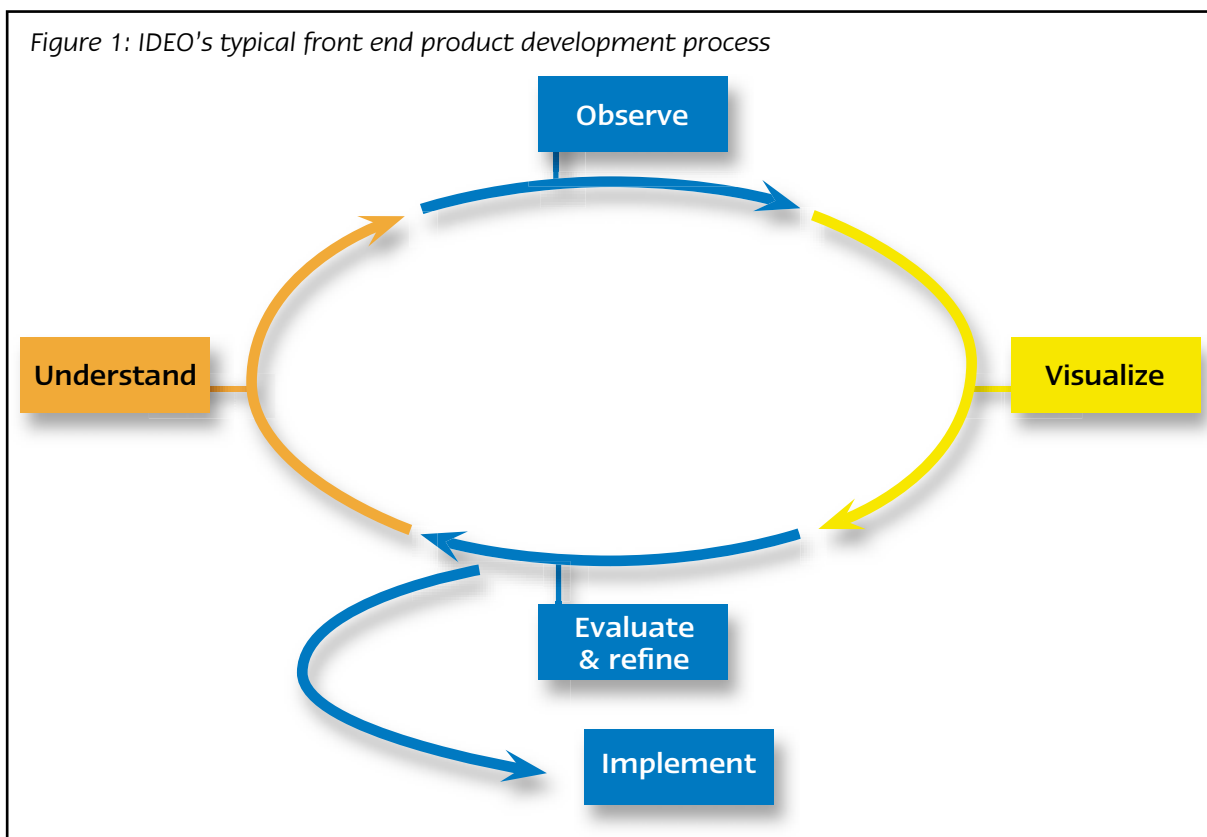
¹⁹ Gemser, Gerda and Erich van Zee: Benchmarking Industrial Design Services. In The Design Journal, Vol. 5, Issue 2, 2000, p. 40

²⁰ For a typical design process, see e.g. Ulrich, Karl T. and Steven D. Eppinger: Product Design and Development. New York 1995. McGraw Hill. p. 15

²¹ Fiell, Charlotte and Peter Fiell: Industrial Design A-Z. Köln 2000. Taschen Verlag., p. 288

In the product development process, IDEO utilizes a design method called Deep Dive²². Deep Dive incorporates hectic brainstorming sessions which emphasise the creativity of the team and result in a mass of potential ideas. The four basic stages of the process are: 1: understanding, 2: observing the end-user, 3: visualising the ideas and 4: implementing the best ones (see figure 2). This process is further divided into separate tasks. In the first phases, in order to understand the end-user teams should go to the place where people work and live, observe them closely using best available technology in order to document and record, use “*body-storming*” (teams play and act the circumstances) and look for the subtle cues to achieve the most complete view and picture of the prevailing situation. In the second phase, which incorporates brainstorming, wild ideas are encouraged. The aim is to produce a mass of ideas, as well as detailed documentation and a wide variety of visuals. Moreover, professionals and experts’ views are closely reviewed and discussed. From this stage it is fairly easy to move to the next stage, which is prototyping, starting from early cardboard and foam-core mock-ups and ending with the more complex, actual working models.

The Deep Dive method IDEO uses is somewhat similar to other well-known brainstorming methods²³ used in other industries, but it is noteworthy to mention that IDEO has implemented it into (industrial) design, thus creating a new type of powerful creativity tool, resulting in a consultancy able to produce fresh and remarkable results. This is clearly seen in the wide variety of customers IDEO has and has had.



²² The information presented here is based on the IDEO's web pages. See www.ideo.com

²³ E.g. Six Hats etc.

Benchmark 2. Product/Industrial design: Frog

Frog was founded in Altensteig, Germany. The company's origins lie in its founder's first firm, Hartmut Esslinger's Esslinger Design. The name Frog²⁴ was introduced in 1982, after Esslinger had started an office in California, where, like IDEO, the major clientele was the rapidly expanding computer industry.²⁵ However, compared to many of its competitors, Frog has had a different strategy in its publicity. During and from the 1970's onwards, Frog has invested heavily in advertising and promotional activities. Advertising Frog's services in design journals and magazines has proved to be successful, and, combined with various large-scale manufacturers of various industrial products as clientele, has resulted the profile of Frog to be renowned for the ability to serve a large diversity of clients. Today Frog has five offices, four of them in USA and one in Germany.

Apart from delivering "ordinary" product, digital, brand and space design, Frog has been active in the innovation and, interestingly, in the field of incubation and licensing, linking important brands with leading manufacturers and retailers.

Frog has divided its innovation process²⁶ to five simple steps that are entitled in an easy-to-understand manner. These are: 1: Business proposition ("Frog understands innovation and business"²⁷), containing physical, digital and emotional innovation activities, 2: The challenge (which emphasises the businesses' need to understand the meaning of innovation in the present competitive environment) 3: the process ("frog designs momentarily stop the world, bring a smile to the lips and increase the pulse rate."), which, not presenting the design process itself, presents a lifecycle costs vs. lifecycle value diagram, thus effectively visualising the importance of design in the early phases of product development processes. 4: ROI, by using some case examples, is highlighting the fact that good design means good business, respectively and 5: Deliverables, consisting of a detailed list of actions and measures the consultancy takes during certain steps of the process, such as investigation & exploration, refinement & development and implementation and documentation. It is obvious, that the method of breaking down the design process to a set of explicit steps greatly enhances the teaming up between a potential client and the consultancy.

Benchmark 3. Craft and styling: Alessi

Alessi is a well-known brand in the household consumer product market. From a historical point of view, Alessi is a family company. This is based on the traditional strong family bonds of Italian culture. Established during the 1950s, Alessi began utilising designers in a very early stage. It is noteworthy that Alessi does not employ in-house designers at all, but instead a large, decentralized network of designers and craftsmen.²⁸ It might be argued that Alessi is a specific combination of a production company and a design consultancy, not a traditional manufacturing organisation. This network has been led by Alberto Alessi's vision of "encouraging the vast body of talent"²⁹.

Today, over two hundred designers have been making designs for this exceptionally design-intensive organisation. While all working under the same household name, there is also a mutual respect between company management and designers, as the most important asset in the

²⁴ The consultancy's name is an abbreviation from the words "Federal Republic of Germany"

²⁵ Fiell and Fiell, p. 230

²⁶ The information presented here is based on the Frog's web pages. See www.frog.de

²⁷ the sentences used in parenthesis are slogans used in Frog's web pages

²⁸ Kotro, Tanja: Culture, Design and Business – Alessi on a Fine Line. In Järvinen and Koskinen, p. 152

²⁹ Kotro, Tanja: Culture, Design and Business – Alessi on a Fine Line. In Järvinen and Koskinen p. 153.

company. While relying on the designers' capabilities in creating memorable products, Alessi has also been progressive in communicating design and designers as the most valuable assets to the brand development.³⁰

Benchmark 4. Brand design: Lippincott Mercer³¹

Lippincott Mercer originates from the company Lippincott, which has been founded in 1943. Later the firm was called Lippincott&Margulies, changing its name to the present Lippincott Mercer. Since the beginning, Lippincott Mercer has been responsible for development or various now famous or memorable graphic or corporate identities and brands, such as Duracell, Campbell's, Del Monte, American Express, DaimlerChrysler or Samsung. The core competence of the company is called "brand science."

According to the company's website, a determined brand strategy is the key element in making successful brands. This is divided in six areas of development: 1: Audience analysis and prioritization, 2: Positioning, 3: Key messages, 4: Image attributes, 5: Communications plan and 6: Brand architecture. The process is presented in especially clear and illustrative manner.

Especially interesting is to note the front end of the process emphasises the importance of end-user understanding, in this case, called *An Audience-Focused Approach*. This means brand preference improvement is created through the understanding and evaluating of the various constituencies, i.e. end-user groups, such as employees, shareholders, creditors, and customers, combined with the assessment of communication.

5.1.4 Summary

In this chapter some business models for consultancies have been presented. It is noteworthy, that in all contemporary cases, the hub of operation is the **striving towards a thorough understanding of the client, the client's client (end-user) and towards creating a novel solution to the client's problem**. However, our case companies not only deliver design, but also design-driven innovation. In these, as Verganti (2003) aptly describes, "the novelty of a message and of a design language prevails over the novelty of functionality and technology"³². Moreover, **the consultancies tend to present their processes explicably to the client to assist the customership**.

It can be argued that the position of traditional product design service as such is diminishing in the overall design service scene. **New types of service concepts** are proposed at an increasing pace. As Gemser and Van Zee (2000) suggest, there is an increasing tendency towards convergence over the former traditional boundaries of different design services³³. This poses new strategic challenges to more traditional types of design consultancies and the services these offer.

