Establishing the basis for the elaboration of the Estonian design policy measures
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0.1 Executive summary

This report presents a proposal for an Estonian design policy. The underlying hypothesis is that good design is a strong competitive factor. Design is marginal to production costs and paramount in terms of market impact.

The proposal for an Estonian design policy is based on three research studies. The studies deal with Estonian design supply, Estonian demand for design, and design policies in a number of comparable countries. The analyses of supply and demand are based on desk research, interviews and questionnaires. The analysis of design policies is based on desk research.

A vision for Estonian design seven years from now was made to establish a direction for the policy proposal. Comparing present supply and demand with the vision and examining design policies in other countries led to the proposal.

One clear result of the supply and demand studies is that there exists a strong interest for professional design and that there is ample room for improvement.

> Supply

The analysis of the services offered by Estonian designers and by Estonian design education are marked by the country’s recent history. Information and exchange of services have not flown freely between Estonia and the western world.

Estonian designers feel that they cover the Estonian supply in terms of quantity and quality. Estonian designers have the advantage of smallness. They earn low salaries and they are accustomed to small series production in small companies with small economies. Low fees essentially keep foreign designers out of Estonia.

Nevertheless, low salaries do not result in foreign commissions to Estonian designers. They lack a number of skills such as international experience, technology and knowledge of marketing and business. Estonian designers are fully aware of these deficiencies and are eager to know what happens outside Estonia to get on international level.

More than anything else Estonian designers feel a lack of contact with Estonian business and industry, and they want to change this.

Estonian design education, primarily provided by the Estonian Academy of Arts, suffers from the same too-many-years-in-shadow syndrome as the design profession. The need for internationalisation is evident and so is the need for close two-way contact with a motivated business sector. On top of that, the EAA severely needs funding and technical infrastructure and to some degree a generation shift in the faculty.
Demand

Estonian companies are in general low on a design maturity scale. They produce relatively many anonymous goods and few branded goods. Failure to use design effectively is both a cause and an effect in this situation. Estonian business and industry are caught in a gridlock situation. Because they don’t invest in design, they are not asked for design. Because they are not asked for design, they don’t invest in design.

The main reason for not investing more in design is economic considerations. Estonian business and industry seem to focus on the fact that investment in design will definitely result in costs while the profits are uncertain. They seem to focus less on the fact that the cost of design is marginal to total production costs while the effect at the point of sales may be paramount.

Estonian business and industry in general are aware of the existence and importance of design. They simply feel that they haven’t arrived, and they lack the impetus to get started. The result is that design does not play a decisive role in product development, while graphic design is left to advertising agencies. Design management hardly exists as a professional function. In most companies design management is covered by people with other responsibilities.

Companies, which have worked with design seem to be more reactive than proactive in their search for information on new design. Their competitors set the agenda.

Finally, Estonian business and design do not completely share the view that local supply of design is sufficient. Some of the largest companies buy design services abroad to get international experience. Others solve the problems internally because Estonian designers know too little about marketing and business and technology.

Design policies in other countries

Design policies and proposals for design policies in six countries have been analysed. These countries are: Denmark, Finland, Sweden, Norway, Ireland and Korea.

The six countries have different objectives for their design policies. Most of the countries state increased competitiveness as their primary objective. The logic is that increased competitiveness will create jobs and economic welfare and – eventually – increased quality of life, materially and spiritually.

The six national design policies address different sectors. All design policies address business and industry. Most policies address designers and design education. Some policies address the public sector. Some policies address general and international audiences.

There are at least three reasons for addressing the public sector. First, an increased use of design will create better public services. Second, an increased use of good design in the public sector will encourage the design sector. Third an increased demand for and use of good design in the public sector will educate both industry and a general audience.
After dealing with goals and target groups, the analysis of design policies lists the prescribed actions in operational terms. These include such means as literature, meetings, consulting, education on many levels, economic incitements, awards, and public procurement.

> Proposal for a vision

To help steer the creation of an Estonian design policy, the report proposes the following vision for Estonian design in 2010. The vision deals with three issues: getting informed about design, designing, and informing about design.

Getting informed

In 2010, the Estonian design sector will have access to and benefit from the most comprehensive design intelligence in the world. A design information centre will monitor what happens on the international design scene – in theory and practice – and see to that this information is distributed to all parts of the design sector. Design education will take place on a truly international level.

Designing

In 2010, Estonian business and industry will be fully aware of the importance of design. Practically all companies will use design for adding value to their products and services. The majority of companies will buy state-of-the-art design services from local and foreign designers. The public sector will spearhead the use of professional design and inspire both consumers and business and industry. Estonian designers will work on a truly international level and sell their services to local and foreign clients.

Informing

In 2010, Estonia has established itself as a locus for professional design. The international markets and design press know that something is boiling and keep eye on Estonia. Professional designers know that Estonia is a great source of design information. Estonian tourism is recognised for its well-designed facilities and communication.

> Proposal for a design policy

The immediate objective of the proposed Estonian design policy is to improve the Estonian design sector. Improving the design sector will strengthen the competitiveness of business and industry. Strengthening the competitiveness of business and industry will in turn improve employment, earnings, wealth and quality of life. Improving the design sector will also improve the quality of life through better products, services and environments.

