The competitiveness and industrial dynamics of the Nordic design industry

Final Report
This report summarizes the Nordic research project The Future in Design: the Competitiveness and Industrial Dynamics of the Nordic Design Industry. The project was funded by the Nordic Innovation Centre which is an institution under the Nordic Council of Ministers. The Centre initiates and finances research and development into the Nordic innovation system. Projects financed by The Centre aims to contribute to increasing the competitiveness of Nordic trade and industry, strengthening Nordic business culture whilst also contributing to sustainable societal development. This report has been written and compiled by Dominic Power from materials and inputs provided by the researchers involved in the project and by the industry reference group.

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In addition to this report a series of Country Reports and Case Studies can be downloaded from:

www.nordicdesign.org
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</table>
Executive summary

The results of a one year research project into the Nordic Design industry carried out by 14 Nordic academics are presented in this report.

In line with the growing importance of design, professional designers and design consultancies have emerged as both a growing industry in their own right and a vital pool of strategic resources for all Nordic businesses.

This report comes from the first large scale comparative research on the Nordic design industry. This report summarizes some of the project’s basic findings and outlines our recommendations and suggestions for how the design industry could be more commercially competitive.

In addition there are detailed statistical reports on each of the Nordic countries’ design industries are available to download to: www.nordicdesign.org

Key Findings and Policy Recommendations

The project’s findings and recommendations fall into 4 main areas. The following introduces a selection of some of the key findings and recommendations within these areas.

1 The design industry: firms, people and growth

- The design industry is a small but important growth industry: across the Nordic countries around 27000 people are directly employed by specialist design firms.
- These firms and employees are also a vital strategic resource for all Nordic business sectors since design greatly aids industrial profitability and innovation.
- The design industry is growing fast in all countries, with high growth in the number of active firms and increasing numbers of employees.
• The industry is dominated by small and medium sized firms: the majority of firms are only 1 person.
• The design industry shows a very strong tendency towards urban locations: the majority of design activities happen in the largest cities.

Recommendations

เสมอที่มีความสำคัญกับอุตสาหกรรมการออกแบบและควรเป็นที่สุด Cluster organizations can help organize and be portals for access to pooled business support, R&D funding advice, legal services, marketing, and expert advice. Different types of meeting places – e.g. networks, conferences, seminars, design centers – are needed to support this process.
• More attention needs to be paid to needs of small firms in the design industry.
• The design industry faces a problem securing Venture Capital: the industry needs more information on VC; and potential investors need to made more aware of the profits to be made from design and how to evaluate design opportunities
• New talent and diversity are important. Policies are needed to encourage the involvement of more design employees from non-traditional backgrounds and to support more inward migration of foreign design experts, professionals and even firms.

2 Getting out there: Growth, commercialization and export success

• The design industry's exports have grown consistently over time but there is a feeling that firms could achieve a lot more. Their growth and export potential is being affected by a lack of alternative business and revenue models, generally low levels of inter-firm networking, and by the fact that few small firms can afford the costs involved in entering new markets.

Recommendations

เสมอที่มีความสำคัญกับอุตสาหกรรมการออกแบบและควรเป็นที่สุด The design industry should look to other creativity- and knowledge-based industries for new types of revenue streams from their intellectual property.
• Government and patent authorities should examine the operation of copyright and intellectual property in relation to design industry products and professional services.
• Support professional networking initiatives and industry associations that help link small firms together so that they can share experiences and offer wider joint product packages.
• There are often significant gaps between clients’ and designers’ worlds: meeting places and contact brokers could help bridge these gaps; and courses could be provided to designers on how to pitch projects and negotiate in the language of target industries
International trade fairs are an important sales and networking opportunity for design firms interested in exporting and support for their involvement should be recognised as a real investment opportunity (and not just a promotional exercise) by export authorities and trade bodies. Funding attendance and for activities that link firms with potential clients and marketing/press channels should be prioritized.

Nordic and national trade fairs should be supported in efforts they make to internationalize: internationally recognised trade fairs greatly enhance the national brand and help firms to access wider markets.

3 Education

- There has been a rapid expansion in the number of Nordic design students and graduates.
- The workforce in all countries is roughly 50:50 men:women; but there significantly more female students so the future may be very different.
- At present there is relatively little research conducted in design schools and departments. In particular, there is a real lack of doctoral and postdoctoral research conducted.

Recommendations

- Many design educations fail to provide students with adequate business and management skills: introduce business, management and entrepreneurship training as an integral part of design education.
- Third level education design educations need to be internationalized to a far greater extent than they are today. In order for firms to be more international, the students and future design professionals they rely upon should be provided with educations that are international in scope and which aim to amongst the best the world has to offer. Examples of measures that need to be taken are: better use of exchange programs/study abroad periods; increase intake of overseas students; more foreign language training; increase the use of foreign external examiners; extend visiting academic initiatives and programs; benchmark international best practice in design education.
- Design schools should be helped to build up and support doctoral and post-doctoral level research that is focused on fundamental, theoretical, methodological and technological issues.
- The kids! Primary and secondary school students could be introduced to design earlier and design should be an integral part of arts and crafts education at all levels in the educational system.
4 Awareness

- Governments and businesses are beginning to take the design industry seriously: treating design not as an art form but as an industry and a vital business tool; Design Years in 2005 are a welcome symbol of governments’ willingness to support design but more needs to be done to raise awareness.

Recommendations

▷ Industry in general needs to be more aware of the business benefits of employing professional designers.
▷ Industry needs to more aware of in-house design competences and integrate them fully into management and strategic planning.
▷ Design firms need to more aware of and better at presenting the business case for their products and services.
▷ The public sector and public authorities should include the design dimension much more when purchasing decisions.
▷ More coherent and representative industry associations are needed.
▷ Scandinavian Design is a well established and robust international brand that could be better used.
What is design? Why is design important?

Introduction

The term design has become something of a buzz word in recent years. In the marketplace designer goods are everywhere and consumers are increasingly assessing products on the basis of their design. In businesses and firms design is increasingly understood to give firms a competitive edge and to help in improving things like production processes and times. In policy circles design has also been seized upon as an important industrial resource and a potentially important employer.

Design is often talked about as an important part of products, as an area of artistic endeavor, and as contributor to the Nordic countries’ global image but very little has been said about the industrial organization and dynamics of design in the Nordic countries. In recent times, design has become not just the preserve of high profile artistic entrepreneurs but the core product around which an industrial system of firms and related institutions and business practices has grown up. The subject of this report is the rapidly expanding professional design industry and how we can better understand its industrial functioning, innovation system and its competitiveness: and how we can support it.

This report outlines the key findings of a year long research project on the industrial competitiveness of the Nordic design industry. The research was carried out by 14 leading researchers from all of the Nordic countries. In addition, a group of 6 people with professional experience of design acted as a representative and reference group for the project. Its aim was to assess the state of the design industry and to develop suggestions and recommendations for how the industry’s competitiveness can be supported.

This report has been written for those active in the design industry and in the use of design as a strategic business tool. The report is intended for designers, interested observers, design clients, and public policymakers alike.

More detailed country reports and case studies can be found at www.nordicdesign.org
The report contains policy recommendations: policies and actions that can be taken by government, local authorities, industry organizations or firms. Some of these recommendations are general in nature some are very specific, but it is hoped that all will stimulate debate. These actions and policies are flagged by this symbol: 

What is design?