³⁰ Kotro, Tanja: Culture, Design and Business –Alessi on a Fine Line. In Järvinen and Koskinen pp. 158-159

³¹ The information presented here is based on the LippincottMercer web pages. See www.lippincottmercer.com

³² Verganti, Roberto: Design as Brokering Languages: Innovation Strategies in Italian firms. In DMJ, Volume 14, Number 3, 2003, p. 36

³³ Gemser, Gerda and Erich van Zee: Benchmarking Industrial Design Services. In The Design Journal, Vol. 5, Issue2, 2000, p. 40

5.2 Finnish Design Consultancies and Their Services

By Anssi Tuulenmäki, Helsinki University of Technology

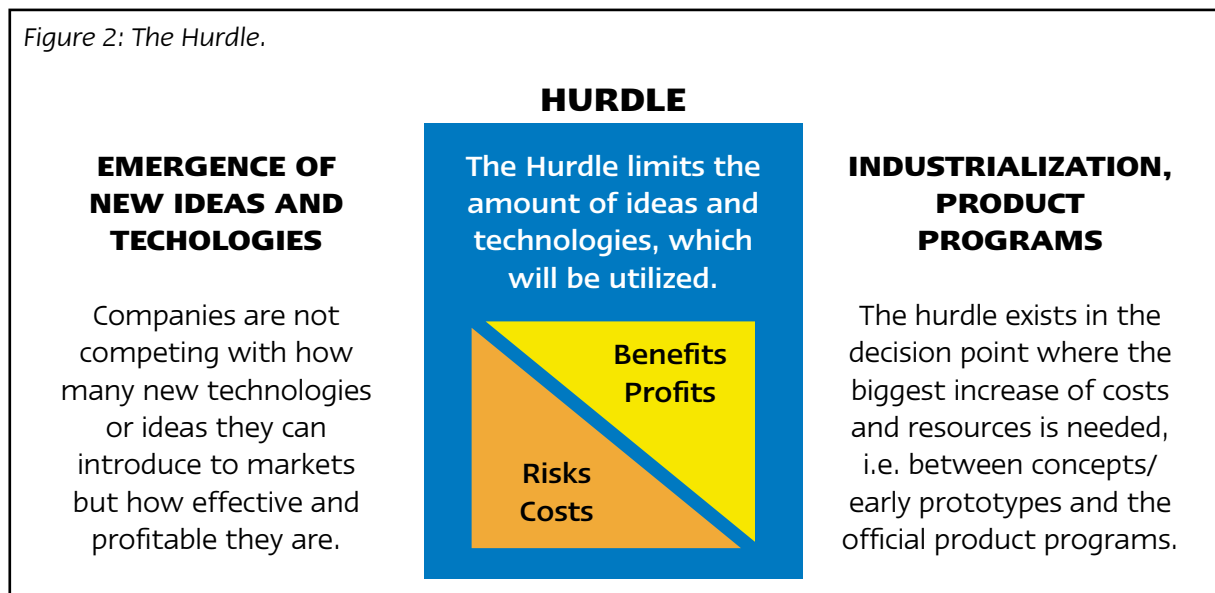
The following analysis focuses on the relationship between design consultancies and their clients. Based on interviews of senior managers of seven design agencies and 23 of their clients conclusions are drawn on how agency-client cooperation starts, under which circumstances relationships develop, and, especially from the design agencies' point of view, what kind of knowledge and skills are needed in successful relationships

The following discussion sketches a generic process model for design agencies, which as external consultants in projects closely related to new product development. Traditional, generic product development process models, like Stage-Gate (Cooper, Edgett, and Kleinschmidt 2002) or the one presented by Ulrich & Eppinger (2000) do not emphasise enough the differences between working in idea development and idea execution. At best, there might be distinctive Go/No-Go decision points in the process but all the gates are equally important. From the agency-client relationship point of view, the decision point from which a concept is going to be developed further as a product or not is completely different from the other decision points. This will be discussed in the next section.

5.2.1. The Hurdle

To understand the agency-client relationship we must better understand the kinds of interests that lie within the client organisations. The key is to recognise that there might be several, often contradictory interests even within the same client organisation. To clarify this idea a concept called Hurdle is introduced (Fig. 2).

Figure 2: The Hurdle.



Companies are not competing on the amount of new ideas, technologies or products per se but on how profitable they are. That is, how effectively they are able to introduce new products and ideas. At some point during idea/ product development managers have to make a decision whether they are going to develop an idea further to a concrete product or not. After the go-decision the amount of people and resources committed to the project increases dramatically. The initiative is turned into an official product program. This biggest decision point is called the Hurdle in this section.

It is important to note that the location of the Hurdle varies greatly. In the software business, for example, even the early development of new software is very expensive due to personnel costs, whereas making a large amount of copies (i.e. production) of the developed software is an irrelevant cost. On the contrary, in a traditional hardware business the development phase is a relatively cheap place to shop but industrialisation or production (i.e. making a larger amount of copies) involves very serious financial decisions. Thus, it is important to recognise what kind of cost structure the client organisation has and on which side of the Hurdle you are working as an external consultant.

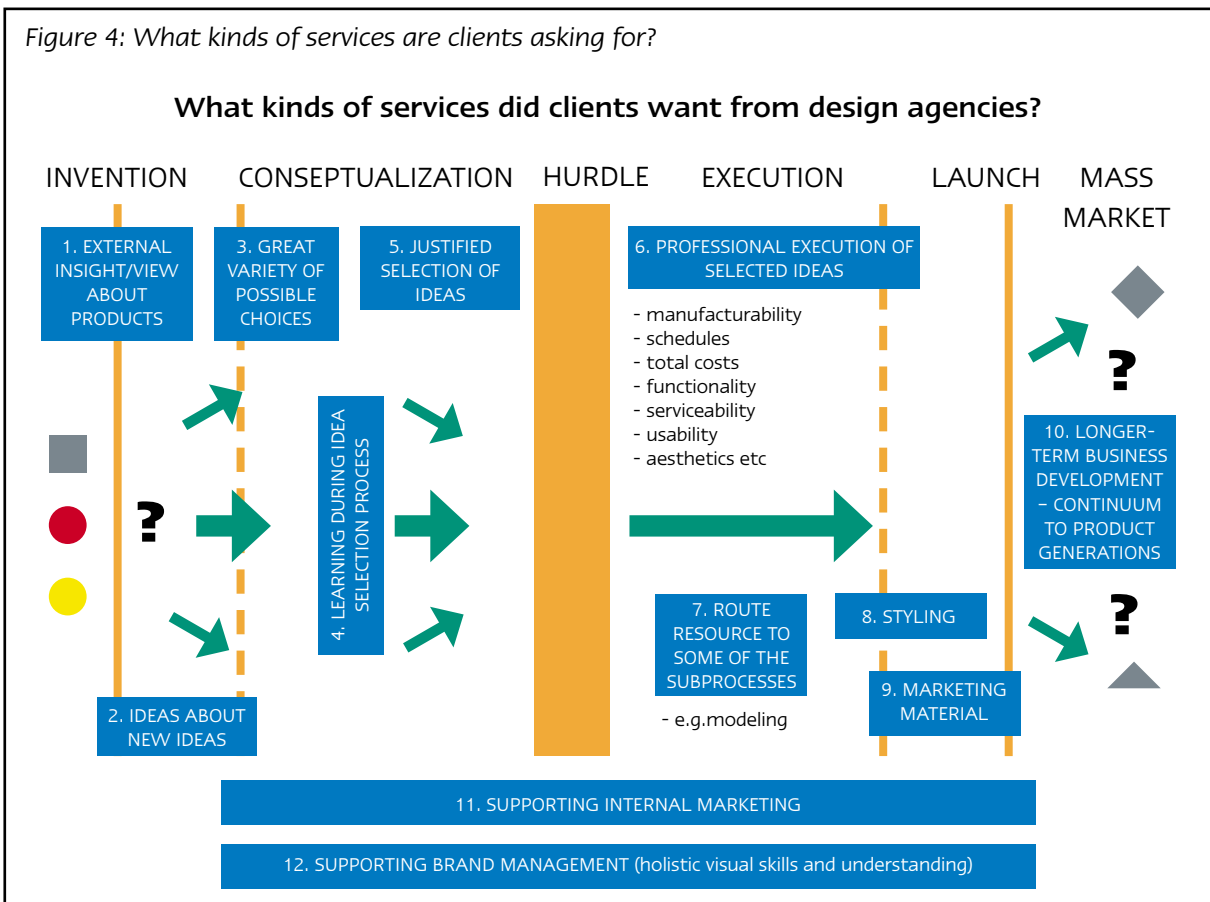
Especially in the bigger companies, people working before the Hurdle and people working after the Hurdle have totally different responsibilities and thus different point of views. To put it simply, the main responsibility of people working before the Hurdle is to create new ideas. Thus, before the Hurdle, new ideas are always appreciated; they are perceived as opportunities. However, after the Hurdle a new idea can be seen as a threat. For a project manager who is pushing a new product ahead with a fixed launch date and serious financial consequences, every new suggestion is easily seen as a threat, extra-work, which only increases the uncertainties and risks. To sum up, an external consultant such as a design agency, has to recognize in which side of the Hurdle they are operating, to appreciate the client organization's different mental views, obligations and expectations (Fig. 3).



5.2.2 Client Preferences for Design Services

Now we can take a look at what kind of services clients actually have wanted from the design consultancies. We asked 27 managers from 23 client organisations to describe the kinds of services and help they have bought, they have wanted or they would like to get from design agencies. Figure 3 summarises these discussions. The issues mentioned are not meant to be

an exclusive list. It is also important to note that I am not claiming that any individual client would like to buy all of these services, nor that all design agencies are offering all these services as identifiable products. Usually, clients are getting some of these services as a by-product of something else, e.g. a conceptualisation package.



As seen in the Figure 4, the services are divided in 12 issues and linked to a generic product development process, the Hurdle being the watershed in the middle. In the following, a short explanation of each of the issues is presented.

Idea creation and planning:

1. External insight/ view about products. Some of the clients seem to appreciate that an outsider with broad design expertise analyses the products in terms of design and product language. An outsider, without the burden of being involved with company routines or previous development efforts, might have a clearer view of the weaknesses of the company products compared to competitors'. Moreover, suggestions for improvements from outside might be more easily accepted than those from e.g. the marketing department. As there may be millions of reasons for product decisions, marketing has their reasons, manufacturing has theirs' etc., the outsider eases the development discussion.

2. Ideas about new ideas. Of course, outsiders can help when a client company is looking for completely new ideas. However, quite often, companies will get this service cheaper from various student projects.

3. Offering a variety of possible choices. Clients appreciate that they have a great variety of possible options from which to choose. Variety might help to detect new directions for development.

4. Learning during the idea selection process. When people in a client organisation give opinions on the idea variants they are actually learning at the same time. When they explain to a consultant why any particular idea is good or why it is bad they are actually verbalising the essence of their products and markets. While being highly important to recognise, such knowledge is often tacit in nature and seldom expressed in concrete terms.

5. Justified selection of ideas to be developed further. One of the main concerns in companies is to know the most suitable ideas to which to commit. All forms of criteria or services that help clients to make decisions are highly appreciated. This is closely related to how the designer as an external consultant works – an experienced consultant can always explain the reasoning behind the choices.

Idea execution and product development

6. Professional execution of selected ideas. The professional execution of selected ideas encompasses being an aesthetic authority in a development team, taking care that the final product is functional, easy to use, easy to repair, easy and cost-effective to manufacture, it is desirable, fits with other products and so on. The difficulty is to have a deep enough knowledge about each of those sub-areas, and, at the same time, maintain the overall view of costs and deadlines. As mentioned earlier during the Hurdle discussion, it is very important to recognise whether the client expects you to be in an execution mode or an idea generation mode. The former means that you are working after the Hurdle and all the largest decisions have already been made. Trying to change an already selected product specification or suggesting alternative product specifications after the Hurdle often leads to dissatisfaction, missed deadlines, increased costs etc.

7. Routine resource to some sub-process. Every now and then a client company might want to ease the workload of its employees. Often the rationale is the urgency to focus on the highest value-adding work and to externalise the routine work for trusted external parties. Acting successfully as an external routine resource involves timely and high quality execution. It must be a risk-free option for a client. It should especially not increase the client organisation workload. The worst scenario is that the client, after continuous, time-consuming information sharing, has to redo some work ordered from the external agency.

8. Styling. Surprisingly often design agencies are still used to finalise the curves and lines of an already developed product. "This is the box our engineers have developed, could you improve the look and feel, please?" Even though it might not be easy to improve something when one is not allowed to change the fundamental features, a successful styling contract might lead to a more profitable account down the road.

9. Marketing material. Design consultancies as visual professionals are sometimes sought to produce marketing material for exhibitions, promotions, brochures etc.