Information surrounds successful design. This is true of the design process applied to the single product and it is true of design as a national resource. Therefore, like the vision, the proposal for an Estonian design policy involves three main themes: getting informed about design, designing, and informing about design. The Estonian design sector must be informed, it must turn information into successful design, and it must inform the world about design.
The proposal for a design policy includes the establishment of a design information centre plus a number of policy measures targeted at the following sectors:

- Business and industry
- Public sector
- The Design community
- Education and research
- General public
- Tourism and transportation
- International audiences

On request by the Estonian Ministry of Economic Affairs we have among these proposals for design policy measures given priority to a number of design policy measures at our choice:

**Design information centre**
- Establishing the centre
- Estonian design website
- E-mail newsletter
- Library
- Foreign guests
- Designers index

**Business and industry**
- Information booklets
- Icebreaker program

**Public sector**
- Information booklets
- Competitions
- Knowledge sharing

**The design community**
- Continuing education
- Travel grants
- Benchmarking

**Education and research**
- Shared courses
- International teachers and researchers
- Business education
- Traineeships
- Travel grants
- Business education

**Tourism and transport**
- Information booklets
- Adjustment of Welcome to EST campaign
- Competitions for street furniture, graphic communications and websites
0.2 Design: an agent for change

In everyday language, the word design is often used to describe products in which visual appeal plays a major role. This generally means such things as cars, fashion, and beautiful objects for the home. This is only part of the story. Design deals with much more than aesthetics.

The word design refers to a process and to the results of the process. The process involves giving shape to man-made objects that have a useful purpose. Shape must be understood in its broadest sense.

Design involves only man-made objects. We do not design the stones and shells we find at the beach, and other wonders of nature are not designed. Designed objects must have a useful purpose. For this reason, the term design does not include free art.

Design does include architecture, but we generally place architecture in a category of its own.

Design is often divided in three categories: product design, graphic design, and interior design. Today design often includes a fourth category, interaction design, a field that deals with modern man-machine relations. Some graphic designers call themselves interaction designers and devote their work to the design of computer interfaces.

Designed objects serve different purposes. Their quality of design is evaluated with these purposes in mind. A hammer that is not good for hammering is badly designed.

We are only interested in the technical performance of some products. With others, we are primarily concerned with visual appearance. An essential part of the designer’s job is to understand which qualities are essential and to provide them. While technical function and visual appeal are often described as opposing qualities, this need not be the case. In fact, the functional qualities of a product often give a product its beauty. Many believe that function is the primary basis of beauty.

The qualities of a product must be evaluated in terms of its human use. Ergonomics, for example, involves the human aspects of engineering that address the physical relation between human beings and machines. This is a field of considerable interest for serious designers. Today, we also discuss cognitive ergonomics, the ergonomics of the brain. This involves the way in which we convey information to make it most easily noticed, read, understood, and accepted. The kinds of questions we ask in ergonomic terms are: How must cockpits, chairs, and flight instruments be designed to keep pilots alert for ten hours or more?

Technical function, ergonomics, and visual beauty are only some of the concerns of the designer. Economy plays a critical role in all professional design. The designer who designs a chair so expensive to manufacture that nobody can afford it has missed the point. Industrial designers, designers designing for industry, must always think in terms of production. However, the process does not stop here. The product must also be shipped and it must eventually be sold in a shop. How does it pack for transport? How is it to be presented at the point of sale?
Today, all designers know that design and industrial production must be seen in a wide perspective. Beyond this, design must be sustainable. Scarce materials and energy must be used with care. The total life cycle of the product must be considered. What happens to the product when it is disposed of? Can it be recycled or reused in other ways?

In brief, design deals with the creation of products, services, communications, and environments that serve a purpose. In other words, the purpose of design is to provide the qualities that users appreciate and need. This means that users will demand and pay for these qualities, and that fact makes design a powerful competitive resource.

The important thing about design as a competitive factor is this: the cost of good design is generally marginal to the costs of production, while its effects on sales are generally of greater value than the costs.

Today, many companies offer products that are technically equal to one another. Most reasonable products meet equivalent needs on equal technical terms. In such situations, design can often be a decisive factor in consumer choice. Cars and mobile phones are good cases in point. Moreover, technology is now so complicated that the consumer must trust the product and the company behind it. This takes us directly to corporate identity and branding.

The identity of a company comprises what the company does, how it does it, and how it communicates. The better coordinated these three factors are, the more effectively a company can use them to speak with a consistent, comprehensive voice across all its products and services. When this happens, the company can develop a clear corporate identity that is known and appreciated by the stakeholders.

We all prefer to deal with somebody we know. A company that creates a visual identity coherent with purpose and action can make itself seen, remembered — and appreciated. Branding is about creating an identity that is so strong that the market will demand more and pay more for the products or services of the company. Years ago, branding generally related to products. Today, we also talk about corporate branding. The market wants to know who is behind the merchandise. This is a central factor in the trust that every company needs in today’s competitive markets.

Visual communications play a special role in creating corporate identity. The first thing we hear about a company is often something we see. Visual impressions are sometimes stronger than words and they often influence us in ways that words do not. The most important design job of any company is the design of the company itself.

One can argue that businesses and countries with a primary economy do not need much design. A primary economy is based on natural goods in various forms, including wealth from mining, petrochemicals, forestry, and agriculture. Nevertheless, as companies and countries climb up the ladder to a tertiary economy based on manufacturing advanced products, services and experiences, they come to realize that design is a sine qua non. They will not succeed without it.

Good design does not just happen. Somebody in a company must manage the design of products. Somebody must manage design in terms of processes. Somebody must manage the design of the company itself. Together, these management functions are known as design management.
According to Nobel Laureate Herbert Simon, to design is to devise courses of action aimed at changing existing situations into preferred ones. That is the case on the micro level when we talk about the design of a product or an environment or a piece of communication. It is also the case on the macro level when we talk about the whole business sector or a country. Professional design is an agent for change: change for the better.
1 The project
'Establishing the basis for elaboration and application of Estonian design policy measures' is a project commissioned by the Danish Ministry of Economic and Business Affairs from Mollerup Designlab A/S.