Design, in the English language, implies a broad and wide-ranging process that exercises control over a product’s entire life cycle: from idea to production to distribution to marketing and so on. In most Scandinavian languages ‘design’ is limited in focus to aesthetic (and perhaps ergonomic) aspects of a product: to its form. The English version of the term is gradually becoming commonplace in Nordic countries and in the minds of business people and designers.

Design is a very difficult concept to define but one may say that design is a central component of what we think of today as innovation. Design involves not just the aesthetic aspects of a product but also their overall technological performance and character. The act of design involves not just shaping a product’s appearance but also involves a range of inputs into the creation of the form and function of a product and its production, marketing and appeal to the consumer.

As a commercial product/service design exists in a variety of forms.

- Business-to-Business B2B
  
  **Design services:** specialized design firms that supply design services to other businesses and organizations (e.g. designing a website for a supermarket; designing a house for a building firm; designing components for a car maker)

- Business-to-Consumer B2C
  
  **Design products:** where the entire value of the product is its design (e.g. designer ornaments and home decorations)

  **Designed products:** where design is an important add-on or extra dimension that allows functional products to be sold at much higher prices (e.g. designer office furniture; high-end cars)

When thinking about design, it is also worth noting that it does not need to be integrated into the whole of the product’s life story. Design can be used in many different phases or stages in the product’s/service’s life cycle.

“Design capability is employing vision, process, creativity and technical skill to develop products, services and brands that capture the imagination of customers throughout the world” New Zealand Government’s Design Taskforce.
Design is commonly associated with the initial stages of developing (or redeveloping) a product - in the process of conceptualizing what is to be done or changed. Having established an aim or concept to operationalize, designers and design can prove invaluable to arriving at the right technical solutions to problems associated with production, storage and distribution. Finally design is increasingly being employed in the commercialization phases. Here design plays a crucial role in shaping the ways in which consumers find out about a product (marketing and advertising), how it appears to them when they are making a decision (packaging, retail environments, etc.), and in how they experience using the product (and therein the likelihood they will want to buy something more from the firm).

Thus it may be that a design firm is employed to develop a new concept for a product or service. Alternatively it may be that design and designers play an integral role in every stage from the birth of an idea all the way through to marketing and after sales. Design then can be sold in different forms (as a B2B service, as a design product, etc.) and it be involved in all stages of the business cycle.

Why is design important?

Design can be seen to offer considerable benefits to businesses and products. Indeed design can be seen to:

- **Increase the value (utility) of the product** to the user by making the product's user interface functional; intuitive, safe, easy of use, easy to maintain, etc.;

- **Increase the aesthetic, symbolic, and visual quality of the product** by manipulating the form, line, proportions, and colors and by considering the psychological and aesthetic needs of the user;

- **Improve the ability to manufacture the product** by simplifying the structure of the product and taking into consideration material choices, production processes, and assembly;

- **Promote rational standardization** to increase the effectiveness of parts logistics, decreasing work in progress and inventories, decreasing the amount of tooling needed, achieving larger purchase quantities, and thus decreasing unit costs, etc.

"Design is a multifaceted concept which not only includes function and appearance, but which also suggests ease of manufacture and increasing the value of the product or providing features that make them sell at a profit”

• **Promote lower environmental impacts** by allowing better incorporation of, for example, energy saving features, increased durability, aesthetic timelessness, recyclable parts, etc.;

• **Improve the ability to market the product** by considering buyer behavior, objectives, and hopes, and informing buyers in a way that makes selection easier;

• **Help companies break into new markets** by adapting products to local conditions and by taking into consideration international competition;

• **Enhance the communication of corporate vision and enhances brand building**;

• **Allow for higher levels of product differentiation** from the competition through the visual qualities of the product.

Although in general it is hard to say whether it is the design of a product – rather than, for example, its price – that makes it successful there are some empirical indications that design has a real strategic value to firms.

One indication that design helps boost competitiveness comes from our examination of the Norwegian National Innovation Survey. This shows that firms that are significant users of design are the most international. While the importance of national markets is equal for firms that prioritise spending on R&D and those that prioritize design, firms that spend the most money on design are more likely to operate in international markets than firms which do not.

<table>
<thead>
<tr>
<th>Market orientation</th>
<th>Non-users</th>
<th>R&amp;D users</th>
<th>Design users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>61</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>Local cross border (Sweden/Finland/Russia)</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>National</td>
<td>31</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>International</td>
<td>7</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm size (no. of employees)</th>
<th>Non-users</th>
<th>R&amp;D users</th>
<th>Design users</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-49</td>
<td>85 %</td>
<td>73 %</td>
<td>71 %</td>
</tr>
<tr>
<td>50-99</td>
<td>9 %</td>
<td>12 %</td>
<td>9 %</td>
</tr>
<tr>
<td>100-249</td>
<td>4 %</td>
<td>8 %</td>
<td>11 %</td>
</tr>
<tr>
<td>250-499</td>
<td>1 %</td>
<td>4 %</td>
<td>4 %</td>
</tr>
<tr>
<td>500+</td>
<td>1 %</td>
<td>3 %</td>
<td>6 %</td>
</tr>
</tbody>
</table>

Source: Statistics Norway Technological indicators

The Norwegian firms which are high users of design also tend to be bigger.

In a study commissioned by the British Design Council the share prices of a total of 166 UK design-led companies was tracked. A group of 63 companies (the ‘Design Portfolio’) chosen for their consistent showing in various design award schemes outperformed both the FTSE All Share and 100 indices by around 200% between 1994 and 2003. A further of 103 companies (Emerging
Portfolio) whose awards success approached that of the Design Portfolio, enjoyed a similar level of over achievement. Effective users of design strongly outperform their peers on the stock market.

Design can be sold in a variety of forms and be involved in all phases of a product or service’s life. However, whilst design is everywhere and can be a difficult thing to define and delimit, analysts and business are beginning to understand how central design is to Nordic industrial competitiveness. The rest of this report rests then on the assumption that design is a key enabler for firms in the majority of industries. **Given the importance of design as a central element in overall economic competitiveness then the support and development of the industry that supplies this strategic resource should be a key priority to us all.**
The design industry: firms, people and growth

In recent years the Nordic countries have seen rapid growth in the number of design firms and the number of people employed in design activities. There has also been a general rise in revenues and turnovers indicating that the market for Nordic design, at home and abroad is growing.

Because every business involves some degree of ‘design’ we decided to limit our study to specialized design firms. The rest of this report is focused on design services sold to other firms (B2B design firms) and firms that produce/sell design products to consumers (B2C design product).

Looking at specialized designers and producers of design goods is interesting for many reasons not least the fact that design as an industry is a relatively recent phenomenon. It is clear from our research that firms and individuals within ‘design’ are increasing conscious of their role and value and are capitalizing on this by professionalizing a set of diverse knowledge-based products, services and activities under the banner of commercial design. Instead of, as in the past, attempting to find jobs as in-house designers in larger firms in other industries an ever increasing number of design-interested people are setting up their own consultancies or design oriented firms. In the figures presented below we also include architectural services since many architecture firms now provide general design services (though designers and architects are usually educationally and institutionally separated). The study has also tried to gather as much information as possible on designers and design ‘hidden’ within firms that do not specialize in design: car manufacturers and electrical appliance manufacturers often employ many in-house designers.