Strategic visions and services

10. Longer-term business development: creation of a continuum to product generations. What makes Volvo look like a Volvo, or a Nokia phone look like a Nokia phone? How much can they be changed without losing the soul and essence? A detectable, meaningful identity is the result of long-term vision and work. While working for a wide array of businesses, products and clients design agencies have the superior ability to understand and create product languages and thus meanings. Indeed, as Roberto Verganti argued in his article (2003) design agencies act

as gatekeepers to product languages and meaning creation. From the clients' perspective, it is very difficult to change a design agency that has developed the identity to their products and a continuum to their product generations. It takes years to develop a new, equally deep relationship.

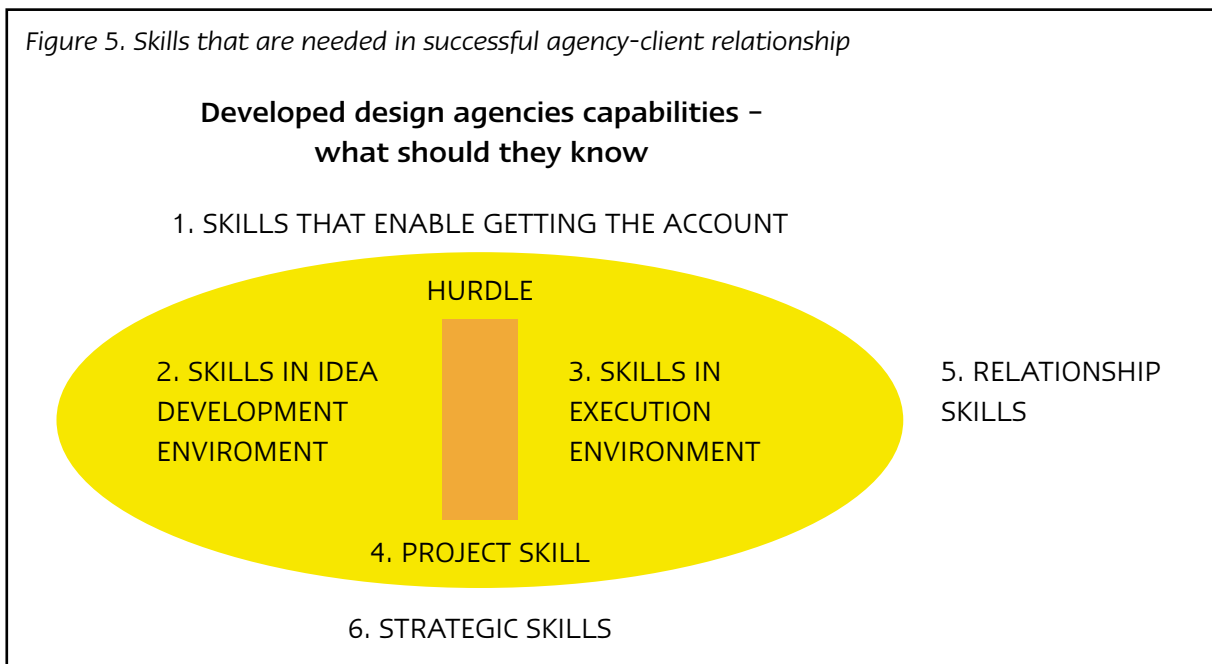
11. Supporting internal marketing. The larger the client the more important the internal marketing. If we think how many new ideas, perspectives and interests are competing for resources and awareness in large companies like Nokia, one realises that it is not always the best ideas that are introduced to the marketplace but the ideas that are marketed most effectively. Before a new idea is finally launched it requires effective and timely co-operation from hundreds of different stakeholders. A great variety of players must know what the new idea is about, how it affects their work and status in the near future, what they should do to help the idea to go further and when, how much effort they are expected to put into it, to whom they should contact before, after and during their part of the development work. If the new idea is advertised internally people are already expecting it and they are able to prepare for it.

12. Supporting brand management. In addition to clients' product development, the brand development might seek and benefit from the visual expertise offered by designers.

5.2.1 Required Competencies for a Successful Design Agency

The above discussion described what kind of help clients were seeking from design agencies. That leads directly to the next question: what makes a successful design agency, what kind of skills and capabilities are needed in successful agency-client relationships?

Figure 5. Skills that are needed in successful agency-client relationship



As seen in the Figure 5 above, we can divide the needed skills into six areas. Before describing the skills in greater detail, it is worth mentioning that not all the skills are necessarily needed in getting and managing profitable accounts. For example, a design consultancy might succeed well while focusing solely on operating in the idea development and/or idea execution environment. However, sound strategic argumentation might ease the way into the core of clients' decision-making, thus deepening the relationship. That, in turn, might lead to work opportunities with higher value-adding potential and increased margins. Similarly, skills that enable getting

new accounts might not be vital if an agency is usually fully occupied with pre-existing customers. In the following, each of the skills is briefly described.

1. Skills that enable getting the account. No matter who the customer is, they want to know as soon as possible how an agency could help them. It means that an agency should not only go through their list of references but focus on what that would mean for this particular client. Describing how co-operation benefits the client is of paramount importance immediately during the first meeting. Also important is to reduce perceived risks, especially when negotiating the actual deal. Let us take a closer look at these two issues.

Perceived risks could be reduced by offering a clear, transparent process model and by productising the services into identifiable packages. It is mentally easier to buy something small first and decide after whether one wants to buy more, than instantly buying a large, somewhat blurred entity. References might play a role here as well; telling how an agency has solved similar problems previously is a good way to utilise references.

Worth mentioning is that small, entrepreneur-led firms might feel uncomfortable when asked to pay by the hour. Entrepreneurs would appreciate if an agency is also willing to bear part of the project risk. Then, setting a fixed price for a project or setting some type of royalty agreement might work better.

What kinds of benefits have been demonstrated to the clients then?

a) An agency can improve clients' development process by helping the client to understand what kinds of decisions and choices have to be made in order to design and develop a product, b) supporting internal marketing, c) improving new product success rate by offering more justified and/or customer oriented processes, d) time -and cost savings e.g. by developing easier-to-manufacture products, e) better looking products, which means more sales directly and indirectly (more credible high end product).

When deciding the details of the co-operation agreement it is vital to differentiate between at least the following four different situations. First, the client really know what they want and you agree. Then, you just execute the vision (before or after the Hurdle). Second, it is clear that the client do not know exactly what they want, which means that you help the client to make choices which lead to a vision (before the Hurdle) and finally to a concrete end result. Third, you realize that the client only think they know what they need but you are not sure whether that is the right solution. Then an agency must target at a very transparent working mode and analytic dialog. "This is what you said you want us to do but it means this and this... is it still what you want...?" An agency is typically operating after the Hurdle but bigger changes would require going back to before the Hurdle. Fourth, you as a consultant do not understand the client well enough to judge whether they know what they want. Then you should be honest and try to clarify the situation by asking more questions and doing thorough homework.

There are a few other issues that an external consultant should recognise during the first contacts. For example, is the client seeking new ideas or just execution of their own ideas? Is the idea you are asked to work with already decided as a product to be developed? Does the client want a) to produce content with you (you are mostly in the competence role) or b) that you as an consultant would produce content independently (co-operation should decrease the client's employees' workload – the agency is mostly in resource role) c) that the agency packages content already created by the client.

2. Skills in idea development environment. Creativity, i.e. the ability to create new ideas, is important but in transaction with clients innovativeness is a capability even more sought. Innovativeness can be defined as the ability to create commercially viable ideas.

In addition to innovativeness, visualisation skills are highly value-adding in environments where something new is under development. Designers can visualise abstract and vague ideas as well as decide details of more advanced ones. Such visualisations are very powerful information sharing tools. That very power contains the potential downside: early visualisations are such strong messages that they might lock developers' thoughts and prevent other ideas from emerging. Thus, visualisations can also be done too early.

The skilful designer/consultant is able to give reasons for his or her choices and also helps others to clarify their thoughts. Quite often, and especially from the design agency's point of view, the process of how the development team reaches the end result is more important than any particular end result itself.

Another skill that is needed in the idea development environment is to understand the client's background and idiosyncratic characteristics before ideas proceed to the Hurdle. The most important issues against which the new ideas are evaluated at the Hurdle are the client's cost structure, competences, strategic focus, and brand and market dynamics.

3. Skills in execution environment. In professional execution, specific knowledge is needed about various materials and their manufacturability, usability, serviceability, aesthetics etc. But, at the same time, consultants should have a broad understanding of total costs, timelines and the client company's product language and identity.

4. Project skills. Daily communications are the most visible and thus the most important part of the experience a client has. The client should always know whom to contact and how the work is progressing. Basics like meeting deadlines, deliverables and documents are extremely important but, however, often taken for granted.

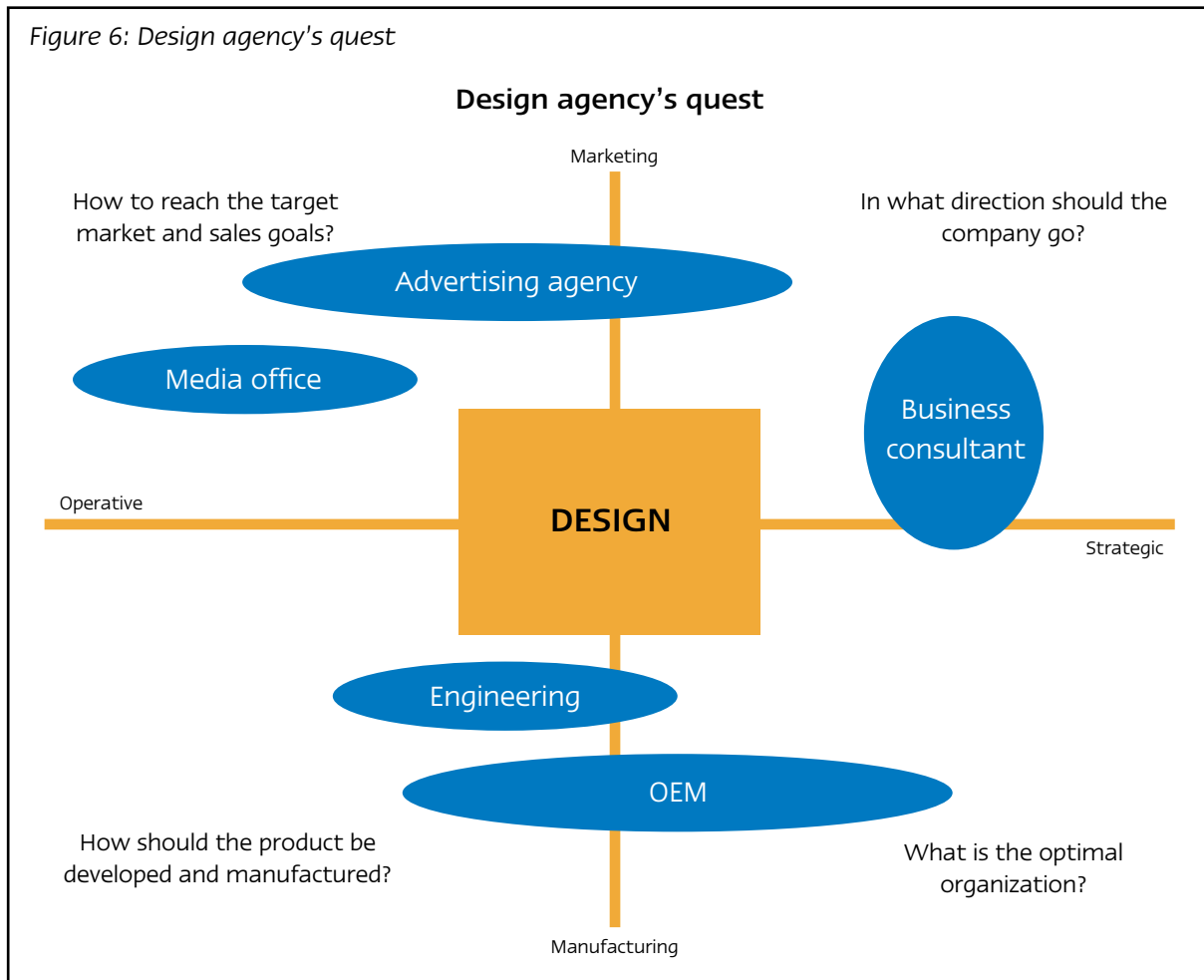
A designer is expected to be an authority in visual decisions but at the same time designers should know how to adjust within the rest of the development team and understand experts from other fields. A designer should also know how to show initiative without being too much of a soloist. An example of the latter could be a designer disappearing for two weeks and then coming to the customer and showing a brilliant, finalised result, which, unfortunately, is not at all what the client has wanted... Usually, clients urge to know the premises and to comment on intermediary phases as well.