Mollerup Designlab A/S has appointed a project team with the following members:

- Per Mollerup, Dr.Tech., Managing Director  
  Mollerup Designlab A/S, Copenhagen
- Ken Friedman, Ph.D., Associate Professor of Leadership and Strategic Design  
  Department of Leadership and Organization  
  Norwegian School of Management, Oslo
- Pekka Korvenmaa, Ph.D., Professor  
  Department of Product and Strategic Design  
  University of Art and Design Helsinki, UIAH
- John Landerholm, Industrial Designer  
  Landerholm and Lund, Århus

Per Mollerup acted as project manager.

The Estonian Ministry of Economic Affairs and The Estonian Designers Association helped to gather information.

1.1 Project objectives

The immediate goal of this project is studying the supply of and demand for design services in Estonia. It will also investigate design policies of some countries that are comparable. Based on the findings, the study will propose a set of design policy measures for Estonia. The implicit long range objective of this project is to increase the competitiveness of Estonian business and industry.

1.2 Project structure

The goal of this project is moving Estonian design from the existing state to a preferred state. This requires bridging the gap between the existing situation and the preferred situation. It will be impossible to evaluate proposed policies and impossible to control and evaluate policy implementation without explicitly describing the desired situation. We therefore included a vision describing a preferred situation of Estonian design seven years from now.

The full report for the project includes five parts:

- Study of supply of design services
- Study of demand of design services
- Study of selected design policies
- Proposal for a vision
- Proposal for a design policy
The study of supply and demand will establish the status quo of the Estonian design sector and detect needs for improvement.

The proposal for a vision will – compared with the study of supply and demand – establish needs for improvement.

The study of selected design policies will provide comparable information about what other countries have done to improve their design sector.

The proposal for an Estonian design policy will recommend ways to improve the Estonian design sector.
2 Design supply
The purpose of studying the supply of design services in Estonia is to assess the sector and — in a wider perspective — to consider what can be improved how. Studied by itself and then in comparison with demand, the design supply study will suggest the need for policy measures to improve the quality of the Estonian design services and the competitiveness of Estonian business and industry.

The study of design supply comprises studies of the design profession and design education in Estonia.

2.1 The design profession

The study of the design profession includes a quantitative and a qualitative analysis of the Estonian design supply.

The quantitative analysis is based on existing statistical material supplemented with data gathered in the field. The quantitative analysis includes:

- Number of designers
- Structure of the design profession
- Turnover
- Export

The qualitative analysis is based on interviews with — and questionnaires completed by — designers. It includes designers’ opinions about the current situation and possibilities for improvement.

2.1.1 Quantitative study

According to an assessment offered by Estonian Designers Association, there are more than 600 professional designers in Estonia. The Estonian Designers Association has 160 members.

<table>
<thead>
<tr>
<th>Designers in Estonia</th>
<th>Graduated*</th>
<th>In business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic</td>
<td>222** + 49</td>
<td>250</td>
</tr>
<tr>
<td>Product and furniture</td>
<td>222** + 46</td>
<td>20</td>
</tr>
<tr>
<td>Interior</td>
<td>444</td>
<td>200</td>
</tr>
<tr>
<td>Park &amp; garden</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Fashion</td>
<td>222</td>
<td>100</td>
</tr>
<tr>
<td>Ceramics</td>
<td>168</td>
<td>10</td>
</tr>
<tr>
<td>Glass</td>
<td>129</td>
<td>15</td>
</tr>
<tr>
<td>Jewellery</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>1,291</td>
<td>620</td>
</tr>
</tbody>
</table>

Source: Estonian Designers Association
* From Estonian Academy of Art 1947–2002
** Product + graphic (previously combined in one line of education)
The Estonian Graphic Designers Association offers an alternative estimate concerning graphic designers: Roughly 300 graphic designers, persons who work exclusively as designers. Probably 200 graphic designers are employed in agencies while 100 graphic designers work freelance. 99 graphic designers including 33 retired graphic designers belong to the Estonian Graphic Designers Association.

The Estonian Enterprise Register, gives the number of companies – and the number of employees in companies – which state design as one of their activities. The Estonian Enterprise Register includes six types of design activities:

- Creating and managing Web pages
- Advertising services / Advertising agencies
- Design of company style (corporate identity)
- Manufacturing and installation of outdoor advertisements
- Product design
- Designing of furniture and other elements of interior design

Figures from the Estonian Enterprise Register have been adjusted to provide information relevant to this study:

- Companies with no real design activities have been deleted.
- Many of the companies listed in the Estonian Enterprise Register had no employees because the owner is not included in the statistics. We have added one employee for all companies entered with zero employees, and a positive turnover.
- For companies where the number of employees was not given, this information has been gathered from the Estonian tax authorities.
- Companies facing liquidation, bankruptcy proceedings, and similar troubles have been removed.
That gives the following figures:

<table>
<thead>
<tr>
<th>Companies with design activities</th>
<th>Companies</th>
<th>Employees</th>
<th>Designers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web</td>
<td>39</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>177</td>
<td>766</td>
<td></td>
</tr>
<tr>
<td>Company style</td>
<td>14</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Outdoor ads</td>
<td>16</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>3</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Furniture a.o.</td>
<td>20</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>269</td>
<td>1,112</td>
<td></td>
</tr>
</tbody>
</table>

Sources: The Estonian Enterprise Register / The Estonian tax authorities / The Estonian Ministry of Economic Affairs

Not all employees in ‘companies with design activities’ are designers by education or by practise. The designer share of employees may roughly be estimated as:

- Web 30%
- Advertising 20%
- Company style 100%
- Outdoor ads 10%
- Product 100%
- Furniture etc. 50%

This adjustment leads to a rough estimate of designers employed in the six above mentioned industry sectors:

<table>
<thead>
<tr>
<th>Estimate of designers employed in companies with design activities</th>
<th>Companies</th>
<th>Employees</th>
<th>Designers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web</td>
<td>39</td>
<td>176</td>
<td>52</td>
</tr>
<tr>
<td>Advertising</td>
<td>177</td>
<td>766</td>
<td>153</td>
</tr>
<tr>
<td>Company style</td>
<td>14</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Outdoor ads</td>
<td>16</td>
<td>64</td>
<td>6</td>
</tr>
<tr>
<td>Product</td>
<td>3</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Furniture a.o</td>
<td>20</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>269</td>
<td>1,112</td>
<td>287</td>
</tr>
</tbody>
</table>

Sources: The Estonian Enterprise Register / The Estonian tax authorities / The Estonian Ministry of Economic Affairs

The companies in question are relatively small companies. The average number of employees is 3.87.
The number of employed designers, 287, may be compared to the total number of Estonian designers stated by Estonian Designers Association, 620. The gap between the two figures may primarily be explained by three facts. First, these statistics do not include in-house designers in companies that do not list design as one of their activities. Second, designers who work on their own are not included. Third, unemployed designers are not included.