**KEY POINTS**

- There are over 20000 design and architecture firms in the Nordic countries.
- There are over 27000 people employed by design and architecture firms; in addition there are a significant number of one-person firms, freelance workers, and designers employed in other industries.
- Growth in the number of firms and employees has been stronger in all countries than the national average.
- Design and architecture firms are heavily over-represented in the capital cities and larger urban areas.
- The Nordic design industry needs to internationalize, be more diverse, and have better access to venture capital and business skills if it is to become globally competitive.
At present measuring design as an industry and identifying design firms in official statistics is very difficult and problematic. In order that government and the industry can plan for the future more accurate, disaggregated and carefully attuned industrial statistics on design are needed.

- National statistical bodies need to develop more accurate measures and statistics on design
- Nordic national statistics should be coordinated so that comparison and benchmarking is possible

Firms and employees

Throughout the Nordic countries there have been significant increases in the number of active firms and the number of people employed in design.

It is extremely hard to accurately estimate the number of design firms and the number of people they employ. However, official statistics (where they exist) give us the following picture:

<table>
<thead>
<tr>
<th>Country</th>
<th>Firms (including architecture)</th>
<th>Firms (excluding architecture)</th>
<th>Employees (including architecture)</th>
<th>Employees (excluding architecture)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden 2002</td>
<td>11199</td>
<td>8459</td>
<td>9177</td>
<td>4238</td>
</tr>
<tr>
<td>Denmark 2000</td>
<td>5607</td>
<td>2714</td>
<td>10369</td>
<td>2846</td>
</tr>
<tr>
<td>Finland 2002</td>
<td>2358</td>
<td>921</td>
<td>2233</td>
<td>796</td>
</tr>
<tr>
<td>Norway 2003</td>
<td>2100</td>
<td>927</td>
<td>5543</td>
<td>1483</td>
</tr>
<tr>
<td>Iceland 2003</td>
<td>117</td>
<td>18</td>
<td>528</td>
<td>90</td>
</tr>
</tbody>
</table>

All figures are based on official statistics and come from the individual country reports: www.nordicdesign.org
Figures for employees do not include sole traders/owners/single person firms.

Though the design industry employs relatively small numbers of people and is made up of predominantly small firms it should be remembered that the design industry has a role in the economy far beyond direct employment. As mentioned earlier these firms and workers provide services that are of strategic importance to the entire economy and to all industries.
Despite many differences the Nordic countries have seen consistent growth in the design sector: both in the number of active firms and the number of people working in these.

In Finland and Sweden, the number of firms and the number of employees has been steadily rising. In general, growth rates are higher in the areas of industrial, interior and graphic design. Moreover, there have been generally higher growth rates in firm establishment than employment. In all countries the strongest feature has been the establishment/start-up of new firms. This high rate of new start-ups is the result of new entrants: though there are also high rates of firm exit as new firms fail to survive. This means that the Nordic design industry is in a turbulent period and is at present an industry almost entirely dominated by small firms that are quite young. Although due to statistical difficulties it is hard to get a reliable general picture, evidence exists to indicate that similar development is occurring in Denmark, Norway and Iceland.
The vast majority of firms — whether they are new start-ups or older firms - are almost entirely single person firms - what are often called sole traders. In Denmark in 2000 87% of industrial design and 84% of interior design firms were sole traders.

### Number of firms by size (measured by number of employees)

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Denmark 2000</th>
<th>Norway 2002</th>
<th>Sweden 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>4431</td>
<td>1008</td>
<td>4255</td>
</tr>
<tr>
<td>5-9</td>
<td>847</td>
<td>355</td>
<td>990</td>
</tr>
<tr>
<td>10-19</td>
<td>142</td>
<td>181</td>
<td>185</td>
</tr>
<tr>
<td>20-49</td>
<td>81</td>
<td>97</td>
<td>95</td>
</tr>
<tr>
<td>50+</td>
<td>35</td>
<td>26</td>
<td>36</td>
</tr>
</tbody>
</table>

**Very small firm sizes dominate** the industry. The fact that the industry is dominated by small firms could be seen to increase its creative potential and innovation levels: smaller, younger firms tend (in all industries) to be more innovative. The existence of a variety of small and flexible firms also allows the design system to react quickly to new types of project and new demands: networks of small firms that can quickly assemble project teams is increasingly a competitive strength of the Nordic design scene.

However, small and young firms face many challenges that make their survival precarious. The key challenge to small (and young) firms is lack of resources.

**Venture and seed capital** is a particular problem for small firms in the design industry. Firms and design workers in all countries reported problems getting the right backing from banks and venture capitalists: financial institutions and venture capitalists seem to have limited knowledge (and interest) of the design industry. On the other hand design firms have generally low knowledge of the various forms/sources of VC. Also in many cases design firms lack skills in business planning and approach adequate to convince venture capitalists that they will get a good return on their investments. For small design firms the principal sources of capital are personal savings/loans or ‘angel investors’ (e.g. parents). For many types of design this is a limited problem as entry costs are low: usually office space and computing equipment. For other types of design – e.g. furniture design – entry costs are high due to the need to produce expensive prototypes and invest in technical machinery and seed/venture/development capital is vitally important. For all types of design lack of adequate venture and development capital is a significant hinder to their development; and a major barrier to their ability to develop into new markets and export markets.

**Lack of resources** can also be seen in the very low levels of basic skills seen in the industry. In our study small firms’ lack of experience and understanding of basic business skills was a constant cross national feature. Whilst they may be extremely good at doing the creative work itself they are most often lacking in management, marketing, accounting and administrative functions. In the future such problems may be alleviated by design educations which go further than today in incorporating entrepreneurial and business skills training. Education however is more of a long term fix and for today’s design firms their small sizes and low levels of capital make buying in competences, skills and resources difficult. Furthermore, efficient sub-divisions of labor are impossible
in single person firms and the solo designer is forced to take on a variety of roles they may not be qualified or able to deal with.

Industry organizations and public authorities could produce information packages and organize targeted seminars to help financiers and venture capitalists understand what investing in design involves and the potential returns.

Designers need better information on how to contact and organize access to the right sorts of venture capital, financing and stock/share offers, etc.

Regional dimensions

One of the starkest findings of the study is that in all 5 countries the design industry is heavily concentrated and over-represented in the major cities: especially in the capital cities.

- Denmark 1999: Copenhagen region 1278 design firms (55% of Danish design firms); Århus 300 design firms (13% of Danish design firms).
- Finland: majority of firms based in Helsinki, however, the largest Finnish industrial design consultancy is based in Turku (Åbo).
- Iceland 2003: 63% (114 firms) of Icelandic design firms in greater Reykjavik.
- Norway 2003: 48% of design firms and 50% of design employees and 56% of total industry turnover are in the capital city region of Oslo/Akershus.
- Sweden 2003: 50% of design firms and 52% of industry turnover are in Stockholm; Västra Götaland (Göteborg region) had 15% of firms and 23% of turnover; Skåne (Malmö region) had 12% of firms and 7% of turnover.

Evidence is also suggests that the strongest growth in design firm revenues is also concentrated in the capital cities. In Sweden in 2002-3 a total of 402 design firms had increases in turnover of over 10%; 205 of these were based in Stockholm and 144 of these had increases of over 20%.

The fact that design firms and employees tend to be concentrated in certain areas cannot be explained purely by the fact that there are more people in urban areas. In all countries concentrations of design activity that are well beyond what one would expect to see if design was to be evenly distributed across space. These concentrations should instead be explained by the idea that agglomerations or clusters of industrial activity tend to lead to higher productivity and lower transaction costs. Where industrial activity is concentrated it is easier to meet clients and find new business. It is also easier to source specialist services and find specialist labor. Moreover the proximity to
potential collaborators makes project based working – a central way of organizing design work – easier and more flexible. Proximity to collaborators, competitors and innovators also means that firms located in agglomerations tend to be more innovative and up-to-date since they can see and meet new ideas and trends on a daily basis. In our research we time and time again came across designers that stated that informal social networks and ‘just being there’ helped them with their work, finding clients, and staying innovative and relevant.