5. Relationship skills. These skills refer to how the client is served from one project to another. It is a challenge to gain profound understanding of a client's world but it is even more difficult to do so by maintaining simultaneously an outsider's perspective and a fresh approach. During a long business relationship, a consultant easily starts taking issues for granted which might lead to a lower level of service, which leads to dissatisfaction, which in turn, might eventually kill the relationship.

Being flexible and trustworthy characterizes long-term relationships: "It's no-brainer [for us], I only have to call [to the agency] to get wheels turning and work done..."

6. Strategic skills. Strategic skills refer to knowledge and services, which helps clients to gain competitive advantage over its competitors. Being strategically potent requires profound and broad understanding on business fundamentals and company-market specifics. Basic design education and background might be enough to make decisions that are strategic in nature, but more heterogeneous personnel is needed before design agencies are able to develop strategic service packages and sell them to clients.

However, expansion to strategic services is only one direction where design agencies could move. From our understanding, and as seen in Figure 6, design agencies are in a very good position to grab a larger share of the key value creation processes.



5.2.2 Summary

In this study, the services that clients wanted from design agencies could be divided into three areas: idea creation and planning, idea execution/product development, and strategic visions and services. These three areas differ at least in terms of customer expectations, stake levels, time pressures, hierarchy levels, opponent players, and requested skills. When developing service offerings and procedures, design agencies should take into account these differences. From three service areas mentioned above, the strategic services offered by design agencies are the least developed area. The basic designer education and working experience might be enough to make decisions that have strategic implications but might not be enough to conduct development of strategic service packages, not to mention selling them to top management teams.

5.3 Customers' Expectations and Experiences

By Jaana Hytönen, Designium, University of Art and Design Helsinki

This section analyses customer interviews, and how the customers emphasise expectations concerning the design consultation. The customer interviews were categorised into three different sections:

- customer's own business affecting the proportion of their expectations
- volume of expectations concerning the design consultation through business activity and performance
- volume of expectations concerning the core design substance.

Customers described the company-consultant relationship as they know it and what they expect from a good relationship.

The qualifications are listed on three levels according to organisational hierarchy and decision-making:

- strategic level, that is, the determining, direction and trend-setting level of business, e.g. how design is integrated in the corporate business and products
- tactical level concerning process management and coordination, e.g. the design process management and coordination integrated in the customer's R&D processes
- operative implementation, e.g. how the actual design is implemented technically.

The results are presented in different ways analysing the extent to which the customers emphasised the importance of design consultation business.

- Listing the most important customer expectations
- Analysing the results through the interviewee's organisational status / responsibility and through knowledge / experience in design.
- Analysing the general picture from the industry point of view, dealing with the customers' business, design consultation business and design substance.

5.3.1 Most Important Customer Expectations

Expected qualifications are categorized and listed on the above mentioned three sections and levels. The list is composed according to the interview content. The qualifications are noted only once per each interview (see the table on the next page).

Customer's own business related expectations for design consultant

Strategic level determination and decisions on design

Understanding of business and business environment. Customers expect that the design consultant understands the customer's business and how it affects the design task, because they expect business growth through the design solution. An increasing experience with design develops understanding and expands the customers' expectations for more; from design implementation towards the business-related strategic level.

Table: Customers' Expectations

	Customer's business	Design consultation business	Design substance
Strategic level / determination and decisions on design	<ol style="list-style-type: none"> 1. Understanding of business / business environment 2. External resource / lack of know-how in client organisation / available when needed 3. Conceptualisation capabilities 4. Understanding of price level / quality 	<ol style="list-style-type: none"> 1. References / how design is integrated into client's business / evaluation of past projects (numerical data) 2. Employees / qualities / chemistry / professional, skilled / liaison up-to-date 3. Listening to the customer and responding 4. Location of the consultant office 	<ol style="list-style-type: none"> 1. Strategic design / visual definition of customer's needs 2. Marketable product / usability and user studies / delivery / trend surveys / target group analysis 3. Internal marketing / specification to customer's business / speeding up lead-time
Tactical level / management and cooperation	<ol style="list-style-type: none"> 1. Price / how the service process is fixed 2. Process management 3. Timetables 	<ol style="list-style-type: none"> 1. Matching up working methods 2. Balancing of cooperation / teamwork 3. Design management / process management and coordination of multidisciplinary network / supervision of the operative work 	<ol style="list-style-type: none"> 1. Coordination and management of the design process
Operative level / implementation	<ol style="list-style-type: none"> 1. Compatibility of software 	<ol style="list-style-type: none"> 1. Skilled with different project tools 2. Independence in planning 3. Updated professional skills Design capabilities / skills for technical tools: 	<ol style="list-style-type: none"> 1. Design / creative and innovative 2. Modelling and rapid modelling 3. 3D modelling 4. Sketching 5. Technical drawing 6. Prototyping 7. Rendering

External resource / lack of know-how in client organisation / available when needed. The customer hires design consultants because of what they themselves cannot or do not want to do. Companies concentrate more and more on their core businesses, and buy different services from outside subcontractors. Companies do not want to support internal talent that might become outdated.

Companies either do not have the required internal resources and design know-how or experience, requiring skills are difficult to maintain and cultivate. It is typical that design is not needed on a regular basis but more periodically. The largest customer companies can afford and fully employ their internal designers.

Customers are interested in new and innovative viewpoints, questioning customers' conventional ways of doing things, to a reasonable extent. An oft used expression is 'freshness'.

Customers expect that the consultant is available when needed. They expect certainty of resources or an assignment of network resources to keep up the agreed timetable. The customer also might have certain favoured designers to do the actual design work.

The customer expects special capabilities that they can buy – when needed – and expects high-quality performance quickly.

Conception capabilities. The design consultant is expected to show understanding of the customers' business, business environment and operations, to be able create appropriate and optimal concept alternatives.

The design does not alone speak for itself. The customer wants to be certain and be able to evaluate presented design solutions as business opportunities. Expressing understanding is through giving feedback on the elected and alternative designs. It also means comments on the visual appearance concerning the target market, market situation, and market opportunities, as through target groups and users.

Understanding of price level / quality. The price level and quality also have much to do with the customer's business. Consultants cannot only follow their own ambitions in design, but must pay attention to keeping customers satisfied. Customer representatives are often line managers and they choose design more for expected returns and marketing consistency than prize-winning high design. Instead good service represents tight process schedules for the customer.

Tactic level management

Price / how the service process is fixed. The customer wants to know exactly how much design services will cost. If the consultant does not have fixed service packets with fixed prices, they tend to be careful and ask too little for their services, hoping that a good result gives an opportunity for rebudgeting. The customer, however, commits the organisation to the funding beforehand and feels uncomfortable to justify rebudgeting to their superiors.

All expenses are significant for the customer. Over-budgeting is perceived as inefficiency.

Process management. Efficient process management is important because of tight schedules, which are often tied to other parallel subprojects. Customers rely on proven consultants because of competition and time-to-markets pressures.

Operative level implementation

Compatibility of software. Specialised computing equipment might be expected, but the customer still expects compatibility of software. However, equipment purchase is no excuse to overcharge if it is not crucial for the customer. Furthermore the customer does not like to be the payer of the latest software – at least it is not the argument for fixing the price for a service.

Consultation business-related expectations for design consultant

Strategic level determination and decisions on design

References. The customers were interested in references to indicate how the consultant has succeeded in integration of design in other customers' business. Customers were interested in facts like numerical data and evaluation of the market success in earlier projects.

Employees / qualities / professional, skilled / liaison up-to-date. The chemistry between the customer and consultant was an important factor when creating a relationship that is built on trust. Trust is built on understanding, for example, by using understandable language, and yet, the customer sets the pace.

Customers expected professional and skilled designers to fulfil their specific needs. They appreciated adequate design consultancy rather than more adequate design. Customers know who they like and who is easy to work with. They forgive some mistakes for a consultant they like and choose them over a consultant who may be less flawed but also less likable. Customers also may choose a firm on the basis of a professional presentation instead of great design. Referring to one of the customer interviews: *'We had to choose the other design consultancy, because of the quality of their presentation. They had better ideas, but we just couldn't take them because of their incompetent demonstration'*.

Keeping the customer up-to-date of all significant changes was important. The customers felt that it is better to keep in touch too often than too seldom. Keeping the customer informed keeps the consultant on track..

Treating the customer with respect was important. It was interpreted as a professional relationship – not just informal behaviour or having a good time.

Listening to the customer and responding. Listening to the customer with care is important in all cases; however two-way communication is vital for a working partnership.

Location of consultant office is important. The location was important for the customers, because design necessitates a close presence. Customers thought it is important that the design consultant is located near enough despite IT communication.

Tactical level management

Balancing of cooperation / teamwork. The customer expects a good blend into in-house product development teams for example. The physical working place is up to the customer; some do prefer the designer's presence to some extent.

Matching up working methods. The expectations included cooperation and teamwork. The design consultation support was expected to be put into the context and methodologies of the customer.

Constantly improved methods and processes are expected to gain competitive advantage. The customer expects continuous improvement, because the best solutions are rapidly adopted and the achieved competitive advantage is difficult to sustain.

Familiarity and understanding of the core design processes and methods improve the collaboration with the customer organisation. Familiarity is built on customised methods and processes. The design process is expected to be integrated with customers' recognised methods, like quality management, standardisations in computer aided systems, project management and documentations, methods to detect markets, stage/gate process, supportive tools, and best practices in R&D.

Design management / process management and coordination of multidisciplinary network / supervision of the operative work. Expectations towards design management capabilities reflect customers' hopes that the consultant takes the responsibility of the process concerning design. The customers may not have detailed knowledge of how design is implemented.

Some customers hoped for total process management including management of the customer's own responsibilities to choose and coordinate other subcontractors or design service network including e.g. graphics services and different engineering services.

Operative level implementation

Skilled with different project tools. As mentioned earlier continuous improvements are expected. Skills in using effective design tools need to be developed further.

Independence in planning. Customers expected that the design consultant is able to manage the planning process. If the customer and consultant both lack experience, the customer tends to take charge in the process. This causes difficulties in getting things done in the proper order and the learning process (payback time) can take more than a year.

Updated professional skills. Updated professional skills are a way to compete on best practices and working methods.