The number of employed designers in the four first mentioned categories in the above table, 243, may be compared to the estimated number of agency employed graphic designers offered by the Estonian Graphic Designers Association, 200.

The Estonian Enterprise register also deals with company turnover and export:

<table>
<thead>
<tr>
<th>Companies with design activities</th>
<th>Companies</th>
<th>Employees</th>
<th>Designers</th>
<th>Turnover 1,000 EEK</th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web</td>
<td>39</td>
<td>176</td>
<td>52</td>
<td>26,600</td>
<td>5</td>
</tr>
<tr>
<td>Advertising</td>
<td>177</td>
<td>766</td>
<td>153</td>
<td>904,079</td>
<td>34</td>
</tr>
<tr>
<td>Company styl</td>
<td>14</td>
<td>32</td>
<td>32</td>
<td>13,13</td>
<td>1</td>
</tr>
<tr>
<td>Outdoor ads</td>
<td>16</td>
<td>64</td>
<td>6</td>
<td>124,239</td>
<td>5</td>
</tr>
<tr>
<td>Product</td>
<td>3</td>
<td>13</td>
<td>13</td>
<td>5,660</td>
<td>0</td>
</tr>
<tr>
<td>Furniture a.o.</td>
<td>20</td>
<td>61</td>
<td>31</td>
<td>12,932</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>269</td>
<td>1,112</td>
<td>287</td>
<td>986,687</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: The Estonian Enterprise Register / The Estonian tax authorities / The Estonian Ministry of Economic Affairs

All employees contribute to the stated turnovers. However, if we assume that design is the primary driver of sales for these companies we can say that the total turnover – close to one billion EEK – is generated by design.

The Estonian Enterprise Register does not list the volume of export for individual companies, it only gives a ranking which – for our purpose – can be read as a confirmation that a certain company exports its services or products. Out of 269 design related companies included in the statistics, 50 companies are exporters. A close reading of the statistics reveals that the exporting companies are not necessarily the largest companies. Most important, the statistics do not suggest design as an Estonian export trade.

There does not exist a statistical body describing the turnover and export of independent designers.

With the figures given by Estonian Designers Association and Estonian Enterprise Register as point of departure we could assume the following employment figures of Estonian designers.

- Total number of designers: 620
- Designers employed in six industry sectors: 287
- Designers employed in other sectors: 133
  - fashion, textiles, glass, ceramics
  - Interior architects: 200

These figures have been confirmed by the Estonian Designers Association.
2.1.2 Qualitative study

> Interviews

With the advice of the Estonian Designers Association, we have identified a number of designers suitable for interviews. The Estonian Ministry of Economic Affairs approved the list:

- Martin Pärm: industrial design, freelance*
- Matti Ūnapuu: industrial design, freelance*
- Villi Pogga: industrial design, freelance*
- Eerik Olle: interior design, freelance*
- Tiina Mang: interior and furniture design, freelance*
- Ivo Nikkolo: fashion design, owner of fashion company
- Andrus Köresaar: graphic design, owner of design firm**
- Ivar Sakk: graphic design, freelance*

* Designer who works basically alone.
** Designer who has a number of employees on a fixed base.

The interviews included the following topics, but interviewees were free to expand:

Identification of the interviewee:

- What are the designer’s educational background, career development, and professional development?
- What is the designer’s current professional status? Does a manufacturer or a consultancy employ the designer, or is the designer freelance?
- If freelance, what are the designer’s past and current client relationships?

The current situation:

- What is the design supply situation in the particular professional field of the interviewee?
- What is the Estonian design supply situation in general?
- How do Estonian industry and business see Estonian designers?
- What is the quality and relevance of design education in Estonia?
- What is the nature of design competition from other countries?
- What is the nature of Estonian design export today?
Estonian designers:

– What do Estonian designers know about the business of business, about marketing and about market communication?
– Do Estonian designers have internationally competitive advantages?
– Are Estonian designers internationally oriented?
– What competencies do Estonian designers need to be more competitive?

Improvement of the current situation:

– What design policy measures would be helpful?
– How could a design centre be helpful to the design profession?
– What are the critical barriers to professional design in Estonia?

> Questionnaire analysis

After studying the interview results, we distilled 12 essential statements about Estonian design supply. Due to the small interview sample, we wanted to test these statements. 28 designers selected by the Estonian Association of Designers (including some already interviewed) were asked to comment on the 12 statements by assigning points on a 1–7 scale, where 1 means: I don’t agree at all, and 7 means: I fully agree. Designers in the analysis:
The statements were:

– There are enough designers (industrial, graphic, interior or fashion) in Estonia to cover current demand.

– Estonian business and industry are satisfied with Estonian designers.

– Design education at the Estonian Academy of Art is relevant to professional needs.

– Estonian designers have no competitive advantages compared with designers in other countries.

– Estonian designers feel no competition from abroad.

– Only very few Estonian designers export their services.

– Estonian designers are internationally oriented.

– Estonian designers know too little about business and marketing.

