

Survey of industrial design in Finland

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Designium, the New Centre of Innovation in Design, is built on close cooperation between the University of Art and Design Helsinki, University of Lapland, Helsinki University of Technology and the Helsinki School of Economics and Business Administration, as well as other universities, polytechnics, businesses and public bodies. The mission of Designium is to promote the development of national design policy, the internationalisation of the sector, and enhance the competitiveness of Finnish industry through multi-disciplinary research and innovation. 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.

Introduction

Design has been part of the product development processes of Finnish companies for several decades. However, the role of design in product development has largely been to provide an aesthetic polish towards the end of the process. Many industries have not managed to utilise design at all. Moreover, design services have not reached those who need them. Nevertheless, design has become an increasingly important competitive factor, even in fields that have not used it previously.

Interest in the design sector and the utilisation of design has increased as a result of the Design 2005 technology programme of the National Technology Agency of Finland. Design is a factor that increases both competitiveness and

value added. However, no systematic data exists on the investment by industry in design in product development and marketing communication, on the effects of design on business operations, or the ways in which design services are procured. Neither has any quantitative data existed on the supply of design services by design firms, their operations, or impact on the business of their customers.

The present survey was commissioned by the National Technology Agency and supported by the Confederation of Finnish Industry and Employers. The aim was to provide a view on the current status of design in Finnish industry and gather comprehensive quantitative data on the design sector and the utilisation of design in industry, as well as to create questionnaires that would allow monitoring

and further work on the development in the design sector. Earlier studies generally had to rely on only approximate figures, which decreased the usefulness of the results. The current survey is the first effort to create a sustained monitoring survey on the utilisation of design. The survey was made using questionnaires mailed to industrial design firms. The address list was compiled with the help of the Confederation of Finnish Industry and Employers. A total of 560 questionnaires were mailed to industrial corporations. Questionnaire data were supplemented with interviews. The participating companies were divided into three groups according to the number of their personnel, that is, companies with over 500 employees, those with 100-499, and those with 20-99 employees. The questionnaire was mailed to all companies in the over 500 category, to every third company in the 100-499 category, and to about 150 companies in the 20-99 category. A total of 165 responses were returned, giving a response rate of 29.5%.

The survey was conducted by Designium, the New Centre of Innovation in Design at the University of Art and Design Helsinki. The authors wish to extend their warmest thanks to all those who participated in the planning, executing and funding of the survey, as well as other work, and especially to the respondents. Helsinki, 19 September 2002

With the help of the Confederation of Finnish Industry and Employers, questionnaires were mailed to a total of 560 businesses. The participating companies were grouped according to the number of their personnel. The questionnaire was mailed to all companies with over 500 employees, to every third company with 100-499 employees, and to about 150 companies with 20-99 employees. In the big companies, the questionnaire was mailed to the person in charge of product development/design, and in companies with less than 100 employees to the managing director.

Table 1. Industry. Respondents by position.