Design substance related expectations for design consultant

Strategic level determination and decisions on design

Strategic design / visual definition to client's needs. Many of the interviewed customers clearly stated that they expect strategic level involvement from the design consultant; furthermore some gave very detailed examples of what they expect. Only a few small companies did not want designers to get involved in corporate strategy in any way; however, their expectations expressed strategic level emphasis in design.

Marketable product / usability and user studies / delivery / trend surveys / target group analysis. Consultants are hired as outside experts to solve the customer's problems in creating opportunities to increase their business, by designing new products or product modifications.

Internal marketing / specification / speeding up lead-time. Even if the customer had designers in their organisation, they expected internal marketing and argumentation for the design or alternative solutions. The management level designers needed external help for marketing the design ideas to their own strategic level executives and they considered the design project only half done if the explaining and justifying of the design to the rest of the customer organisation was left to them.

External resources were also needed for cultivating large organisations to understand what design is and what it means at the strategic level.

In the worst case the whole process can fail if the solution becomes a matter of taste. The commitment to the new design also goes hand in hand with effective performance in time-to-market processes.

Tactical level management

Management of the design process. The consultant's important contribution to the customer is project management know-how. The sooner the customer sees a demonstration of the process content and alternative service packets, the more comfortable the customer feels. Uncertainty leads easily to a perception of risk. Small and medium size companies, especially owners, do not take that risk lightly. Many customers preferred the consultant to take rather more than less responsibility; however, small size self-employed managers had a very strong opposition to any external control. They wanted to take charge of anything unknown and did not want to spend a lot of money for little certainty.

Design processes could be mysterious to customers, especially to those with no experience of design. Inside a customer company the design experience was also radically different. Understanding was felt to speed up organisational commitment. The manager's reputation as a project manager is affected by uncertainty and unfamiliar process.

The substance of design and how it integrates to customers' business or to products was unfamiliar to the customers. They cope with the risk e.g. by taking over the management of the design process and, unfortunately, making the learning process much longer than necessary.

Operative level implementation

Design capabilities and use of technical tools: design / modelling / rapid modelling / 3D modelling / sketching / technical drawing / prototyping / rendering. The customers expected good design capabilities from the designer who does the actual work. The customers might have their favourite designers to do the job and feel uncomfortable with unfamiliar and new faces. The customers like to choose the ones they trust. Consultants should always pay due attention to the introduction of new faces.

Expectations for the design implementation were presented here in the order of frequency. This may reflect to some extent the most favoured services the customers expect to gain – however, this also shows that what the customers actually know is what they see and get: the results and deliverables.

5.3.2 Organizational Status Influenced Expectations

This section analyses the results through the interviewee's organisational status and responsibilities, through knowledge and experience in design, as the factors were issued in the customer interviews.

The customer interviewees had different roles and experience in design:

- Customers with or without in-house design professional(s) in the organisation,
- Customers whose design process is managed by a design professional or by a non-designer,
- Customers with much experience in design and design consultants and customers with smattering experience.

The analysis revealed different needs and emphasis. The interviewees were influenced by their job description and the organisational status.

In-house design-professional as customer representatives.

The in-house designer's work assignment and level of responsibility varied from one organisation to another. In-house designers work on assignments: contained responsibility for the design supporting the corporate or the brand identity, assumed responsibility for process management and coordination and even operational level project coordination. The individual work assignments and assumed responsibilities affect a great deal the expectations the in-house professionals have of a design consultant, to the content of the services and pricing.

Much predictability can be found through the organisational status. The in-house professional determines and evaluates the needed schedules and service packages quite easily. The main anxiety is if the design consultant has the resources to accomplish the expected timetable and how much the service packet will cost.

Top position in-house designer. The top position in the organisational hierarchy means that the company has realised opportunities design can offer. Their competence is the integration of design into the corporate business, which has to become competent in practice.

Top level in-house professionals acquire new ideas (viewpoints), strategic level understanding and solution alternatives, and technical skills in design implementation from outside design consultancies.

The smaller the packages they buy, the younger and cheaper the designers they can hire. The other end represents the technology intensive customers. They buy larger packets expecting more experienced designers in charge of the design process. The price still plays an important role in the timetable and the quality of designer employees or subcontractors is also important.

Large companies may have an in-house design organisation for process management and managing projects.

The in-house designer has know-how of the detailed design process, the production and product development, and access to users, for example

Middle management in-house designer. Their competence is the design process management integrated into the idea-to-market process.

The external and somewhat objective resources are used for selling and justifying the design, and to commit others in the organisation to the design solution. In-house designers expect 'objective' internal marketing to consider the work concluded and not half-done.

Process, project management and in-house designers at those levels want help in marketing the ideas to the executive level and to commit the rest of the organisation. The strategic level argumentation and justification is targeted to the executives having very little understanding and knowledge of design. In-house designers are usually busy with process and project management, and coordination. In some cases they do the implementation totally or partly themselves.

Non-designer customers

New customers acquired short design projects to gain more experience of the consultant office, its reliability, operation modes and working methods. The more experience the customer had in design, the higher the expectations the customer had for design services. Increasing experience in design enhanced the customers' understanding in seeing the opportunities that design can provide for the company on tactical and strategic levels.

The volumes emphasise a more strategic level expectation that required understanding of the business and business environment and utilising and justifying that knowledge. The companies expected to find a visual determination for their business.

Most of the customers do not know how the design process is managed or technical design implementation is done. They do not know the detailed path in the design process; however they can itemise lists of different deliverables from the design process. The non-professional customer has a gap between business guidelines and design implementation, which is HOW the design is integrated into the corporate business, the process is managed and design is implemented.

5.3.3 Business and Design Influenced Expectations

This section discusses how the customers' business, design consultants' business and design substance influence the customer-consultant relationship and customer's expectations:

- More than 2/5 are influenced by the customers' own business
- Less than 1/5 of the content was influenced by the design consultation business and performance during customer-consultant cooperation
- Around 2/5 of the content dealt with the core design substance.

Customers' own business related expectations emphasise the strategic level and focus on understanding the customers' business. Most of the customers' expectations and needs are tied with customers' business, economics and environment, because design is expected to enhance the customer's business opportunities. Typical for the tactical level is the design-related process influencing expectations. Customers expect collaboration and customising the design process

to those with whom they are familiar. Key to this is understanding core processes and methods used by the customer. At the operative level the comparability of software is important because of process progress, but also for future exploitation.

Expectations that the customer has for the consultation business are tied with the consultants' references, resources and hireable talent. An easy flowing design process is at the top of the list. The level of concentration on the core business and rising use of external subcontractors increase the need for external management. The customers without in-house design professionals listed the coordination and management of subcontractor cooperation as a possible prospect.

Design substance is the core competence of a designer and design consultation business. The strategic level determination of the business actions and its direction are factors against which the customer is making decisions. Strategic level expectations for design are thus easily determined; the customer use required basic data of markets and users for decision-making. This knowledge is the basic information for e.g. the determination of design concepts. Likewise the outcome of the total process, the deliverables, are familiar to the experienced customer. The critical point and the core competence of the consultant is HOW to apply strategic level specifications in a design process; customise and manage the design process, in order to produce competitive design resolutions for the customer's future. The volumes of the results showed that the customer does not necessarily know how the design process is managed and implemented to get the best possible result through the process. This shows WHERE the core professional competence of the design consultation is according to the customer interviews.

The national study on future design education showed that most of the needed design skills in Finnish industry and trade still concentrate on the operative level in the near future. The study estimated an app. 60% need for operative level design skills, 23.5% tactical level and a 16.5% strategic level need in Finnish business life³⁴. The operative level expectations in this study focus on implementing the actual design, and on design capabilities and skills for using various technical tools. Most of the customer needs described the design process results and deliverables, with which customers have experience. According to the interviews we know that customers are pleased with operative level capabilities, and design is implemented in most cases by the design consultants. We can assume that the need for operative level services is not vanishing despite the low emphasis. On the contrary there may be no needs because the customer is more or less pleased.

5.3.4 Customer Characteristics versus Expectations

Customer's line of business. The line of business did not seem to have notable effects on the relationship. However, the industrial sectors need further investigation.

Size of the customer company. The most satisfied customers in this study were the middle-size and large organisations. The purchasing is not perceived as a risk, because they used experienced design consultants and had an on-going long-term relationship.

In SME's where the highest number of potential customers exists, design is experienced as a risk. The first-timers, in general, perceive design as a risk, because they lack knowledge. While gaining more experience the customer recognises the strengths of design.

The situation can become most difficult in a small company, where the owner takes the risk. They take over the management and coordination of the design process, because they can only afford young design consultants. The learning time and time-to-market (payback time) becomes

³⁴ Hytönen, Jaana. National Study on Design Education for the Ministry of Education in Finland. Muotoilun tulevaisuuden tunnistaminen. Ennakointiselvitys muotoilukoulutuksen ennakkoinnista. Designium/ESR/Opetusministeriö. www.uiah.fi/designium

long, when the customer lacks knowledge in design and young design consultants lack credibility to take over the process. The customer learns – through mistakes – the design process very slowly.

A good customer-consultant relationship is based on trust. This is necessary for effective utilisation of the design consultant's services. The key to improvement is to shorten customers' learning time in any possible way. Small companies tend to choose the price at the cost of their competitiveness.

Customer's product / technical and process complexity influencing the customer-consultant relationship.

Complexity causes a demand for experienced design consultation or management and co-ordination. This demand comes up when the customer companies concentrate more and more on their core businesses, and buy various services from outside subcontractors. Companies do not want to support internal talent that might become outdated. This development carries the possibility for a new kind of business in managing the line of subcontractors.

5.3.5 Risk Reduction Through Experience, Learning and Customising

All interviewed customers were more or less experienced in design and design consultation. Completely ignorant possible customers are somewhat different and need further study; however, the interviewees also described their early experiences.

Customers' risk reduction through learning and understanding in all possible ways is beneficial for the customer and furthermore for the design consultants' business. This study showed that the more customers understand the more they discover strengths and sustainable applications and demand for design.

The customer's experienced risk is an inhibiting factor in early customer-consultant relationships. The design consultant can reduce the situation by customising and engaging the design process to the customer's typically used methods and systems. Justifying the design through business, market opportunity or solutions fitting to the market brief is one way to evaluate success in advantage. Understanding creates trust – a lack of knowledge results in uncertainty. SME's especially avoid uncertainty and risk, and furthermore seldom invest in design.

- Customers with much experience and somewhat technically demanding products use experienced design consultants and rely on long-term relationships. They use experienced design consultants to get the results they have defined beforehand. Furthermore, the design brief can be informal when the relationship is long enough to create a relationship that is built on trust.
- New consultants are tested in short projects to test reliability, chemistry and compatibility.
- In-house designers lower the risk. In-house designers can use young and not-very-experienced designers, for simple design projects. Sometimes broad-minded designers are used for tracking down new visions, adventurous questioning and new viewpoints as a part of concept design. At the same time understanding of the business environment is expected.
- SME customers are used to taking over, managing and fending the business from interruptions, while also managing design. Costly and time-consuming learning experiences are avoidable by opening up the design process as advantage for the SME companies. The customer is willing to share the risk by billing.

Customer trust is a requirement for a good and profitable relationship for both the design consultant and the customer company.

The more experienced the customers are in design the more understanding and (higher level) expectations they have for practical design applications to be integrated into the corporate business. Furthermore, experienced customers utilise more effectively design service packets – customised merely for their project specific needs. The customer's *learning* is important. The shorter the customer's learning period, the shorter the design process' unproductive learning curve.