– Estonian designers need possibilities to meet business and industry.
– Estonian designers need support for studies abroad.
– Estonian designers need lifelong learning through continued education after graduating with a professional degree.
– The major problem, Estonian designers face today is too little awareness of design in the business community and in the public sector.

The rating of the statements appear along with the analysis of subjects they touch. Six of the statements were approved strongly with average points over six on the 1–7 scale. Six other statements were assigned average points between 3 and 5.

>> The current design supply situation

Designers educated in industrial design tend to leave the trade for graphic design and advertising because they cannot find employment. Five years after they will have problems to return to the trade for which they were educated.

Depending on how one counts industrial designers, there are too many or too few. Many designers are educated, but few are ready for employment. More active designers might help to activate industry’s potential demand.

Too many interior designers are educated for today’s demand. Interior architects who specialise in furniture design have a hard time. Many take work as sales assistants and seek other occupations where they cannot use the skills for which they were educated.

Employment prospects for fashion designers are rather bleak.

Graphic designers with Estonian education feel strong competition from those who have got their professional training abroad, be it in schools or in jobs.

Questionnaire analysis
‘There are enough industrial designers in Estonia to cover current demand’ was confirmed by 5.19 points on a 1–7 scale.

>> The way Estonian business and industry see Estonian designers

According to designers interviewed, Estonian industry and business do not have strong opinions about Estonian industrial designers. Most companies don’t realise that they have a design problem and have no contact with designers. They are more occupied with technological problems than with design considerations. Some companies may have an interest in design, but are not prepared to pay. Only furniture manufacturers and fashion manufacturers have frequent contacts with designers.

Estonian interior designers are well respected. During the Soviet period Estonian industrial designers had a certain reputation as it was the only place in the East block where education in interior architecture was given.
In the field of graphic design Estonian business seems quite satisfied with Estonian designers. Articles in business journals confirm that. However, large internationally operating companies typically buy design services from foreign firms to get better and more strategic design.

Questionnaire analysis
‘Estonian business and industry are satisfied with Estonian industrial designers’ was given 4.31 points on a 1–7 scale. That result is very near to the middle of the scale (4). The average covers a large cluster of figures near to the middle. According to these results, designers believe that Estonian business and industry are neither extremely satisfied nor extremely dissatisfied with Estonian designers.

>> Competitive advantages of Estonian Designers

Estonian industrial designers are inexpensive, used to working with very few resources, and used to working with design for production in small series.

Estonian graphic designers may have a bad reputation in some quarters. They are sometimes considered Russian and exotic.

Questionnaire analysis
‘Estonian designers have no competitive advantages compared with designers in other countries’ was given 4.42 points on a 1–7 scale. Slightly confirming result, although not significantly so.

>> The quality and relevance of design education in Estonia

Industrial design education for the bachelor degree is acceptable. Education for the master degree is not yet good enough.

Interior design education is good.

The interviewed graphic designers held a relatively low opinion about the quality of graphic design education at the Estonian Academy of Art and referred to a critical article in kunst.ee 3/2002: Sitt ehk põnevat Eesti graafilises disainis. While teaching methods are acceptable, and students learn many techniques, they do not learn how to think about what clients need.

Questionnaire analysis
‘Design education at the Estonian Academy of Art is relevant to professional needs’ was given 3.85 points on a 1–7 scale. This answer is neither a confirmation, nor a rejection.
Competition from designers abroad

Industrial designers and interior designers agree that there is practically no competition from designers abroad. Designers from abroad can find more attractive markets elsewhere. Estonian companies would rather pay the low fees for an Estonian design student or newly educated designer than pay an expensive designer from abroad.

In the field of graphic design there is some competition from Finland. Major branding and identity jobs such as Welcome Estonia and Hansa Bank typically go to international design firms abroad. (Estonian designers are particularly sad about the poor graphic result of the Welcome Estonia project).

Questionnaire analysis
‘Estonian designers feel no competition from abroad’ was given 3.96 points on a 1–7 scale. This answer is neither a confirmation, nor a rejection.

Estonian design export

Few Estonian industrial and furniture designers work abroad. One or two have commissions. One or two have emigrated.

Some graphic design export goes east.

Questionnaire analysis
‘Only very few Estonian designers export their services’ was given 6.31 points on a 1–7 scale. This significantly confirms the results of the interviews. This information also confirms the result of the quantitative analysis: only 50 out of 269 companies in six design-related industry sectors exported. See page 9/10.

International orientation of Estonian designers

Industrial and furniture designers are becoming more internationally oriented. This is a question of the mentality of the whole nation. Young designers travel more. Still more travel is needed.

Graphic designers are internationally oriented. They read the same magazines and books, see – to some degree – the same television programmes and surf on the same Internet as their colleagues elsewhere. In the 70/80s Estonia had a national graphic style. Today it does not. Cultural convergence is one effect of international orientation.

Estonian designers have taken a number of initiatives to show their design at exhibitions abroad, including Helsinki 2000, Copenhagen 2000, St. Etienne 2000 and St. Etienne 2002. As well as showing they have also learned from the participation.

Questionnaire analysis
‘Estonian designers are internationally oriented’ was given 4.77 points on a 1–7 scale. This is a mild confirmation.
What Estonian designers know about the business of business, about marketing and about market communication

Until recently designers were not taught any business skills. Today they learn something about design management at the end of their studies. Some designers have learned about business from direct experience. Designers are typically more interested in self-expression than in business skills.

Questionnaire analysis
‘Estonian designers know too little about business and marketing’ was given 4.88 points on a 1–7 scale. This is a mild confirmation.