A further dimension to this is that smaller local concentrations tend to survive longer and be more profitable if they are relatively specialized in a particular area of design and don’t try and do everything. This suggests to us that regional specialization should be encouraged and that regional resources (like specialized educations) should try and support specialization.

ős Clustering is important to the design industry and should be encouraged Cluster organizations can help organize and be portals for access to pooled business support, R&D funding advice, legal services, marketing, and expert advice/consultancy.

ős Meeting places of different kinds can help build social networks and improve communication and knowledge flows between firms and individual designers. Such meeting places can be in the form of conferences or seminars, or in the form of design centers where related firms can share facilities and resources, and earn to work together.

Design People

Whilst the main focus of attention for this report is firms that specialize in selling design services and products there are a great many designers, design groups and design activities that do not happen within the ‘design industry’. For example the Nordic countries can boast of a large number of big firms in other industries that invest considerable resources in design and directly employ design staff.

Figures from Sweden show that if we use statistics on occupations instead of figures on what firms do we find that there are significantly more designers in the general workforce than in a narrow definition of the design industry.

**In 2002 in Sweden there were a total of 33768 people employed in design and design related occupations.** Only 9177 were employed in the design industry itself. In other words there were well many more design professionals in the rest of the workforce than there was in the design industry.

Design policy and design education obviously has a role to play in these peoples’ lives and not just in supporting a set of design firms. These people possess considerable skills – all countries reported very high levels of formal educational achievement in the design workforce – and one may wonder whether better integrating them into the design industry itself should not be a
long term goal for the industry. There already exist links between designers in design firms and those in other industries/the public sector but these links could be greatly increased: especially through labor mobility. Design firms might therefore find it useful to look to hiring designers working in other industries and not just concentrate on employing new graduates from third level design schools and courses.

This ‘hidden’ design workforce also represents a considerable pool of potential entrepreneurs. However in most Nordic countries those employed in other industries are reluctant to make the jump into the design industry and the jump into the turbulent waters of starting up a small business. In Finland there exists a useful form of ‘half-way-house’ which allows people to both work for a company and to pursue commercial activities without needing to go all the way and set up a firm of their own. This freelance system is particularly popular amongst Finnish designers and may help ease them gradually into setting up firms of their own, and/or allow them to periodically work in an industry they would not consider working in fulltime. As can be seen from the table below, in Finland freelance workers are a significant group in certain areas of design:

<table>
<thead>
<tr>
<th></th>
<th>Industrial Designers</th>
<th>Interior Designers</th>
<th>Graphical Designers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freelancers</td>
<td>0,0 %</td>
<td>11,0 %</td>
<td>18,6 %</td>
</tr>
<tr>
<td>Entrepreneurs</td>
<td>20,7 %</td>
<td>41,0 %</td>
<td>35,2 %</td>
</tr>
<tr>
<td>Employees</td>
<td>37,8 %</td>
<td>21,0 %</td>
<td>29,6 %</td>
</tr>
</tbody>
</table>


Government and tax authorities should investigate alternative business and company forms: Finland’s freelance system, for instance, may be more useful to some creative individuals than the registered firm system in operation in many Nordic countries.

Diversification

The tendency to concentrate in certain areas can be interpreted as an attempt to be near a diversity of experiences and competences. Worldwide industries with high levels of creative content and knowledge based work have been shown time and time again to do best in places with both a diversity of related industrial activities and openness to new ideas, skills and workers.

Statistics on the Nordic design industry indicate that firms located in areas with the greatest diversity of firms engaged in similar and related activities perform better and have longer life-spans. This indicates that industrial and firm diversity increases competition and competitiveness in the long term. In the long term improving the diversity of activities and types of design firm is constructive. As too is the presence of design firms and design intensive industries.

Encouraging the diversity of national and regional design clusters should be a priority - Inward investment could improve the competitive and knowledge base of the national industry: inward investment agencies (e.g. Invest in Sweden Agency, Invest in Denmark,
Innovation Norway) should target international design firms and design-intensive firms and sectors to locate offices or projects teams in Nordic regions.

Diversity of skills and cultural backgrounds in the workforce is also crucial for innovation/new perspectives and building international sales and commercial development networks. Moreover there are many that believe that the closer the demographics of your firm or your industry is to its customers, the closer it will match their desires and sell more.

Unlike many industries the Nordic design industry is very even in terms of its gender makeup: in all countries – with the exception of Iceland – design industry workers are roughly 50:50 male:female.

Whilst relatively equal in terms of gender at present there are extremely few Nordic design workers from immigrant backgrounds

<table>
<thead>
<tr>
<th>Employees in the entire workforce with design as an occupation, Sweden 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of origin</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>Europe excluding Nordic</td>
</tr>
<tr>
<td>Nordic excl Sweden</td>
</tr>
<tr>
<td>Asia</td>
</tr>
<tr>
<td>North- and Central America</td>
</tr>
<tr>
<td>South America</td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>Oceania</td>
</tr>
<tr>
<td>Unknown citizenship</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Statistics Sweden

Moreover relative to other industries there are very few foreign nationals (expatriates) working on short or long term bases in Nordic design firms or design intensive industries. Visits from and short-term work performed by foreign designers can help bring new perspectives, contacts, and skills into the Nordic industry. Far from being a threat to domestic employment such inward flows are most likely to support the long-term development and prosperity of the industry.

New talent is important: support the inward migration of foreign design experts and professionals.
Getting out there: Growth, commercialization and export success

The products and services offered by Nordic design firms are mostly sold within the Nordic region, and most commonly in firms’ national or local markets. However, an increasing number of design firms are beginning to think about exporting and finding new markets. Nordic designers and architects have long often enjoyed strong global sales figures and international reputations: for instance products based on the designs of figures such as Arne Jacobsen and Alvar Aalto; and design intensive firms such as Bang & Olufsen and IKEA.

In this section we explore in more detail the issue of how firms can be helped (by themselves and others) to grow on the basis of better commercialization of their products and on the basis of exports.

Evidence from the study shows that, in most countries, the design industry is exporting more than before. The table below shows that in the Danish case, whilst still a very small export industry, design’s export growth has outstripped the rest of the economy.

<table>
<thead>
<tr>
<th>Year</th>
<th>Design exports</th>
<th>Total Danish exports</th>
<th>Design as percent of total Danish exports</th>
<th>Design exports growth indexed (1999=100)</th>
<th>Danish economy’s export growth indexed (1999=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>51.5</td>
<td>47126.5</td>
<td>0.109</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2000</td>
<td>60.6</td>
<td>54644.2</td>
<td>0.111</td>
<td>117.7</td>
<td>116</td>
</tr>
<tr>
<td>2001</td>
<td>75.1</td>
<td>56844.4</td>
<td>0.132</td>
<td>145.8</td>
<td>121</td>
</tr>
</tbody>
</table>

*Design is here total for indoor interior, industrial design and architectural services
Currency rate of 31.12.01 of DKK 1= EURO 0.13391, 2000 of DKK 1= 0.13404, and 1999 of DKK 1= 0.13445 euro. A full stop indicates a decimal point.
Source: Statistics Denmark

As noted earlier (Section 1) evidence from Norway suggests that firms that use design extensively are more likely to export.
What are you selling? Commercializing intellectual property

Design firms are very often concerned with selling intellectual property (IP) of different types: e.g. product ideas, images, forms, marketing and advertising concepts. Some of these will have a very limited lifespan, others may result in a design that has a very long commercial lifespan: e.g. a design classic. In contrast to many other IP driven industries – music, film, publishing, and pharmaceuticals – the design industry tends to sell its products for one-off fees. This means that even if the design IP has an extremely long lifespan or has an enormous effect on the client’s sales volumes and profitability the designer receives little if any of this added value.