Customising the design process is an important part of the design consultant's competitiveness. Most of the customers referred to customising many times in different ways, and others frequently. To open up the design process is merely a success factor, but customising the design process affects the consultant's competitiveness. Integrating the design process to familiar processes helps the customer to understand and moreover, to trust the design consultant. Customising and integrating the design to the customer's business is one of the design consultant's core competencies and a beneficial learning experience for the customer, while the design process, alternative design solutions and design are justified through the customer's business.

Customer organisations' *commitment* and customising shorten the organisation's way through the process to the markets. The customer organisation's commitment is important, not just the commitment of a contact person. When the total design process is customised and justified through the customer's business, the whole customer company is behind e.g. the new design. Understanding makes the design or product important for others in the organisation and at best shortens the lead-time.

5.3.8 Summary

This section concentrated on the industry point of view, analysing the customers' emphasis on design consultation business. This section discusses factors that are important for the experienced customer at this moment, and where the design consultant's core professional competence is. The factors are based on design consultants' (6 consultants) and customer interviews (23 customer organisations).

The consultant is expected to understand what business the customer is in, how the company competes with rival businesses, and how the customer deploys resources. The purpose of strategic design is to back up customers' decision-making at the strategic level. The central issue is to understand the business drivers. The designer's core competence is how to integrate design into the customer's business. For the customers it is easier to observe and to evaluate the created options through their own specs in business.

The designer's core competence at the tactical level includes management and coordination skills in the design process. In this context design process means effective integration of design skills to the customer's idea-to-markets process. This includes design planning, development and intensifying, and productising 'and customising the best practices.

The operative level includes practical and independent skills in design projects and technical implementation during the total process.

Customers do not require design services purely for the sake of design. The service package demanded should contain much more than that.

- More than half of the customers' expectations focus on **strategic level skills** to support the corporation's strategic level decision-making related e.g. to innovation, visionary concept design³⁵, and to brand signature and corporate identity³⁶. Expected strategic

³⁵ Definition of concept design in Keinonen and Jääskö ed., Tuotekonseptointi. Teknologiateollisuus 2003. Page 41.

³⁶ Picoud Philippe, Design director, Decathlon. Decathlon design, in DMI The 8th European International Design Management Conference, Barcelona Spain 2004 Conference proceedings.

skills emphasise the understanding of the customers' business and justifying the solutions through the business.

This indicates that pricing could be evaluated through the customer's business economic importance rather than charging by the hour, and furthermore positively influencing the design consultant to develop and intensify the design process. On the other hand, the employment for in-house design professionals may grow together with the increase of needed capabilities.

- **Tactical level** needs emphasise design process management and coordination. In some cases customers were asking for sustaining a multidisciplinary network of different subcontractors. This kind of development may create new types of consultation business possibilities besides those which concentrate strictly on design implementation. These needs indicated a step towards strategic partnership. The future development of design service concepts is based on design and process management.
- **Operative level** needs emphasise the implementation of design, design capabilities and skills for using various technical tools. Overall development needs from the customer's point of view concentrate on competitiveness and differentiating the services through customising.
- **Customer's own business** related factors (> 2/5 of total volume) emphasise: understanding of business, business environment; suitable service package and pricing together with customised design process; compatibility of software.
- **Design consultation business** related factors (< 1/5 of total volume) emphasise: references (how design is integrated to customers' business and numerical data as evaluation of past projects, used as a reference) and the quality of consultant employees: compatibility of working methods (i.e. customising the methods) and balance of teamwork; skilled employees with different project tools and independence in planning.
- **Design substance** related needs (>2/5 of total volume) emphasise: strategic design and visual definition to customer's needs, and marketable products through surveys and analysis; coordination and management of the design process; design capabilities and skills for technical tools.

The customer's knowledge of the design substance, i.e. the core competence of a designer, cannot be expected to be deep; however, a very experienced customer knows what to expect from the process, and what they need according to the service content and quality. The interviews showed the fact that customers are very pleased with operative level capabilities; however, they expect that the design consultants are up-dated with the latest knowledge in design, for example in using and improving project tools. The customer-consultant relations have good possibilities to enter towards a strategic partnership indicating consultation business opportunities in management and coordination of customers' subcontractor cooperation, besides the design consultation business that concentrates on design implementation.

5.4 Results for the Workshops

5.4.1 Opportunities and Visions for Design Consultation in Finland

Mr. John Feland III, Stanford University, (CDR) Center for Design Research

This section sums up the two-day workshop by John Feland III and based on a taped interview after the workshop.

There is a distinctive difference when growth opportunities and visions are concerned. Half of the consultancies are willing to grow their business till the year 2005, whereas the other half is comfortable with the current situation. This opinion is strongly affected by the overall age structure of the company personnel. Younger design companies are more interested in growing and developing their services.

The consultancies should open their tool box. Currently it is virtually unknown for the customer. Opening up the tool box enables the customer to understand what actually happens in the consultancy. It means design has the possibility to rise as a factor that must take its place in the customer's product design process. If the procedures and actions taken in the consultancies remain a mystery, design is merely seen as a cost rather than a revenue source.

The participating consultancies have the opportunity for transition, if they want it. However, this will require much work. The passion to develop is crucial. If there is no passion, i.e. focused knowledge on what the company wants to do, or in what they are very good, severe limitations can occur. Successful companies have understood that the transition towards a new focused business needs the understanding of what the company's passion is, what the firm is good at, and where it is heading³⁷.

One possibility [for management] is to hire professionals to do the business. However, this is somewhat problematic. The staff members in a consultancy who best know the projects, clients and relationships are the designers. For example at IDEO, design and engineering is nowadays "first" with only one professional business management person.

Networking can prove to be a crucial factor in the survival of the fittest. In a situation where more and more production is moved from Europe to the Far East, consultancies providing design services will follow. However, the immense production potential that is already visible in e.g. Chinese industry might mean that there are also diminishing areas in the use of design: fast and cheap mass production potential may override the fact that a certain design does not initially work. While there will always be a market for high quality designs, this market is shrinking.

Finnish consultancies' concentration in specific areas, e.g. heavy industry equipment, is not a problem as long as these consultancies stay on Finnish soil. However, the operational environment, both social and economic, is different abroad. In Finland, business relationships are based on personal relationships. Firms are tied in their industry clusters and these are tied to what happens in Finland, respectively. The size of the client companies is an issue of specific importance. Finnish industry is based on a few large companies and a very large number of small enterprises. The lack of medium-size enterprises means there is a considerable lack of potential customers. Medium-size enterprises are companies that can afford design services,

³⁷ See Collins, Jim: Good to Great. New York 2001. Harper Business, p. 118-119

and realise the value of it, but on the other hand, are small enough to be not capable of hiring an in-house consultant. Hence, they need support from an outside consultant. In Europe there are many medium size companies that utilise design services. Due to intense competition, on the other hand, selling the services becomes more difficult.

A successful breakthrough into new markets can first mean economic sacrifices have to be made. Some consultancies might even have to do design work free of charge at first. However, this, along with a powerful advertising campaign, might bring the desired results. If the value of design is presented to the potential client, they are willing to pay for it next time. In some cases, money must be spent in trying to create new business. This does not mean the potential client should be provided with a whole package of design service free of charge, but e.g. creating new services, doing user research, driving in the new tools the potential client companies are not doing. Positive results will enhance the possibility the client is willing to invest in similar research and service the next time.

Starting to provide a new service or getting into new design processes may be difficult for those consultancies that have been designing specific equipment or products for a long time. Designing business processes needs specific competence that cannot be gained by passion alone, especially if it does not show any evidence of skill. However, creating new services in the specific areas one has been operating previously might prove successful.

Consultancies should be encouraged to try to contact the end-users (instead of only communicating with their client) if they want to rise in the value-adding chain. Designers and design consultancies' mission is to understand that the nature of their work means understanding the end-user and delivering that information to their client.

The flow of money to the client: IDBM³⁸ students at the School of Economics, Helsinki, were asked to follow the money in the value-chain of their (study project) clients and to watch for the needs of the stakeholders. This produced interesting results. In many cases, the clients were not at the top of the list of stakeholders. Hence, the buyer was not the most important person. **The design process is similar. Consultancies are relatively distant from the money.** For example, a paper machinery manufacturer's business means selling machinery to enable processes that make paper. However, the end-user is elsewhere, e.g. it is schoolchildren who use the paper to do homework. This chain can be reversed to parents buying the necessary tools, from a retailer to the logistics chain, to the origin, the manufacturer, operating with the suppliers of paper-manufacturing machinery. The design consultancy should innovate themselves tighter in the value-chain; that is, talking to the end-user, the schoolchild. Design means bringing value to one's life, or finding a way to help the retailer, distributor or logistics. Designers should help the machinery-manufacturer not only to produce the equipment or improve the performance of the product, but to approach the end-user. Design firms should be encouraged in this field. Understanding the end-user and delivering that information to their client is the primary task.

Design firms are instances that create value. However, currently, the work is in the actual products and less work is in the area where the money is. Designers do not think they can sit in the "centre of the three circles". Instead, they think they can only sit inside the technology circle. To improve this and ensure design has its effect on all areas in the clients' businesses, there is a need for an exchange process, i.e. empowerment. This means the power relationship

³⁸ The International Design Business Management programme (IDBM) is a joint teaching and research programme of three leading Finnish universities: the Helsinki School of Economics, the University of Art and Design Helsinki and the Helsinki University of Technology. <http://hkkk.fi/idbm>.

between the client and consultancy must be solved. If the consultancy is asking for permission it means it is asking for forgiveness.

There is a distinctive lack of marketing, affecting the methods clients are acquired. Design firms can be compared to the fish that clean sharks. In order to do marketing for different services the design firms have to “chase sharks”. A “team of sharks” means a large concept. However, it would be easier to have “two or three smaller fish” (i.e. a good selection of clients) to serve with some turnover obtained every time.

Significant potential is mismatched in some cases. Instead of looking into the value-chain, designers tend to think of the scale of the product, if it is the size of bread-box, or a large device (e.g. paper machinery).

5.4.2 Development Potential for Design Consultation in Finland

Mr. Harri Andersson, SVP and Director, Boston Consulting Group (BCG), Finland.