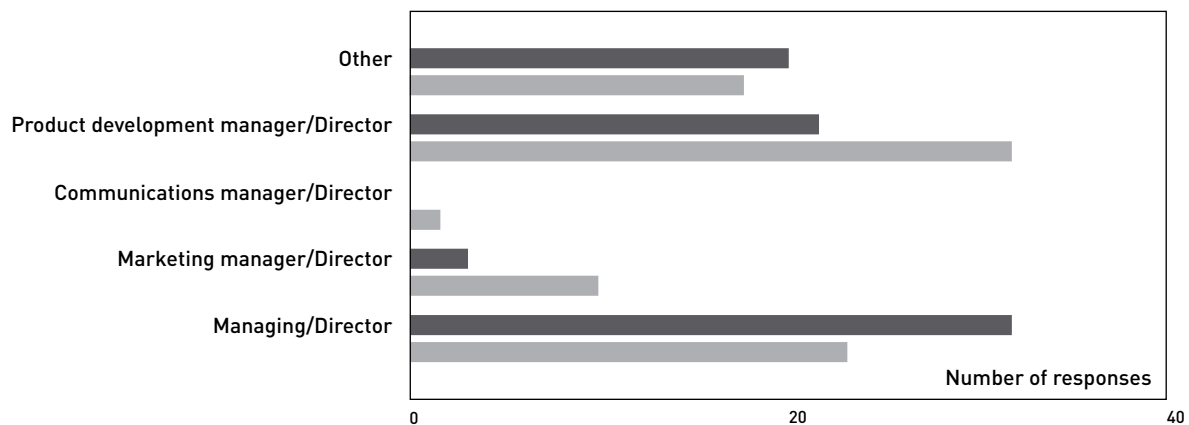
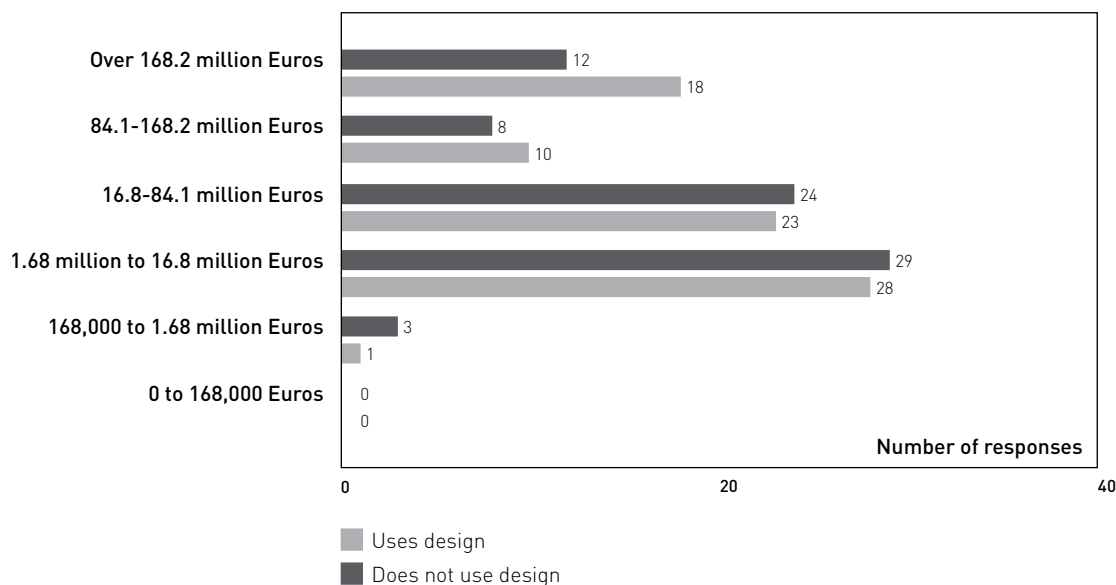


Table 2. Respondents by turnover.