This situation is good for the clients, as they can buy valuable IP at relatively low cost. For designers the situation is more mixed. The simplicity and transparency of buying exclusive IP rights makes it easier and more attractive for clients than more complicated arrangements. However, many designers are beginning to question whether they are not in fact selling themselves short and missing out longer term revenue streams and on revenue streams from spin-offs or by-products of the IP: for example from future product lines based on the original design, licensing fees or publishing fees for photos. There is no doubt that Nordic design firms can create innovative and competitive IP, but there may be problems with their commercialization of this IP: i.e. how they bring it to market and profit from it.

In the future design firms, and the design industry as a whole, should think hard about how they commercialize their IP. A first step may be to investigate alternative payment and billing models. At present the majority of contracts involve one-off payments which effectively sign over intellectual property rights (IPR) over to the client. Other industries involved in the development and sale of IPR to clients have successfully used other payment models. For instance, it is ever more common now in advertising that the client pays on the basis of the effectiveness of the campaign: if the product’s sales go up the advertising agency’s commission follows. Indeed such commission or grow based payment models might attract new clients and motivate design firms to invest more in products/services with medium to long term commercial potential. Design firms should also be more careful how the designs they have produced become distributed in other forms – as licensed photos, sold onto third parties, etc. – and attempt to incorporate revenue streams from spin-offs in their contracts/agreements with clients.

Government and patent authorities should examine the operation of copyright and intellectual property in relation to design industry products and professional services.

Provide specialized legal services giving advice to small and medium sized design companies on IPR issues and commercial strategies: especially in connection to exporting IPR.
Enhance the internal and external knowledge about IPR: although the Nordic IPR regimes are fairly well developed there may be a need for a better understanding of design firms’ rights and potential profit streams.

Networking and working together

As we noted earlier being an industry of small firms has both positive and negative effects. On the positive side being small means that you can be more flexible in your thinking and you can push through your own vision and focus easier than in a large firm. Indeed small firms tend to be more innovative and experimental and to grow at higher rates than larger ones. This is of great importance for coming up with new product ideas and export ideas.

On the minus side small firms most often lack sufficient capital and internal expertise to: fully fund the development and commercialization of new product ranges; expand into new export markets. This is not just a question of capital as new products/services and expansion into new markets (at home or abroad) often demands insider and expert knowledge. For instance to be successful in foreign markets often demands language skills, an understanding of the local culture and business environment, detailed knowledge of import regulations, tendering, taxation, etc. and of distribution channels and industry gatekeepers.

The most pragmatic and (perhaps) cheapest way to overcome the problems and expense such barriers can be is through the effective use of networks. Many of the design firms we interviewed that had export success or international clients said that at some point personal and professional networks and links had been crucial.

Enhance international networks by supporting inward investment and visits and by supporting design firms attendance at international trade fairs and the like.

Networking is, however, not just about making friends and contacts to smooth your firm’s entry into new markets. In many segments of the design industry, firms are not just competing with each other but with other service industries that are able to offer, for instance, broad and varied communications services or product development packages. For example, small graphic design firms offering only specialized graphic design services are coming into increasing competition with advertising agencies that can offer broad communication packages: packages that often include use of in-house design departments. Internationally many of the largest design firms are adopting a similar model and selling clients packages that combine everything from product, graphic and process design to marketing. This of course need not be done under one roof: small firms that are well networked can equally successfully assemble project groups able to offer broad design packages. However, at present inter-firm networking in Nordic countries is minimal and firms tend to stick to their own niche rather than attempting to network and bundle their services with other design specialties. Thus networking can help small firms with product offer issues whilst allowing them to concentrate on the aspects of the design business they are best at.
Support professional networking initiatives and industry associations that are aimed at linking small firms together so that they can share experiences and offer joint product packages.

Bridging gaps

Getting into new markets – whether they are abroad or ‘simply’ new market segments at home – is difficult if firms do not have knowledge of the new market or have contacts. Getting to know new markets can be very costly: not just in terms of travel costs but also the time (and potential wasted time) involved in getting to know a market.

Such difficulties are greatly complicated by language differences. In all the Nordic countries there are often significant cultural and language differences between design and Business. Clients in other industries often have a hard time understanding what constitutes good design (and a good choice of design supplier) and equally designers often have poor understandings of the needs and important actors in other industries.

For small design firms bridging these gaps is a costly and often unsatisfying process. Many of the firms we talked to in the course of our research pointed to the fact that they had been greatly helped in reaching new clients and new markets by personal and business contacts that were insiders in the target market. Indeed in many creative industries – for instance in the film and music industries - this process is made easier by professional contact brokers and by agents/matchmakers. In the future design firms might find it most expedient to employ brokers/agents/managers. Equally cluster organizations and industry associations in other sectors might find that sharing the establishment/hiring of an agent capable of finding the right design competence might be a good investment.

Agents and brokers can play a valuable role bridging the gap between design and traditional industry.

Cluster and industry organizations should support meeting places and contact brokers to help bridge different worlds.

Courses on how to pitch projects and negotiate in the language of target industries could be provided.

Trade fairs, showcases and exhibitions

Trade fairs, showcases and exhibitions play an important role for most segments of the design industry. For producers of designer goods – such as designer furniture or fashion design – they are often the main way to enter new markets and to get in touch with contract or wholesale buyers.
Apart from the important job of selling product, trade fairs are also important for firms in a number of ways: making and maintaining social/business contacts; getting new ideas and staying up-to-date; finding new employees and partners; sourcing suppliers and services; getting press and publicity.

In all the Nordic countries trade fairs are an increasingly important part of the design firm’s landscape. However, whilst national/local trade fairs are seen by many as the most important for their business there is a growing awareness of the benefits of participating/attending international trade fairs. The importance of international trade fairs, showcases and exhibitions is especially high for firms engaged in specialized or niche products and services where national or even Nordic markets are simply too small. In addition, a growing trend is that Nordic buyers (from a wide range of industries) of design products and services are increasingly attending international trade fairs, such as Milan Design Week. This means that for design firms attendance at international events is a growing part of finding customers at home as well as abroad.

The costs of attending trade fairs are high. The costs of participating and exhibiting in international trade fairs are extremely high and out of the reach of most small Nordic firms. Nordic firms that attended the Milan Design Week 2004 which we interviewed estimated costs of on average 50,000 euros for exhibition and staff associated with such an event. Such estimates did not include the costs of prototypes, etc. developed for the fair or the costs/difficulties in getting the right stand, press coverage, etc.

- Trade fair support should be recognised as a real investment opportunity (and not just a promotional exercise) by export authorities and trade bodies. Funding attendance and for activities that link firms with potential clients and marketing/press channels should be prioritized.

- At trade fairs export authorities and industry organizations can help administrative issues and translation services, and by helping pre-arrange business and press contacts and meetings.