Competencies which Estonian designers need to be more competitive

The competencies mentioned by interviewees cover a broad spectrum of professional and personal skills:

– Analytical thinking
– Business knowledge
– Business understanding
– Experience
– Financial aid
– Give and take criticism
– Hands-on skills
– Knowledge of case stories,
– Knowledge of technology
– Learn the big thing
– Learn to promote design and themselves
– Learning from abroad
– Management skills
– Marketing and business skills
– More experiment
– Project management
– Technical skills
– Understanding of visual communication
– Work in groups

Some of the suggestions are not skills, but rather needs or program measures.

Questionnaire analysis
‘Estonian designers need support for studies abroad’ was given a convincing 6.38 on a 1–7 scale.

Questionnaire analysis
‘Estonian designers need lifelong learning through continued education after graduation with a professional degree’ was given 6.31 on a 1–7 scale.

See also CAD analysis page 28.
How a design centre can help the Estonian design profession

Diversity of the answers suggests that the interviewees did not share a mutual frame of reference:

- Arrange competitions
- Educate companies
- Educate consumers
- Educate designers
- Establish contacts between designers and industry
- Exhibitions
- Graphic design library
- Implement good designer ideas
- Input and information about design related issues
- Meeting place
- Promote the use of design
- Try to brand Estonian design

Design policy measures, which will be helpful to the design profession

- Advise to public sector
- Anything that will bring manufacturers and designers together
- Competitions
- Educate Estonians
- Establishing Estonian design as a brand
- Free advice to young design firms
- Getting case studies distributed
- Getting foreign teachers and lecturers
- Help to fair participation abroad
- Magazine on graphic design
- Master classes
- Sending designers abroad
- Support to organisations
- Supporting students money to projects
- System of credentials
- Workshops

Questionnaire analysis

‘Estonian designers need possibilities to meet business and industry’ was given 6.50 points on a 1–7 scale. No statement was rated higher.
Critical barriers to professional design in Estonia

- Artistic expression rather than understanding clients’ needs
- Business understanding of the value of design
- Artistic expression rather than understanding clients’ needs
- Knowledge about Estonia and image abroad
- Little understanding among business and public sector
- Low quality products connected with Estonia
- No magazine
- Property right infringements
- Technological and financial limitations

Questionnaire analysis

The major problem Estonian designers face today is too little awareness of design in the business community and in the public sector’ was confirmed with 6.15 points on a 1–7 scale.

CAD competence

While technical skills and knowledge of technology are mentioned in the above suggestions, nobody specifically mentioned the mastery of CAD, computer aided design. Together with the questionnaire described above the designers were also given six questions regarding their knowledge and use of CAD. 11 designers answered the CAD questions:

- Jaansoo, Tarvo fashion design
- Karro, Üllar industrial design
- Kask, Katrin industrial design
- Kelder, T industrial design
- Luisk, Tarmo industrial design
- Mitt, Hugo industrial design
- Päranson, Arvo industrial design
- Pärn, Martin industrial design
- Sörmus, Sven industrial design
- Torn, Kaspar industrial design
- Vellama, Tõnis industrial design

The number of yes responses are indicated to the right of the questions:

- Do you apply CAD in your professional work? 6
- If yes, do you use 3-D CAD? 3
- Do you use CAD to illustrate/render your projects? 5
- Do you share CAD files with your clients? 4
- Are you acquainted with rapid prototyping techniques (SLA etc.)? 5
- Do you use rapid prototyping techniques in your work? 2
This is an important result. Directly the result indicates that half of the designers who answered are not familiar with techniques that are central skills for the industrial designers in other nations. CAD technology means faster and more accurate communication between designer and client. CAD provides unambiguous results and enables reuse of information. Indirectly, these results suggest that Estonian designers are more oriented towards artistic issues than towards technological standards that industrial production now sets for design. The viewpoint is articulated by a number of Estonian business people. For these viewpoints see the demand study.

Facts about CAD

CAD users, whether 2D or 3D, benefit from an increase in speed and accuracy. Designers who are able to complete projects faster and with fewer mistakes have a competitive advantage over others who haven’t invested in the technology and necessary training.

2D CAD has the disadvantage of relying on the likelihood that the clients are trained to interpret the two-dimensional drawings as three-dimensional objects. Many managers who don’t have a technical background find this difficult. This results in a possible gap between the expectations of the decision makers and the intent of the designers. In this respect 2D CAD drawings are just as ambiguous as drawings made by hand. They are merely quicker to produce and change and contain fewer mistakes.

3D CAD is even more accurate and less ambiguous than 2D CAD. It is more accurate because most 3D CAD software can check for conflicts between the various parts of the design. To check that parts actually fit together saves both costly mistakes and time. It is easier to interpret for non-technical decision makers to interpret three-dimensional drawings.

When a project is rendered or illustrated from digital CAD information it is possible to produce photorealistic depictions of the finished product. This makes it possible to communicate more than just fit and size but comes closer to explaining the actual design intent of the product.

Sharing CAD files involves more than simply sending drawings and photorealistic pictures to clients. It also involves using information supplied by the client in the design process. This is a key to working quickly and accurately. If the information is available to the project team, the designer can save time by not having to reproduce it. The exchange of CAD files with the client can save time by repurposing the information or images for other uses. This could be for example, marketing, advertising, product brochures, and Web sites.

Rapid prototyping techniques like Stereo Lithography (SLA) are the best way to unify client expectations and design intent. SLA models are produced directly from the designer’s 3D CAD files, usually within 2–3 days. These models can be used for testing fit, ergonomics, function, size and design intent.

While inexpensive model making is available in Estonia, if the models aren’t based on the designer’s 3D CAD files then they risk not being as reliable as an SLA model.
> Summary

The qualitative analysis reflects opinions of Estonian designers and their view of facts. They were interviewed and they completed questionnaires. The results are evidence from one group. Estonian business and industry gave different answers to some of the same questions. For these answers see the demand study.

- Estonian designers feel that there are enough designers to cover current demand and that Estonian business and industry in general are not unsatisfied with Estonian designers.