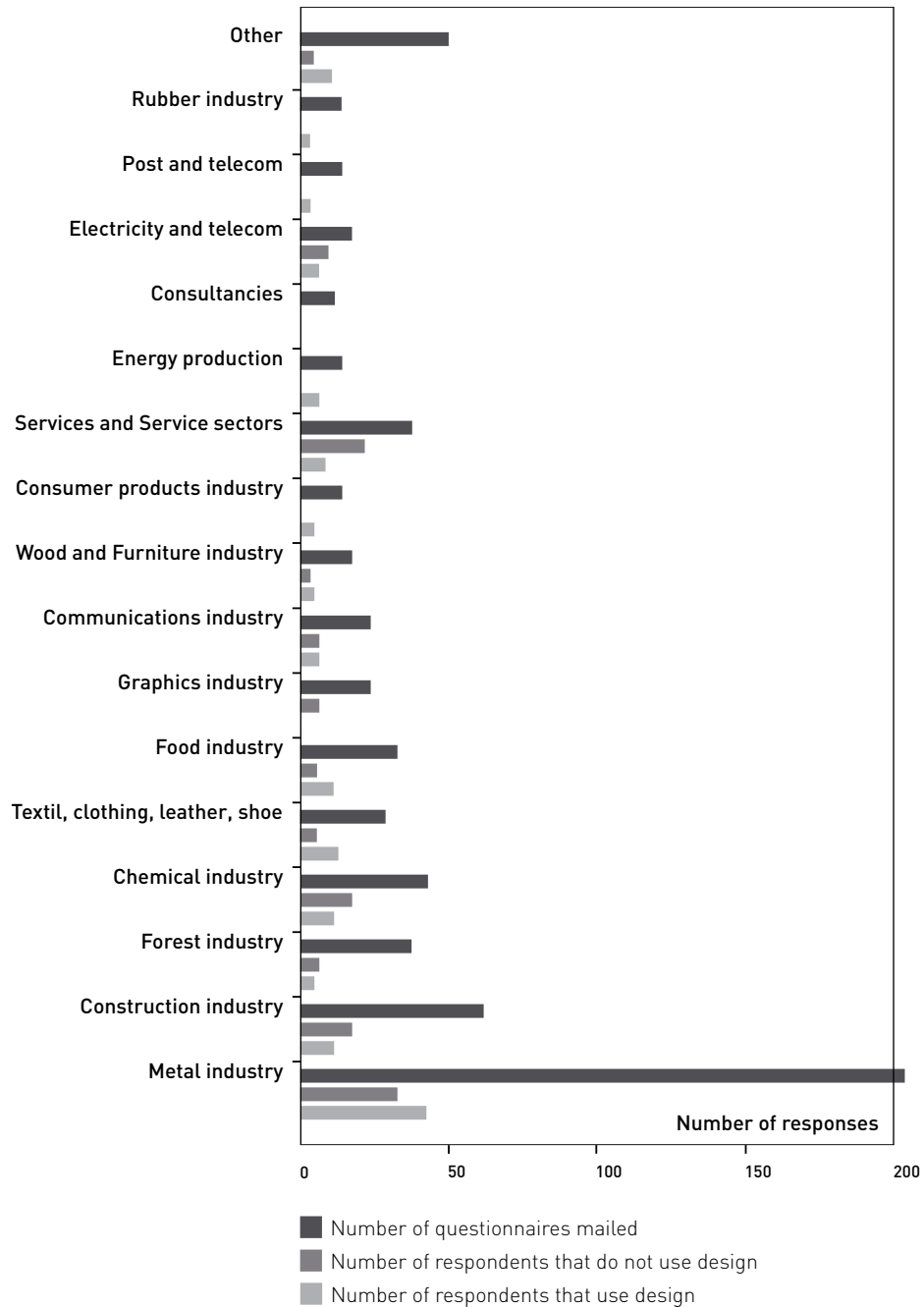
The larger the company, the more often it uses design in its operations. Of companies with a turnover of less than EUR 1.68 million (appr. FIM 10 million), only 25% used design services, whereas with companies with a turnover exceeding EUR 168 million (appr. FIM 1 billion) the corresponding figure was 60%.

The largest sector involved in the survey was the metal industry. It was also the largest user of design. Textiles, clothing, leather and shoe industries used proportionally the largest number of designers. The food industry uses designers for the design of packaging in particular.

52% of the respondents used design (industrial design, graphic design, interior architecture, textile and clothing design, etc.). 41% reported using industrial design, the

focus field of the survey. Not all respondents use design services constantly, there are also those who use them occasionally. We can assume that design is utilised less in companies that did not respond. The questionnaire was mailed to a total of 560 companies. The number of responses was 165, of whom 86 reported utilising design. In a study conducted in 1998 and included in a report of the Finnish National Fund for Research and Development (SITRA) *Muotoiltu etu: Muotoilu, teollisuus ja kansainvälinen kilpailukyky*, edited by Pekka Korvenmaa, it was estimated that about half of the companies in the piece goods industry utilised design in the operations. The current survey supports the estimate. Assuming that, of all the companies that were mailed the questionnaire, only 86 do utilise design, the percentage drops to 15%. 14% of respondents had designers on their payroll. The

Table 3. Industry. Respondents by position.



Industry. Percentage of respondents that had used design.



Percentage of respondents that use industrial design.



In-house designers on payroll (percentage of all respondents).



term designer was not defined in the questionnaire; the definition was left to the respondent. Design seems to be that part of product development which is typically outsourced. Moreover, customers have scant knowledge of design expertise and the profession. The proportion of in-house designers may well increase when understanding of the utilisation of design increases.