- Nordic and national trade fairs should be supported in efforts they make to internationalize: internationally recognised trade fairs greatly enhance the national brand and help firms to access wider markets.
The Nordic countries have an extensive and high quality design education system. Such a system is central to the long-term competitiveness and innovativeness of the design industry. However, the educational system is currently in a period of rapid change as it tries to cope with dramatic rises in the number of students. New courses and institutions are opening and existing ones are quickly expanding. In addition, it is clear that the changes occurring within the design industry and design markets the educational system is also been faced with some hard decisions about how to maintain quality and relevance.

Universities and design schools: third level education

Traditionally design was a relatively marginal subject in Nordic educational institutions. Though architectural education has been well developed for a long time, design education was most often limited to crafts and vocational courses or as a marginal subject within history of art. However in recent years design has become a strong independent educational field that encompasses a wide variety of foci. In conjunction with the rising status of the subject there has been a marked increase in the number of students interested in studying architecture, design and design-related courses and programs.

In addition there has been a rapid rise in the number of design courses and programs offered in third level institutions and indeed a general expansion in the size and number of institutions involved in design education.

Although there are many ‘design’ students only take a few design courses as a part of wider studies or only complete a part of a design program there are increasing numbers of people, in of the Nordic countries, who have successfully completed specialized graduate degrees in design and related subjects. Some professional designers have reported to us that they are worried that many of these will not find employment within the industry; on the
other hand they are happy that the supply of well qualified candidates for employment has increased.

**Number of full-time students in third level design programs in Sweden.**

![Graph showing number of full-time students in third level design programs in Sweden.](image)

**Number of students completing a degree in Norwegian design programs**

![Graph showing number of students completing a degree in Norwegian design programs.](image)

In the Icelandic case there are significantly more Icelandic students studying design overseas than there are home students. However whilst the majority of Icelandic design students go abroad – mainly to Denmark – there has also been more students choosing to study design in Iceland and more courses available for them to choose from.

Whilst the situation is not as extreme as in Iceland, many Nordic students choose to study design overseas. Such flows often raise the issue of 'brain

drain’ and led to speculation that those that go overseas never return. In the Icelandic case this has been partly true. However, on a Nordic level it is generally accepted by design professionals that overseas studies and work experiences are a valuable asset.

**Numbers of students in Icelandic academies; number of Icelandic students studying design overseas**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iceland</td>
<td>Abroad</td>
<td>Iceland</td>
<td>Abroad</td>
</tr>
<tr>
<td>Multimedia/3D design</td>
<td>0</td>
<td>18</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Architecture</td>
<td>0</td>
<td>49</td>
<td>0</td>
<td>55</td>
</tr>
<tr>
<td>Graphic design</td>
<td>89</td>
<td>28</td>
<td>81</td>
<td>45</td>
</tr>
<tr>
<td>Industrial/Product design</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Pottery</td>
<td>12</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Textile/fashion design</td>
<td>0</td>
<td>14</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Interior design</td>
<td>-</td>
<td>29</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>Civil design</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Design and arts</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Totals</td>
<td>117</td>
<td>169</td>
<td>120</td>
<td>207</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland

Indeed a main recommendation coming from our survey of Nordic design educations is that **design educations need to be internationalized** to a far greater extent than they are today. Earlier in this report we suggested that greater levels of contact with the outside world would help design firms gather in new ideas and skills and increase their export potential. In order for firms to be more international, the students and future design professionals they rely upon should be provided with educations that are international in scope and which aim to amongst the best the world has to offer. The following steps could help this happen:

- Internationalize: Mandatory exchange programs/study abroad periods
- Internationalize: International work placements as part of courses
- Internationalize: Increase intake of overseas students
- Internationalize: More courses in English and more foreign language training
- Internationalize: Engage in debates (such as the Bologna process) over how to make the transfer of educational credits and qualifications across European boundaries easier
- Internationalize: Increase use of foreign external examiners
- Internationalize: extend visiting academic initiatives and programs
- Internationalize: Make better use of Nordic exchange programs such as NordPlus
- Increase collaboration and joint programs/courses between design schools in the Nordic countries
- Benchmark international best practice in design education

When talking to design professionals about their experience of the educational system a constant theme was that most (though not all) design educations on
are based on the traditional arts school emphasis on the solitary genius: "the primadonna". Professionals were concerned that team working and collaborative problem solving was not prioritized; and in many cases effectively discouraged. There is a feeling that students are taught to expect to be the ‘next big name’ and that this mitigates against working effectively and smoothly with others. An added dimension of this is that the focus on creating primadonnas tends to led students to focus on artistic creativity and to neglect the problem solving, production oriented and entrepreneurial/business elements so essential to making a career in the design industry.

Whether or not it is true that students are taught to be primadonnas, it is generally true to say that design education in the Nordic countries systematically **fails to provide students with basic business and management skills**. Given that the majority of the students will work in the private sector and a significant number will startup small firms this is a serious failing. Time and time again firm respondents cited the problems they had with administrative, management, legal and marketing issues – artistic creativity was never cited as a problem. Many designers said that when they started working they felt poorly prepared not only to deal with business issues within their own firm but also with business people from other industries. Design educations should start addressing this problem by better integrating such considerations into their courses or by having students complement their education with courses in business studies or management faculties where available.

- Introduce business, management and entrepreneurship training as an integrated part of design education
- Internships – both in design firms and in non-design firms: e.g. a manufacturing company.
- More teaching done by non-designers: e.g. managers from companies which buy in design services or product ideas
- The importance of design management must be emphasized not only in design schools but also in business schools
- Create an understanding within the educational system that there is a need for more team based working and collaborative projects

Though much of the teaching and instruction that goes on in Nordic design institutions is of world class standard, concern was also voiced that those employed in design schools/courses may have low levels of pedagogical training. The addition of so many new students and courses has put further stress on the system and increased schools’ reliance on teachers who are first and foremost practitioners. This means they are likely to have little formal pedagogical training and have little experience of academic research and the latest academic insights.

- External teachers should continue to be used: Design education should continue to collaborate closely with professional designers; it could also benefit from teachers drawn from other disciplines like business studies and management.
- Support a system of external examiners that can quality control teaching and examination standards and advise on best practice
- Design teachers should not only be practitioners but also academics and trained teachers.
Research

The Nordic design education system is almost entirely devoted to educating students at undergraduate and Masters levels. At present design institutions and departments are, relative to other academic disciplines, seldom focused on research and development. Architecture tends to fare better and have much higher rates of research and many more research students but is still low in research compared to other disciplines. However it is in design that the most problems lie. In general there is little fundamental theoretical or methodological research work produced and doctoral and post-doctoral research is largely non-existent. Where research is conducted it is typically from the perspective of art history. There is beginning to be research in areas such as technology and product development as well as in design economics and management but at present this is under-funded and has a low profile.

This is a problem for the long term competitiveness of the Nordic design industry. In other areas of business – from biotechnology to banking to building construction – the value of basic and applied research conducted in universities and educational institutions has long been recognised as vital. Basic research on methods, new technologies and new ways of understanding cognitive processes and consumer psychology are examples of areas where work is needed. Applied research on management and organizational issues, product development and design implementation, and design marketing are also fruitful areas for research.