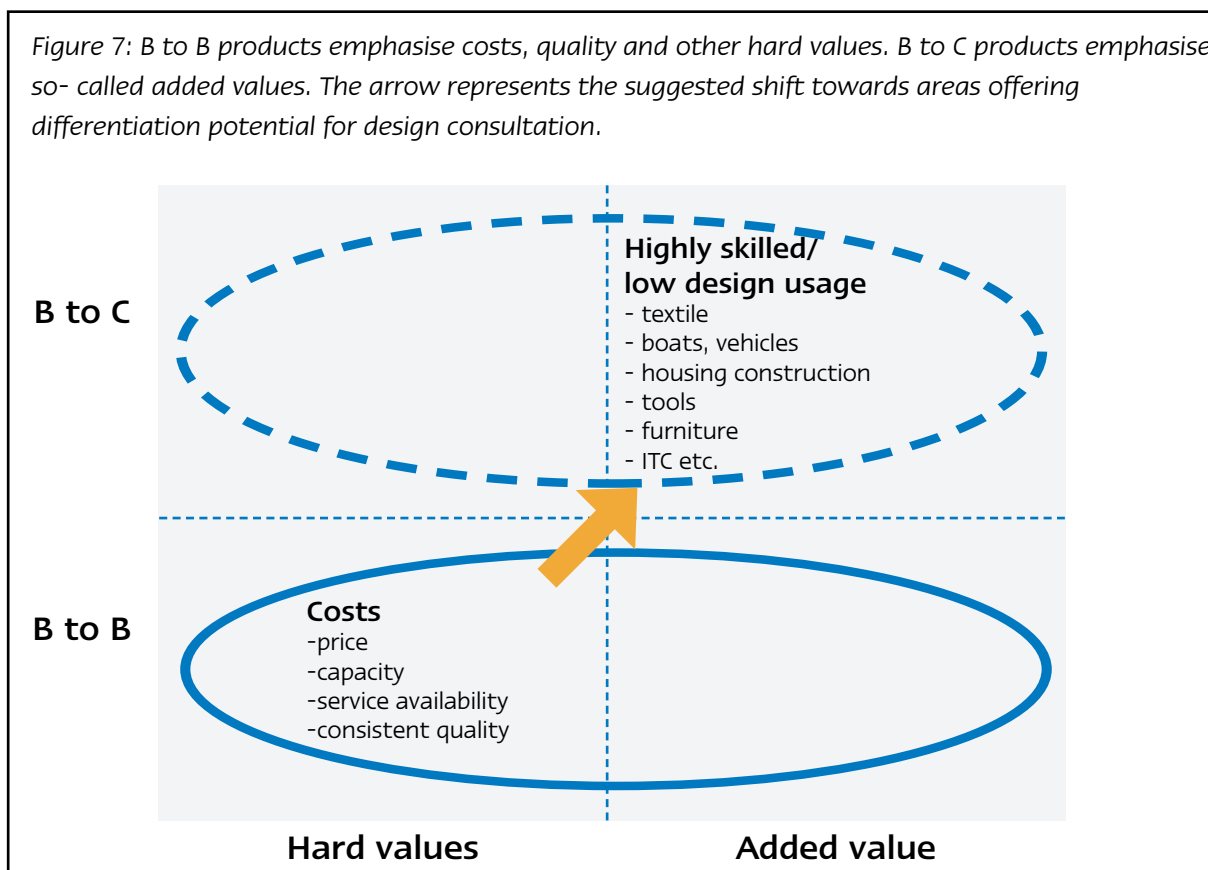
STATE OF ART: Design consultation business

Understanding of customer's business. The design consultation business seems to be in Andersson's view too product-centred and subjective towards the consultation service cases. The design consultant does not have a sufficiently deep understanding of the customers' business, economics and environment.

Differentiation. The design consultation businesses have difficulty in differentiating themselves. This is one of the reasons behind the frequent price competition.

Internationalisation. The possibilities to internationalise are sometimes quite limited. Design consultants should think carefully about what specific capabilities they have as Finnish consultants who add specific value to international customers. Is the outstanding capability the national visual language?

Figure 7: B to B products emphasise costs, quality and other hard values. B to C products emphasise so-called added values. The arrow represents the suggested shift towards areas offering differentiation potential for design consultation.



Suggestions for proceedings

Customer-centred thinking. The suggestion for proceedings to develop the design consultation business is to shift from product-centred thinking towards benefit-centred thinking. The customer is merely interested in HOW design can benefit the customer's business. The customer thus expects to hear a comprehensive outline of their situation in the markets, competition, and customers / users, not just product concepts through form-giving. Understandable service packages emphasise the benefits the customer can gain through design.

Analysing the success stories. Analysing one's own success stories or successful global companies to understand, 'WHY did it happen'. Analysing for example interactive, customer- and user-centred processes, and cases.

Differentiation and centralisation to business branches. Process-specific differentiation of service profiles lead only to price competition. The future business potential is found in service businesses and the specialised SME-sector, where used capacity in design is as low as 17% and can be elevated to 50%.

Internationalisation. Internationalisation is possible with the customer company.

Networking beyond the borders. Business development should be done in cooperation, or under supervision, of business professionals. Development of design substance and service package development with other design and parallel disciplines (e.g. engineering services).

5.4 Potential Service Concepts

This section of the results analyses the design service concepts through the results of customer interviews. The design service concepts are identified from international research and publications.

On the basis of international design consultancies benchmarking and the Finnish customer company interviews, new service concepts are needed according to the results of this study. Here presented possible concepts are set beside customer expectations and experiences from the customer interviews.

Possible and partially feasible concepts are: design management, design as a strategic tool; design as innovation, change and asset management; and design as attitude and business management.

Design management. The purpose of design management is to initiate and handle design strategies in boardroom decisions, and to follow up results with implementation and communication. Design management strives to create understanding and awareness among personnel at all levels. Conscious actions in even the smallest decisions are the core of design management. Design is managed and present in all places and situations in which the organisation, through its structure, products, and employees, makes decisions about customer experiences and product quality³⁹.

Design management is guiding design for the organisation's common purpose, industrial, commercial and social⁴⁰.

³⁹ Dahlin, Torsten, President, Swedish Industrial Design Foundation, 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile Of Design Management. Summer 1998

⁴⁰ Rewsedavies, Jeremy, Design Director, London Transport: 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

Design management denotes continuity by respecting the past while guiding the present with openness to the future⁴¹.

Customer representatives in middle management, the design professionals and the non-designers in charge of design operations expect external justification for the design solution referring to the corporate goals, for various reasons. For example, the consultant might have easier access to top management. The middle management in-house designers might expect external design promotion to the corporate executives or to promote new design solutions to commit and intensify the organisation.

Design as strategic tool. Design is a valuable tool, especially in mature industries, where quality is fine-tuned and costs are continuously trimmed. Design remains a source of differentiation⁴².

Design is regarded a strategic initiative by its nature, strengthening brand identities, fending off low-cost competition, harvesting the benefits of new technologies, renewing connections to the customer, fostering (nurturing) a culture of innovation⁴³.

Many customers perform in mature industries, where the specific driver is differentiation with an exceptional brand or product from the competitors. The companies have found design a way to compete and to implement overall quality in products and services.

Design as innovation management.⁴⁴ In the very core economy of an organisation, innovation plays a dominant role in economic growth. Design is planned and innovative use of available knowledge forms processes, environments, products and services with a point of departure in the user's needs.

Design-innovation interacts in two ways (double-line): between the firm, customers, suppliers and partners either refining the current product; or being afresh with a new product by interacting between the firm and providers of new technology, best practises, new materials, processes and management redesigning the production process.

Design as innovation management is an idea of design utilisation for the moment. The in-house designers have a very distinctive role between the information flows from the company to the consultant company. That role and organisational position defines the content of bought design services. This relationship needs further study.

Design for managing change. The designer's expertise is to understand the current situation and to apply appropriate solutions⁴⁵.

Customer companies expected new view angles to question the used ways of doing things; however the justification for new ideas has to be found from within the company's own goal and strategies, e.g. competition or operations. The customer wants to be able to evaluate design solutions as business opportunities and comments on the visual solutions through target markets, situations, target groups and users etc.

⁴¹ Larsen, Tim, President, Larsen Design + Interactive, 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

⁴² Kelley, Thomas A., General Manager, IDEO. Design and Product Development. Designing for Business, Consulting for Innovation. DMJ. Vol. 10, No. 3. 1999

⁴³ NZ Institute of Economic Research (INC.). Building a case for added value through design. Report to Industry New Zealand. 2003

⁴⁴ NZ Institute of Economic Research (INC.). Building a case for added value through design. Report to Industry New Zealand. 2003

⁴⁵ Rieple, Alison, Director, Graduate Centre-Harrow Business School, University of Westminster. Sailing the Seven C's: How to Enlighten an Organization Without Losing All Your Friends. Design Management Journal. Vol. 11, No. 1. Suffusing Design Throughout the Organization Winter 2000

Design as asset management. Design brings effectiveness in making a difference by requiring as few resources as possible⁴⁶.

Design can maximise value added by contributing to minimise input costs and more effective production systems. Design can maximise the sales revenue by providing a tool to create a product satisfying the expectations, needs and requirements of customers and being sold at its maximum value⁴⁷.

Design as asset management is in the core of business-related expectations together with time-to-market boosting; however, this kind of situation requires experience in design. The customer and the consultant must have enough trust between them that the required information flow is possible.

Design as attitude management.⁴⁸ Design is differentiating products and organisations in the market place communicating the best attributes (tangible / intangible).

The most common qualification of the design consultant according to the customers is their external and different way of doing and thinking, different from what is customary from the customer organisations' visual angle or point of view.

Design as business management. Design can point out organisations' possibilities and opportunities to go forward with its operations⁴⁹.

Design helps organisations to be perceived better and different from the competitor⁵⁰. Design creates a distinguishable profile in complicated market environments⁵¹.

New product design processes are tied with business management. The NPD process affects customers' long term decision-making. This study showed that the experienced customers become conscious of the strategic level potential design can offer their business management. Good experience, trust, long-term cooperation with a design consultant or in-house designer with adequate knowledge and understanding of business activities lead to a broader utilisation of design.

The customer representatives recognised the managerial potential in design. More than half of the customers' expectations (experienced customers) emphasised strategic level and one fourth tactical level expectations.

The influences and gained benefits of industrial sectors need further investigation in this regard.

⁴⁶ Häusler, Jürgen, Managing Director, Interbrand Zintzmeyer Lux GmbH, Cologne, 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

⁴⁷ NZ Institute of Economic Research (INC.). Building a case for added value through design. Report to Industry New Zealand. 2003

⁴⁸ Larsen, Tim, President, Larsen Design + Interactive, 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

⁴⁹ Girvin, Tim, Principal, Tim Girvin Design Inc., 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

⁵⁰ Gommer, Fennemiek Mdm, Partner, Scan Management Consultants 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

⁵¹ Häusler, Jürgen, Managing Director, Interbrand Zintzmeyer Lux GmbH, Cologne 18 Views on the Definition of Design Management. In Design Management Journal Vol. 9, No. 3, A Profile of Design Management. Summer 1998

6. Discussion

This section discusses the validity and limitations of the study.

Research materials. The research materials are pragmatic according to the framing of the research questions, and adequate for making the conclusions.

The literature and references are selected from the latest knowledge in this field. References used in this study have been produced by experienced professionals. The new knowledge is empirical and tried in practice, likewise the knowledge gathered by the design consultant and customer interviews. Most importantly the study has as a whole a cross-scientific and cross-disciplinary approach to the subject. Furthermore, through the customer interviews the gathered knowledge has been applied to the national specific situation.

The information was categorised and analysed in order to discover what is important for the customer. Through categorising it was possible to make a list of important factors. However, the next question was how to show the importance. Very important was not enough for prioritising development for example. The importance is expressed in quantities. The emphasis of customer's expectations cannot be expected to be exact (referring to the numerical data); however, the results give course for future development priorities of design services.

The results of this study were discussed regularly in arranged meetings with the design consultant partners, where the given comments were discussed. The comments were further used for digging into the subject and objections more deeply. The liability of the results was under discussion according to the practical experience of the design consultants, but also through other consultation disciplines as well (e.g. business consultation). Furthermore the design consultants have at all times pointed to unexamined viewpoints.

Study design directions. The series of interviews consisted of six of the major Finnish design consultancies and 23 of their customer companies (affirmed with service sector firms). The customer and consultant representatives were all best possible deputies of their profession representing its expertise. The customer representatives were selected with the counselling of design consultant partners and according to the objectives of the study. Furthermore, the organisational status, work-description, and experience in design were best possible and estimated in advance, according to the goal-directed frames.