Utilisation of design by Nokia and also their number of in-house designers stands out from the statistic. Compared with the rest of the industry, Nokia clearly has more designers on their payroll. The textile, clothing, leather and shoe industry and manufacturers of design-intensive consumer goods traditionally use more in-house designers than other branches. The number of designers in other sectors of the industry is small, 1-3 people. They can also function as design directors and purchasers and coordinators of design services.

Table 4. Industry. Position of designers in corporate hierarchy.

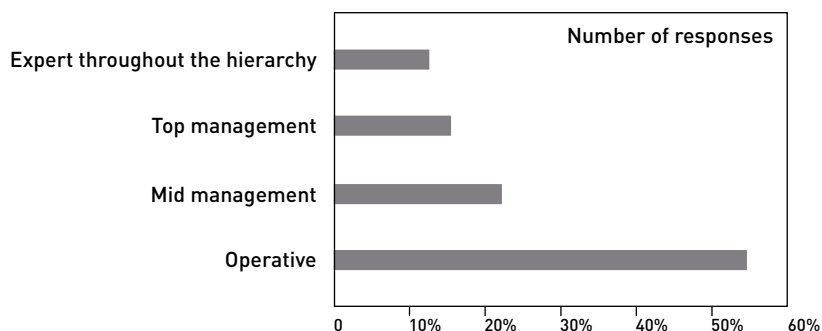
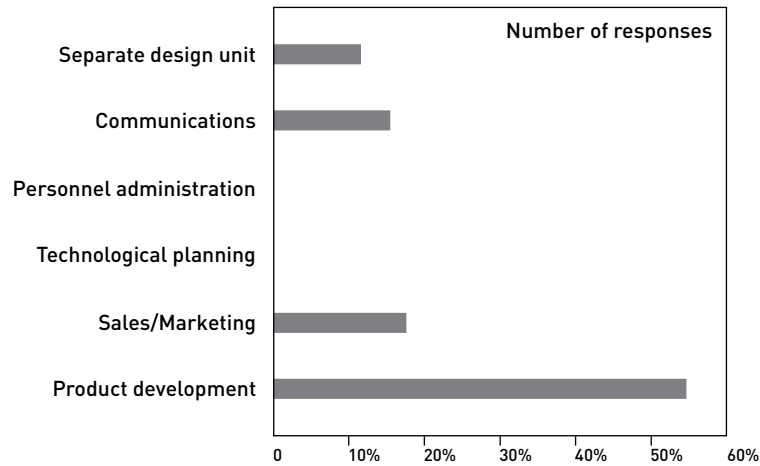


Table 5. Position of designers in corporate operations.



Most designers worked on the operative level of the company, in product development. The designer is one member in the process of product development. Design is also used in marketing and communication, in which case the designer may be used as an expert throughout the entire organisation. Most design experts are probably in mid-management. Few companies have a separate design unit, because it would require several designers and correspondingly greater investment. The designer was part of top management only in designer-led small agencies, or in large organisations utilising design, in which case there were designers at all levels of the hierarchy.

Responses to the question about the percentage of designers in product development staff varied drastically. Discarding the largest and smallest figure (100%, 0.5%), the average was 22%. The number of designers depends above all on the size and field of the company. The percentage of designers was great in some small companies in the textile, clothing, leather and shoe industry and the arts and crafts sector. Many companies known for their design have

outsourced their design services – in-house designers are not always needed. However, such companies often have a long tradition in the use of design and are experienced in purchasing design services.

48% of the companies had purchased design services. The principal factor affecting the selection of supplier was their references. This might also imply that these respondents had not been purchasing design services for very long and consequently the company had not yet established a regular supplier. Familiarity with the customer’s line of

Industry. Companies that had purchased design services (percentage of all responses).

The 48% of companies had purchased design services.



Table 6. Your reason for choosing the current supplier.