- Apart from low salaries and familiarity with small-scale production, Estonian designers don’t feel they have internationally competitive advantages. Nor do they feel much competition from abroad. One reason for this situation is that Estonian companies cannot afford more expensive foreign designers. At the same time, a low level of skills compared with international standards means that there is nearly no export of Estonian design services.

- Estonian designers strongly feel the need to internationalise design education. They want all kinds of contacts with design abroad. Through magazines, books, television and Internet they study what happens in the western world. They would like to travel more to see. Estonian designers have taken initiative to Estonian design exhibitions abroad. The aim has been both to show and to learn.

- Estonian designers are fully aware of the need to learn more. They realise the shortcomings of their education and they also recognise the lack of engagement — and debate with the Estonian industry — and the public sector. In particular Estonian designers know that their skills in marketing and business are insufficient. Also, the low technical skills of industrial designers are exemplified by their limited knowledge and use of CAD techniques.

- Most of all, Estonian designers feel that they have much too little contact with business and industry. They are confident that they could do business with business if they were given a chance to convince business people of the benefits of professional design.
2.2 Design education

This survey aims to give a concise picture of the present condition and quality of Estonian design education. This survey relies on interviews, supplemented by literature, Web information, and on-site visits. The method offers a qualitative synthesis. Hence, it presents a minimum of statistical data. Information from individuals is presented anonymously.

Literature and Websites will not be listed. Main informants were:

- Jorma Heinonen, professor, Concordia University of Estonia
- Ando Keskküla, rector, Estonian Academy of Arts (EAA)
- Krista Kodres, professor and critic, EAA
- Peeter Mauer, curator, Estonian Museum of Architecture and manager, Disaingalerii
- Toomas Piliste, professor, Tallinn Technical University (TTU)
- Margus Proos, manager, Thulema Furniture AS
- Arvo Pärenson, designer, professor and Head of Department of Design, EAA
- Martin Pärn, designer, head of Estonian Designers Association and professor at EAA
- Tiia Vihand, Vice Rector, EAA

> The field and the main actors

Estonian higher education in design is dominated by the Estonian Academy of Arts (EAA) in Tallinn. The only other institution of importance is Tartu Art College (TAC). (For a general description of the educational system including vocational education see www.hm.ee). Other vital actors are university level institutions of technical and business education located in Tallinn, Tallinn Technical University (TTU) and the private Estonian Business School (EBS). Tallinn Pedagogical Institute also deserves attention. Supporting studies in the liberal arts and humanities are provided by Tartu University and the Department of Art History at EAA. Due to the population distribution of Estonia and its geographical area, design education and the institutions supporting it are chiefly located in Tallinn. It is the only hub where enough stakeholders can interact, maintain contact with foreign actors, and produce added value even in design education.

The Estonian Academy of Arts (founded in 1914) is one of Estonia's six full universities. It has developed rapidly since the new independence of 1991. It has recently restructured its academic organisation and degree system. Six faculties offer education of an exceptionally wide range, from free art to product design:

EAA faculties are:

- Fine Arts
- Design
- Media
- Art History
- Protection of Cultural Heritage and Conservation
- Architecture
The EAA awards bachelor’s, master’s and doctor’s degrees. In 2002 the total intake was 198; BA 129, MA 64, Doctorate 5. Student body totals 950. Graduates 2002: BA 83, MA 51, Doctorate 0; total 134. The gap between intake and output is considerable but not alarming. The number of students is significant considering the population of the country. EAA and Tallinn Pedagogical Institute will be integrated in near future.

Tartu Art College is located in southern Estonia. It gives a necessary geographical balance to EAA. The curriculum is a college format, offering a single degree after four years. There are 7 departments each with its own study line. The student body in 2002 was 275; intake was 65 and graduates 37. In the Estonian division of design education, TAC is geared towards pre-professional training for the labour market. TAC can be seen as the equivalent of the polytechnic level in use for example in Germany and Finland (Fachhochschulen, ammattikorkeakoulut). The context of a small nation requires a division of educational representation in terms of levels and in geography. TAC fulfils this role in two ways: it is already and should be further developed into a high-level polytechnic serving the design field with competent workforce. Regionally it can and should build networks with the SME (Small and Medium sized Enterprises) sector in the southern part of Estonia.

Relation between demand and supply of professional expertise

While the demand for design services will be discussed later, it should be noted, that the demand for design services is insufficient. This is a matter of concern for business as such. It is also a serious hindrance for the education sector. The lack of demand is reflected in a lack of contact between business and education in industrial design, corporate design, design management, and all kinds of design for the public sector. The furniture sector is one exception. As leading furniture companies have established lasting relationships with designers, they have also been able to influence education in their field. Students in fashion design have in some cases formed their own companies and thereby bridged the gap. The lack of contact between business and education means that students get too little relevant business input and are therefore less prepared to meet the needs of business when they graduate.

Even though the number of graduating designers is rather high, their education does not equip them with skills that enable them to match the expectations of industry. This is partly the result of the poor level of machinery and equipment evident at least at EAA. And it is partly due to the lack of education in contextual skills, such as management skills, business skills, and contextual studies of societal nature.

EAA has suffered – and still suffers – from inadequate premises and lack of technical infrastructure. This has been balanced with an active search for external funding as well as with contact with international networks to upgrade the level of education. Lack of know-how about entrepreneurship is one widely acknowledged problem in education as well as in PD (professional development) type education. Here, again, furniture and fashion design seem to be exceptions.
Here, we have a chicken-and-egg problem: Development towards versatility and the growth of industry are needed for stronger demand for design services to motivate changes in design education. Also, education does not at present provide enough international exposure either in Estonia through visiting teachers or through student exchange to foster skills vital in international competence.