Limitations and viability. The sector of trade and services were low represented, because of current design consultation practices – the interviewed customers represented more or less traditional customers of industrial design, aside from some earlier mentioned exceptions from the insurance and banking sector. In the future a study made on the basis of different business branches is needed.

The six design consultants represent the major Finnish consultants of industrial design in size and profile, with a variety of typical customers. The study results brought out opportunities for development, though the goal of internationalisation was unfinished during this study because of time resources. However, the workshop proposed various opportunities to develop international activities, e.g. by increasing the international visibility together with internationally operating customer companies, and by alliances with internationally operating consultancies. The internationalisation of Finnish design consultation also needs further study.

Other proposed business opportunities concerned small- and medium-size companies, where the utilisation rate of design is 17%⁵². The direction of development in size, differentiation, concentration, design services and internationalisation, however, requires action of their own volition.

The customer companies were pleased with the present design services as a whole; however the benefits they have gained from design came out as perceptions on how to better use, develop and expand the design utilisation in the corporate organisation. The expectations for future development in design and possible utilisation in the customer company were high. Furthermore, the research showed that the more the customer understands and knows about design the more valuable the customer perceives design for the business economy, and even more valuable the services the customer expects. The study also showed that the core competence the customer company expects for the future is the design substance and the knowledge of how the corporate strategy is implemented by means of design skills.

The benchmarking of international design consultants presented design service concepts used worldwide. The international benchmarking cases suggest a common special feature of being part of general design promotion. Design promotion is institutionalised in Finland. It has been an injunction of public and professional institutions to open up design practice to its constituencies. The benchmarking showed that internationally operating design consultants, throughout their performance, open up and try to make understandable what they do. Literature references support the view that opening up the design process is merely a success factor; it becomes a competition factor after it is customised to the customer needs. This is evident when considering SME's scant experience with design, early customer experiences and the result that long experience, knowledge and understanding of design and its possibilities enhance the need and use of economically important strategic level design services.

The development of the design consultation business is as mentioned earlier up to the owners of the business. Better profits necessitate a change from the traditional way of charging per hour and on the other hand the ability to justify the economic importance of design services to the customer company. Charging according to the economic importance could encourage consultants' willingness to develop and intensify the design process as they are now willing to do because of the traditional charging per hour. The experienced customers seem to be ready for that change. The design consultants already operated at economically important areas of the customers' business. To benefit both, the consultant's and the customer's business, the design consultants need better income for economically important design tasks, and more effective projects would truly benefit the customer. The development might have a reasonable causal connection.

⁵² Piira and Järvinen, Survey of Industrial Design in design service companies and customer companies. Teollisen muotoilun toimialakartoitus. Helsinki 2002. Designium/Tekes 2002.

The study also showed different benefits for specific industries in hiring in-house designers. Cheaper, less experienced designers in company-defined design projects typically search for unconventional and open-minded ways of interpreting new business opportunities, markets or customer sectors. More technically demanding projects or products might need an in-house designer for managing the product process or for coordinating the subcontractors including the design consultant. Some customers expected the design consultant to take this responsibility in businesses that have externalised everything other than the core business.

The statistical importance is not significant; however it was not the goal of this study. From this study emerged knowledge of great importance by categorising, ordering, and showing causal connections, e.g. that customer's experience and learning enhance the level and economic importance of design services.

The study gave the provisions to develop design services. The companies need to decide what to do, and provide the needed skills to do so.

The testing of new design service concepts need to be tested in a further study. This study did not have the time resources for this testing, but remains a good base for future research. This study managed to answer the main questions while in some cases remaining somewhat shallow.

The in-house designer's work assignment and level of responsibility varied from one customer organisation to another. Lot of predictability can be found from the organisational status; however this requires further study.

7. Conclusions

The objective of this study was to develop new, versatile service concepts with the six major Finnish design consultant partners in the field of industrial design.

The results of the study aimed at improving the business and international market-shares of the partner consultancies.

Furthermore, the project plan called for the aggregation of views, opinions and experiences from the industry concerning the strategic value of design in increasing the industry's competitiveness.

The use of design can be divided to three levels:

- Operative level for product design
- Tactical level for design process management and coordination.
- Strategic level for visionary concept design⁵³, design-driven innovation, brand signature and corporate identity management⁵⁴

Analysis of the customer interface of the design agencies helped to identify special challenges on both sides of the development Hurdle. Based on the interviews of the participating design agencies and of both existing and potential customers, the desired service offering could be divided in three areas: idea creation and planning, idea execution/ product development, and strategic visions and services. These three areas differ at least in terms of customer expectations, stake levels, time pressure, hierarchy levels, opponent players, and requested skills. Design agencies should formulate a clear strategy on which areas to cover and, when planning for their strategy deployment, take into account these differences and develop their competences accordingly. Of the three service areas the strategic services seemed to be the least developed. In addition to the basic designer education and working experience the design agencies should pay attention to developing the capabilities that enable them to not just make decisions that have strategic implications but also to conduct the development of strategic service packages, and sell them to top management teams.

It can be concluded, based on the customer and consultant interviews of the study, that design services are mainly used at the operative level. Tactical level use of design services can be described as immature and strategic level use as moderate.

The results of the customer company interviews showed that operative level utilisation is the most frequently used level of design services, and that the customers are mainly very pleased with the operative level capabilities of the consultancies. This requires, however, up-dating and maintaining the latest knowledge in the field, especially in using and improving the project tools. Tactical level utilisation in design is immature. Customers, however, emphasised their future increasing needs for capabilities to manage and coordinate design processes by the consultancies. Some customers expected sustaining a multidisciplinary network of different subcontractors. The utilisation of design services is moderate at the strategic level of decision-making in the companies. The utilisation is mainly demarcated as conceptual design. The most experienced customers, however, emphasised their need to use design consultation to support

⁵³ Keinonen and Jääskö ed., Tuotekonseptointi. Teknologiateollisuus 2003. Page 41.

⁵⁴ Picoud Philippe, Design director, Decathlon. Decathlon design in DMI The 8th European International Design Management Conference, Barcelona Spain 2004 Conference proceedings.

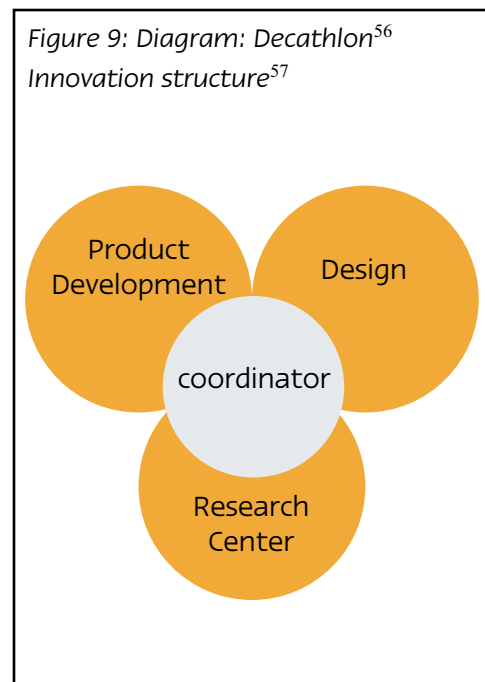
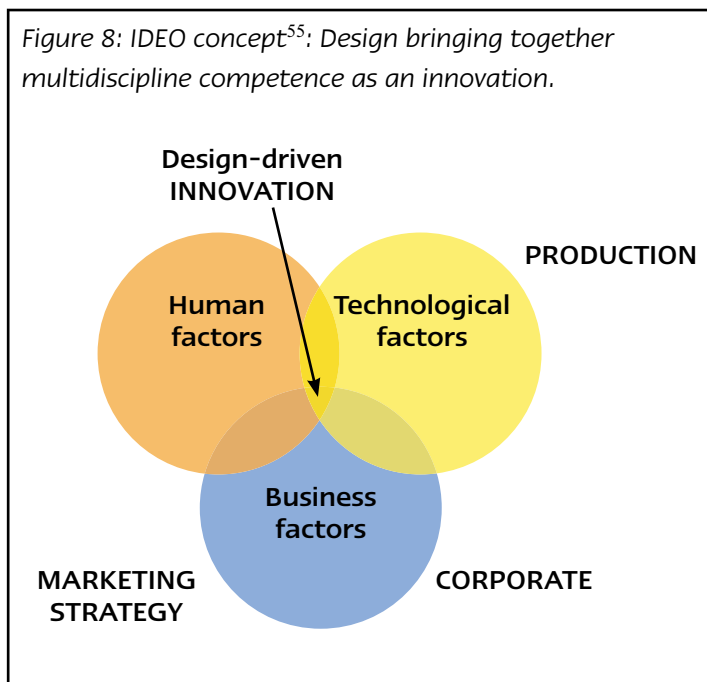
strategic decision-making (visionary concept design, innovation, brand signature etc.), having high expectations in the development potential of the Finnish design consultancies.

Benchmarking of international design consultancies resulted in new knowledge of emerging service concepts. Some benchmarked design consultancies even claim that they operate at the strategic level with their clients. These service concepts necessitate, however, comprehensive experience in design, to produce both product and conceptual design services. Multidisciplinary capabilities are needed to produce design-driven innovation services.

On the basis of international design consultancies benchmarking and the Finnish customer company interviews, new service concepts are needed according to the results of this study. Possible and partially feasible concepts are, for example, design management, design as a strategic tool, and design as asset management, attitude, business, innovation and change management.

According to the case examples it appears that strategic and versatile utilisation of design necessitates a multidisciplinary organisation both in design service business and inside the customer company. IDEO and Decathlon concepts are presented here as examples.

All internationally operating design consultancies have multidisciplinary organisations. IDEO is known for its multidisciplinary organised competence in its design services and comprehensive working methods in design consultation. The service concepts are founded on a comprehensive base of knowledge: design, business and technology.



Decathlon on the other hand is an example of a company extensively utilising design in business performance. Decathlon’s work slogan ‘good design is good business’ depicts a design team giving visible and quantifiable results and participating in company growth. Those involved with a product should be directly involved in its design. Design’s main role is to propose new business opportunities to the company. Decathlon’s innovation structure is based on coordinated product development, design and research.

⁵⁵ See www.ideo.com

⁵⁶ Decathlon is the European leader in sports equipment production and distribution.

⁵⁷ Picoud Phillippe, Design director, Decathlon. Decathlon design in DMI The 8th European International Design Management Conference, Barcelona Spain 2004 Conference proceedings.

8. Appendices

The questions were semi-structured and followed the presented pattern:

1) Background of the interviewee: education, career, responsibilities

2) Business of the company: To whom are the products targeted at? What kinds of clients/customers? What is the competitive advantage (past/present/future)?

3) New product development process:

When, who are making decisions which are affecting new products? Manufacturability, serviceability, usability etc

4) External help used? Used services and subcontractors? Why used or why not?

5) Use of design services:

How well you know Finnish design agencies, which are their profiles, core competences? How many agencies are you considering when you need external help? Have you used international design agencies? Differences compared to Finnish ones? Do you have in-house designers, if yes, what are their responsibilities?

6) When using external help, how the process starts?

Is there ideal state to enter the process? How design agency gets into the core of the company? What are the risks or advantages? Are the company units allowed to use external design help independently? What issues are decided locally?

7) Essential characteristics of a good external help/ design agency?

What are you buying when you are buying design services? What does it contain? What are the agencies selling? Is it expensive? What parts of the service are adding most value? What kinds of other services tightly/ loosely connected to design would you need? Could you imagine that you could buy something else from “design agencies” (broadly defined)?

The basic pattern was the same as presented, however the questions vary according to each specific case.

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