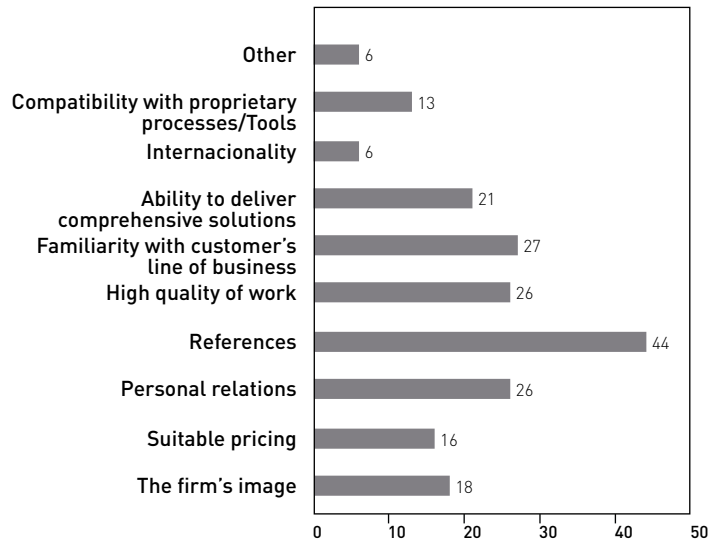
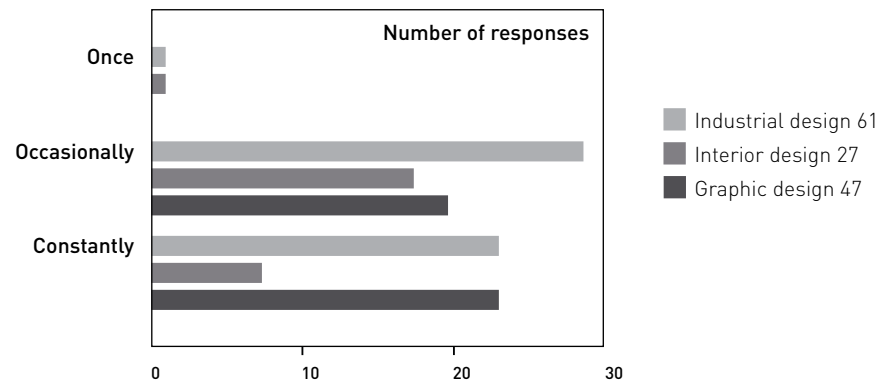


Table 7. Industry. What design services have you purchased and how often?



business was also clearly an important factor. Word of good work by design firms spreads to other companies in the same sector by word of mouth. To assess the quality of work by a design firm, earlier experiences are needed as a reference point.

Personal relations are important, designers are their own best marketers. According to the design agencies, the demand for comprehensive, turnkey solutions has increased. Price is not the determining factor in selecting the supplier of design services.

Table 8. In your estimate, how much of your R&D budget goes to design?