In the medium to long term investing in research creates the foundation and climate for innovation and technological development that has an enormous impact on industrial and firm level competitiveness. Research work and research dissemination (through books, articles, lectures, conferences, etc.) conducted by those at doctoral and postdoctoral levels are particularly important. Educational institutions and subjects with strong research tend to: have stronger and more up-to-date teachers; to contribute to the development of the industry; and have a higher profile in society. Improving/creating an internationally competitive research environment for Nordic design should be seen as immediately necessary.

- More research-based design educations: expand doctoral programs and funding
- Build up and support post-doctoral level research in design schools
- Encourage and hire lecturers/professors with research backgrounds
- R&D funding for design that is focused on fundamental, theoretical, methodological and technological issues
- R&D funding for design that is open to all disciplines: including economics, business studies, and engineering. It is also important that design education and research is cross-disciplinary.

Research funding and educational reform tends to be a national issue and occur on regional and national levels. However, there is much to be said for pooling resources when it comes to research and education. What design research that does exist in the Nordic region is currently very scattered and unconnected. A valuable attempt to address this fragmentation might be to build networks and in particular centers for Nordic research: centers that are
not just Nordic but open to bringing in the best design expertise the world can offer.

☐ A Nordic funded global design future lab aimed at making the Nordic region the centre of research and experimentation with design and design applications. In the USA research labs have had a long and successful history in driving forward academic research and business spin-offs and applications (e.g. MIT Media Lab, MIT Laboratory for Computer Science, Stanford Center for Design Research).

Finally it is perhaps unsurprising that a group of researchers such as us thinks that it is a good idea if there is more research on design as an industry and business. More research on the Nordic design industries is needed if we are to better understand the direction the industry is taking, the types of international competition it is facing, and the types of challenges and solutions facing design firms and design users.

The kids!

Since education is a life long process we need not only think about design education as something best left until people have left primary and secondary school. An appreciation of design at an early age and what the design process involves should be encouraged. Not only would this help produce more and better designers but it would also raise the profile of design and the public understands of its value.

In schools and pre-schools across the Nordic region there is already a fine tradition of artistic education and instruction. However, this education is almost entirely focused on fine arts and on handcrafts with an emphasis on individual artistic skills.

☐ Design should be an integral part of arts and crafts education at all levels in the educational system.
☐ Design education in schools should emphasize design as an innovative process based on problem solving skills and team working.
☐ Create projects that increase children’s awareness of design (e.g. Fantasy Design Projects).
**Awareness**

*The importance of promoting awareness of the design industry and design in general*

The term design has become something of a buzz word in recent years. In the marketplace designer goods are everywhere and consumers are increasingly assessing products on the basis of their design. In businesses and firms design is increasingly understood to give firms a competitive edge and to help in improving things like production processes and times. In policy circles design has also been seized upon as a potential growth area and as an attractive gloss to boost the image of regions and cities.

Despite the fact that the word appears everywhere it is also clear that design needs to be more visible and people need to be more aware of what it involves. Increasing awareness of what design is and what the design industry can offer involves engaging with many sectors of business, politics and society: at home and abroad.

**Knowing Me, Knowing You**

Design is a reasonably young term in the business world and there is still a general need for promoting design: in particular to make traditional industry more aware of the necessity of using design as a competitive edge. However, if the awareness of why employing professional design firms/designers is to grow in other industries it must be a two-way street:

- The business sector/other industries need to be made more aware of the benefits and value of employing professional design inputs and
how it can enhance its use of design. It should also be aware of the challenges in employing and operationalizing design.

- The design industry needs to be more aware of the needs and demands of their clients, and to be more aware of the how to have fruitful dialogue and cooperation with other industries.

It can be said that it has not always been possible for the managers of business organizations to be convinced of the ‘the business case’ (Ainamo and Korhonen 2003) for making design investments. For business managers (especially those who have not used design firms before) there is often a lack confidence that the costs of the initial design investment will be matched sufficiently by increased revenue streams: that design will pay back the initial cost. In addition whilst business managers and decision makers are now extremely familiar with the costs, benefits and complementarities between such things such as production innovation, marketing and advertising they are often unsure of how to integrate these with design inputs: i.e. not sure of where design fits in and what extent it should). There is, in short, a lack of understanding of the complementarities between design and other elements of product development and commercialization.

Uncertainties over the returns on investment and a lack of awareness of design’s wider role and complementarities may well explain why many firms take a minimalist approach to investing in design or buying-in design services. An awareness of the extent to which design and design innovation is integrated into the business models of many successful global firms – e.g. Apple, Samsung, Electrolux – would greatly help the business case for employing professional designers and design firms. Firms need also to be aware of the complexities of the design process and understand that successful design rests upon a long investment in methods, techniques and time on the part of designers: that the design process is not as simple as quickly sketching a plan. Being more aware of designers own investments and costs should help firms understand the value of professional designers’ work and the price that good design comes at.

As we have noted earlier there are already many people with design training and design competence working within other industries. However, there are big gaps between managers and designers. In most cases in-house design teams and designers tend to be marginalized and there are low levels of awareness of their potential value as integrated members of entire business cycle planning/management. Designers are often marginalized and placed in a special category. This may allow them extra creative freedom but also means that they find it harder to integrate systemic design strategies into the firm’s operations. Is this because designers are afraid of leadership or is it because management in many sectors does not yet fully realize the importance of design?

- Design departments and in-house designers should be better integrated in firm strategic planning and general firm hierarchies
- Experiences of design and design firms should be discussed and distributed within firms and be integrated into staff development programs
Firms who intend to use design or enhance their use of design should invest time in seeking the right advice.

Firms using design should benchmark themselves against other firms in their industry/sector and research best practice.

Increase awareness about design in traditional industry by creating meeting places and strategic projects within the firm or with networks and milieus the firm moves within: e.g. in cluster initiatives, industry conferences.

The need for greater awareness is far from being limited to the client’s side. Given that many design firms are essentially service providers, it is surprising how little understanding of their client’s business and operating environment many design firms have. This is partly a question of time and scale: most design firms are small and have clients from a range of different sectors making it hard to be aware of all their needs and circumstances. However, time and time again throughout our research we were offered the opinion that designers tend to ‘speak a different language’ from those working in more ‘traditional’ business sectors. Designers were said, for instance, to be more concerned with presenting the object/design itself than presenting financial projections or how the design could be integrated with other elements of the firms operations.

Designers must be linked to the buyer/customers to a higher degree. The mindset must be more focused on competitiveness, market orientation and internationalization. Design companies must be better at using, for example, management and marketing.

The business perspective must be more important in the design sector in order to better present the business case for the product/service they are selling.

Design firms should take note of the importance of presenting the business case for their services/product in a language that is easily understood and trusted by their potential client.

Different types of meeting places must be created in order to facilitate the meeting (and in order to increase the mutual understanding of each others activities and ‘ideologies’) between ‘businessmen’ and designers.

The Public use of Design

The general public and the public sector are ever more aware of the value of good design. But policies are still needed to increase the awareness amongst both consumers and the public sector of design’s potential as an industry, as an important part of other industries success and in promoting a better life for all in society.

Across the Nordic countries the Design Year in 2005 will hopefully be successful in raising awareness of the many benefits of design and design professionals.

The design year is a window of opportunity. Better information strategies are needed though, as well as resources, if the Year does not go by unnoticed.

Design Years should be coordinated at Nordic levels - a Nordic Design 2005 campaign and website is a good idea.
A Nordic initiative that goes beyond 2005 and takes up the momentum produced by the national Design Years could help raise awareness of Nordic design in the long term.