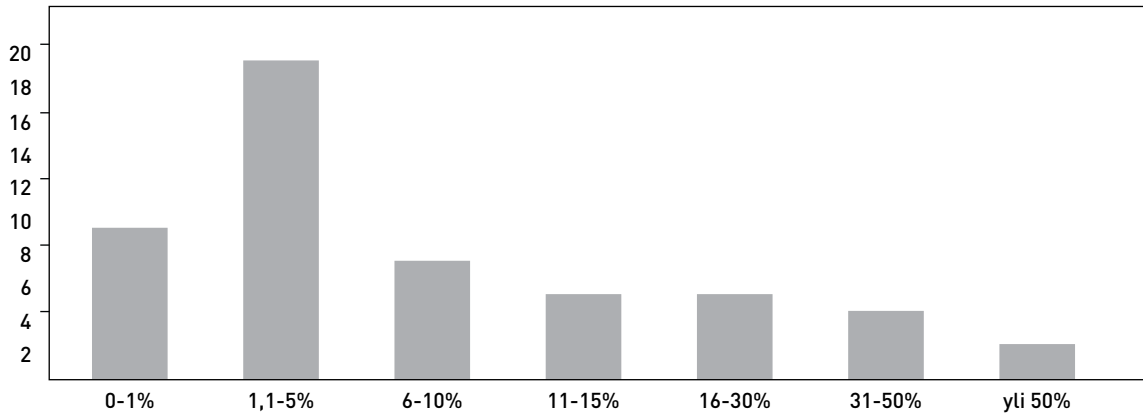
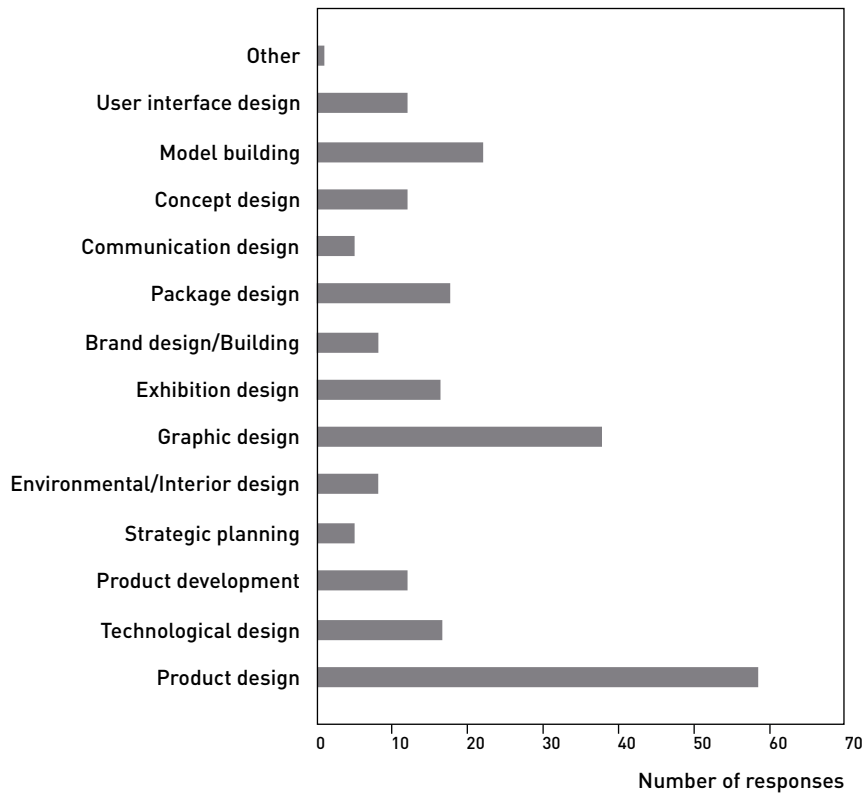


Table 9. Industry. What services have you purchased from industrial design firms?



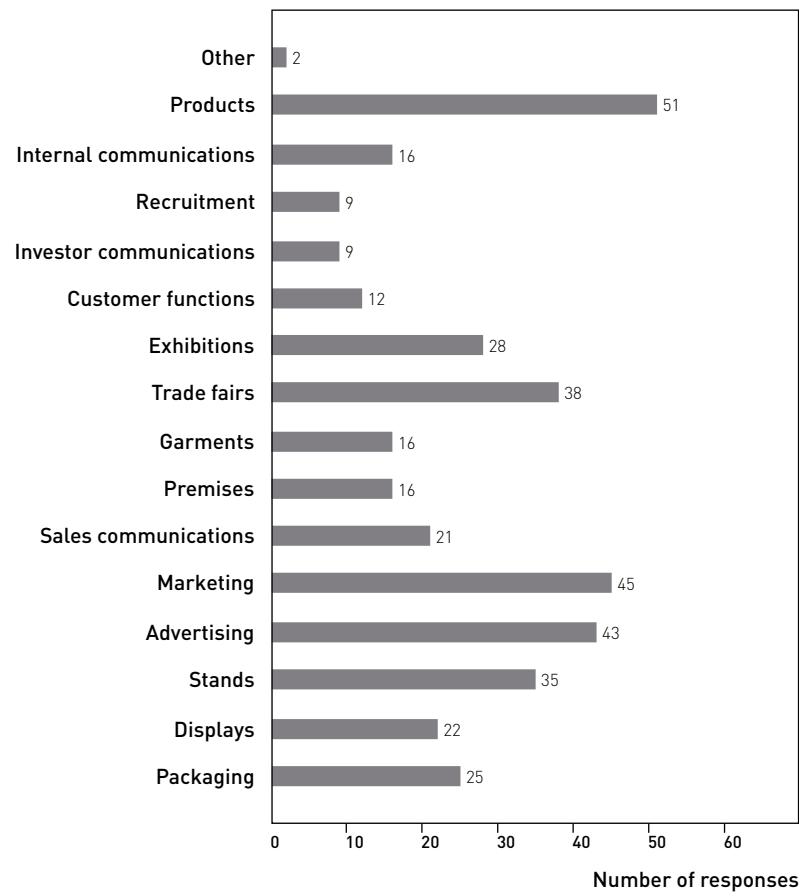
Design services studied were limited to industrial design, interior architecture, and graphic design. Industrial design is used mostly occasionally, but also the proportion of respondents using design constantly was remarkably large. Differences between interior architecture, graphic design and industrial design are explained by the nature of the work in these sectors: for example, business premises do not need to be refurbished all the time.