It should be remembered that in the Nordic countries the public sector accounts for a large share of consumption and spending. A key aim of the Swedish Design Year is to encourage all public authorities – from hospitals to the military – to be more aware of the value (and savings) design can bring if integrated into public purchasing. Such a policy could give a real boost to design firms and provide powerful incentives for all industries to make better use of design. Public support for new technologies and innovation should also be more aware of design.

The public sector must include the design dimension much more when purchasing decisions.

Create national funding for strategic design projects where design and non-design firms can get funding to startup projects/product development in innovative areas.

More ‘design driven’ business intelligence and technological foresight studies are needed to help regional and national policymakers make educated policies.

**Scandinavian Design?**

The term Scandinavian Design first appeared in 1951 as the title of an exhibition of home decorations and furniture – ‘Scandinavian Design for Living’ - at London’s Heal’s Department. The exhibition was the first of a series of showcases for Nordic design, decoration and furniture. In 1954-1957 ‘Design in Scandinavia’ toured Canada and America to great success and similar collaborative exhibitions in Milan during the 1950s and Paris in 1958 (‘Formes Scandinaves’) helped to form a globally recognized brand. Despite being pronounced dead and buried in the 1980s the term has reemerged in recent years both in the international press and in the form of showcases and exhibitions such ‘Scandinavian Design: beyond the myth’.

Due to the often rigid ideas of style and good taste that became associated with the term it has become a controversial and often unpopular label for many Nordic designers.

Whatever the term’s artistic merits may be, it cannot be denied that outside the Nordic countries ‘Scandinavian Design’ has become a commercially powerful and valuable brand that signifies modern design and high quality. It can be argued that in the wider world, it functions less as a marker of particular forms/styles than as a quality mark. In this sense it has become a brand or label similar to other place-based labels.
such as ‘Paris Fashion’, ‘Made in Italy’, or ‘Swiss Watches’. National versions of ‘Scandinavian Design’ such as ‘Swedish Style’ or ‘Norwegian Design’ have also begun to be internationally recognized.

For small firms in the Nordic countries such ready established commercial brands can, if they want, help them market their products internationally. National or Nordic government bodies could help.

Support for common branding abroad: Brands such as Scandinavian Design or Swedish style are valuable and have currency abroad. However, brand building and maintenance is a delicate process. Efforts made should not be focused on particular ‘styles’ or ‘aesthetics’ but on attributes such as quality and diversity. The aim should be to promote Nordic design as an internationally recognized brand (or set of brands) such as ‘Paris fashion’: brands that are not owned by particular groups/organizations and that work to promote diversity, quality and desirability not a particular set of styles.

The public should allocate more money/resources for the international marketing of Nordic designers.

**Industry bodies**

In all industries professional associations and organizations play an important role. In particular they represent the interests of their members and have the power to give a strong united voice to collective wishes. Industry associations may also be important for setting professional standards and raising the status of their members and the profession.

Although the Nordic region is home to the world’s oldest design association – Svensk Form – the industry is served by a generally fragmented set of bodies. There are significant gaps in coverage, many associations represent narrowly defined branches of design, and some of the larger associations are seen to be more concerned with promoting ‘good design’ than supporting firm competitiveness. There is evidence that this situation is in change and in many cases there is a period of mergers and reorientation going on. This process is creating new, more industry focused design associations that are based on a broader definition of the design industry than their predecessors.

More united industrial representation needed to present a coherent voice on common issues: umbrella industrial organizations or federations could provide this.

A more coherent set of professional or industry representative bodies could lobby government and provide a link between policy and the industry.

Industry bodies are in an ideal position to provide courses/programs/seminars to promote awareness in the wider business community – e.g. educating business managers on how to shop for design.

Financing national studies on profitability and design (following the lead of the British Design Council) and supporting applied business research

Industry bodies should focus on firm and business issues and less on issues of style and content.
What the future holds...

Conclusions and reflections on the future in design

In this report we have tried to give an overview of the key findings of our year long study of the Nordic design industry. In particular we have been concerned to present the reader with a variety of recommendations and suggestions on how the industrial competitiveness of the design industry and its firms could be supported. What is clear from all of the above though is that the design industry is a relatively young industry: one trying to define itself, professionalize, and find its place in the marketplace. It is undoubtedly an industry that, in the Nordic countries, has already demonstrated a sustained capacity to grow. It is an industry that has great potential and strategic importance but it is also an industry in a period of transformation and flux.

The future of the design industry itself can take many forms. In our work on the Nordic industry we have identified 5 models of how the design industry may be likely to develop. These models or directions are based on what is happening at firm level in the Nordic countries and indeed internationally. We hope that the following 5 models will help people think about different strategies and trajectories the industry and its firms can take.

1. **The specialization model.** The industry is dominated by small firms that do not network or work with each other. They offer only specialized and niche services. The question here is how long can isolated firms survive in niches? In the long term it is likely that the majority of firms will die and the industry will weaken unless wider structures and networks can develop to help these small specialists find new methods and markets.

2. **The accountancy, advertising and finance model.** In this scenario the design industry follows the lead of service industries like accountancy and advertising. The industry becomes dominated and characterized increasingly large firms with an international outlook. These large firms attempt to everything in-house and offer a broad integrated product range – everything from designing the concept to the production process to the marketing. This model would give significant economies of scale and raise the industry’s profile but might make it harder for innovative and new ideas to break through.
3. **The music industry model**: in this model what happened in the music industry occurs. Here we see some large majors supplying most services and dominating large parts of the global market. However, at the same time a large number of independents (some quite big) compete with the majors and also cooperate with them through project-based work, out-sourcing, licensing, etc. In this scenario there is an uneasy balance between giants and smaller but specialists. However, this interplay leads to wider global reach: for big firms because they can source local specialist knowledge; and for small firms because they use the channels opened up by the global majors to reach new markets.

4. **The network model** (flexible specialization). In this model there are many small specialized firms who are linked together in networks. These networks might, for instance, be project-based, grouped around niche markets, or be based on social and personal contacts. However, they are built up the networks allow firms to cooperate on a variety of different projects, to learn from others, and draw in specialist skills. In this model firms use network resources to be more flexible - but it is because there are no powerful organizers/big firms scale and organizational problems can cripple dynamism.

5. **The Volvo/Nokia/Global Manufacturer model**. In this model specialist design firms are largely absent or marginalized. Here large firms and corporations do design internally in design departments. It is these firms (e.g. consumer goods or car manufacturers) that are in reality the majors in the ‘design’ industry; even though they are not categorized as design firms. This scenario may have 2 effects: they will in the long term not hire designers; or in the long term design firms will disappear and design departments rule.

In reality, of course, these models all exist to some extent today. For example, the network model is becoming more prominent in various forms: from guerilla groups to formal firm networks. At the same time large global corporations are building up ever larger in-house design departments but also drawing on the services of specialists and ‘accountancy model’ firms. In the short term we expect to see all 5 exist and become increasingly aware of and compete with each other. Perhaps as the realization grows that design can no longer simply be seen as an add-on but instead must be seen as a core competitive characteristic of all products and services the market for design will grow to the extent that all of our 5 scenarios stay in play.

Whatever the organizational form firms take it is clear that there exists a tremendous wealth of design experience and potential in the Nordic countries. We should not ignore the potential of these industries by not supporting them with timely industrial, regional, national and Nordic policies. We believe that we are at a stage where much is hanging in the air and that the Nordic region has a chance of being a world-class power in a design economy that will help not only generate jobs and growth but also enrich the region’s long term innovation potential.