The variation was quite large in responses regarding the proportion of design in the R&D budget. Most of the

respondents were unable to give an estimate. The average figure of the responses was 13%, but the range was great.

The most commonly offered service was product design and it was also the most commonly purchased one. The responses also indicate that package and graphic design services are also purchased quite a lot from industrial designers and industrial design agencies, whereas strategic design services are rather seldom outsourced. Client companies understand technical expertise, but do not utilise the consultation services of design firms.

Table 10. Industry. How do you use design to build your corporate image?



Design is used for building the corporate image especially in products (industrial design), marketing and advertising (graphic design) and trade fairs (interior architecture).The entire spectrum of design is utilised in building the corporate image.

Design services are considered fairly expensive. Nevertheless, the price is not the key factor in purchasing design services. In reply to the question, which factors affect the selection of the design agency, suitable pricing was seventh on the list.

Experiences of the use of design services were generally good. Exceptionally good experiences were reported by no less than 37% of the respondents. Of course, positive experiences increase the willingness of companies to use design services in future as well.

Most respondents considered design a significant factor in their business operations. Companies that said they use only a few design services, nevertheless, considered the role of design significant to their own business. Design occupied a crucial role in the clothing industry in particular.

Table 11. Industry. What is your opinion of the price of design services ?

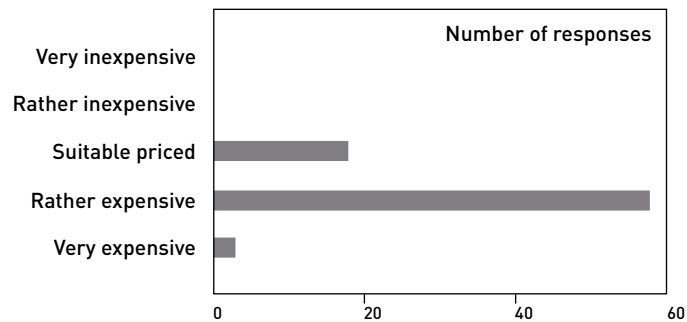
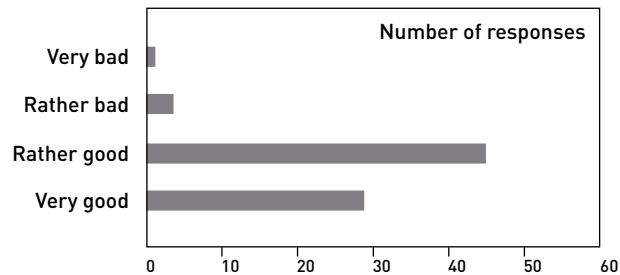


Table 12. Your experiences of the utilisation of design in business operations.



The greatest obstacle or reason for infrequent use of design services was the unimportance of design to the sector in question. Most of the respondents who gave this reason purchased design services from subcontractors. In some cases the design was received from the customer. Many food and chemical companies also considered design

to be insignificant in their business. Typical standard products mentioned as not requiring any design were products of the construction materials industry. In these companies, design is probably considered to consist of nothing but product design, and its strategic importance has not yet been understood.

Table 13. Industry. How important is the role of design in your line of business?

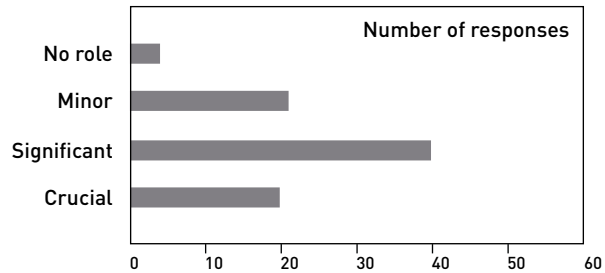


Table 14. Obstacles to using design.