Industrial development and changes in education must be mutual, interactively supportive and catalytic. Beyond this, Estonian design consultancies are too small and too few in number to offer training positions where students at the MA level can enhance education with practice. It should also be noted that the BA level (EAA) is still poorly developed. Therefore even after a four-year education students lack the broader understanding of design which could be obtained with two years of extra studies.

Interior design has been flourishing lately because of the rapid construction and development of office and retail space. Education of this and furniture design at EAA is on good level. The professor is known as a dynamic teacher.

> Future development of industry and commerce vis-à-vis education

Estonian design education can easily be developed in any direction and quantity. The crucial issue remains: the dependence of competence providers on local actors, industry, and commerce in general. If the prevailing and highly significant presence of foreign sub-contracting industries continues, Estonian companies will continue to rely on foreign design rather than Estonian design. This means that Estonian design will not act as a driver for education.

Even if the education system would provide students with entrepreneurial skills it would not be enough: Two factors are required. Locally managed industries must use design more intensively to stimulate the expansion and development of design education. The already relatively well developed furniture and fashion sectors may well be spearhead areas for design.

Estonian infrastructure, critical mass, and local capital accumulation are not well suited to producing substantial growth in such globally vital areas as consumer appliances, ICT (information and computer technology) or biotechnology. Instead, design education could take advantage of existing assets by developing quality through design and design-driven marketing.

Areas such as transit traffic and commerce could highly enhance their functionality and attractiveness through information and environment design. The public sector could set example by investing in design for public spaces and services. This would positively influence education. Beyond this one serious alternative involves traditional labour and low investment sectors such as craft and the workshop tradition.

Estonia has difficulties in competing in the mass production field where it is difficult to challenge existing international actors. Instead, Estonia could build on the strong, high-level craft tradition to create niche categories sold for high price locally and in international markets. The upper middle class and upper class are ready to invest in craft labour. It is here that Estonian design and craft education is highly competitive and even avant-garde.
Estonia’s already strong tradition of craft education should be upgraded, and revamped to serve modern design education. It can serve as a laboratory to test ideas that can then nourish the industry. For individuals, this means designer oriented design with personal designer-name brands that offers freedom of movement even internationally.

> Conceptual skills

Core professional education at EAA is mainly sufficient and weak points have been recognized (see the following chapters). Nevertheless, there is a void in the area of skills that enable the student to deliver professional services, to work as integrated members in multi-professional teams and to conceptualize industrial, economic, societal and cultural issues. It is clear that skills of this nature are difficult to incorporate into the curriculum during a profession-driven four-year BA degree. Therefore, developing the MA level is crucial. Two ways to foster these skills can work as parallel models: one is bringing external educators to EAA to build courses. The other is using the competence of other institutions to a course and credit transfer.

Because Tallinn lacks a traditional research university such as the University in Tartu social and cultural studies must be brought inside EAA. But integrative educational modes in design, production, technology, economy, and business studies may permit a curriculum to be built in Tallinn with local actors such as EAA, Tallinn Technical University and Estonian Business School. Successful working models can be benchmarked in this regard, such as the International Design Business Management (IDBM) MA program in Helsinki. It remains to be determined whether Estonia can produce this model itself or should it be brought from outside – at least in the beginning. Course modules can also be delivered to working designers through PD education.

College-level and professional education at TAC may be improved by co-operating with engineering education. It is already possible for students to transfer credits in this area.

> To the international scene – Competitiveness

One evident handicap in design education and in Estonian design in general is the low level of internationalisation. In education, this is evident in the low level of teacher exchange in both directions and in insufficient opportunities for students to meet visitors or to benefit from exchange programs. Prevailing structures and the lack of funding hamper the situation. Students who do not develop the ability to succeed in a global workplace during their studies will meet difficulties for building a career that requires they meet international competition in Estonia, let alone sell their services in an international marketplace. It is evident that the national Estonian context is not enough to provide employment. EU membership will be beneficial in creating student exchange programs. It will also be crucial to placing the Estonian design profession in open competition where a free labour market and mobility place demands on graduating students. These demands are positive. They are also stressful if education has not given tools to cope with this situation.
> Research, R&D, education, and doctoral studies

One central focus area in developing BA and MA education is research-based doctoral education. Research combined with doctoral education produces both knowledge and high-level professionals to teach with a knowledge base deepened and structured through research.

Research and R&D are strategic assets too in generating external funding in a situation where funds for basic education remain stable or even shrink. Global activities in design research still accelerate. This focus on design research and doctoral education serves as a vehicle for design research and research training. This can enable Estonian institutions to participate in the second wave. Estonian institutions will also benefit from work already done and from the global networks that have grown from current initiatives. Membership in the EU will mean that EU-based R&D programs will open to Estonian bids. While EAA has already been granted doctoral rights in certain faculties, the infrastructure for research is poor. Even so, being granted the rights to a full university curriculum creates a positive platform for future development.

> EAA – status and goals of the key expertise provider

Estonian design education mainly means EAA. It is the only university-level institution of its kind and it is thus a dominant driver of all education sectors in this survey. Located in Tallinn and near of several capital cities in the Baltic area offers possibilities for a rich development. EAA has recently re-organised its structure and is ready for growth in quality and versatility. Raising quality and versatility requires solving two main problem. The first is money and infrastructure. The second is quality of teaching and the recruitment of teachers.

The representatives of the EAA list several factors as strengths. These are the substantial amount of contact teaching; good teamwork through interdisciplinarity in the field of design; the high level of craft education and the role of art studies enriching design skills. Weaknesses include the outmoded facilities; lack of proper funding; poor level of ICT equipment; little education in management and business skills; not enough teaching force from abroad, a generally low level of internationalisation; educational areas that need upgrading include graphic design, media, and film education. While the need for a generation shift in the faculty is also apparent, this must be organised so that a certain number of experienced teachers are always present. Due to restricted opportunities in the Soviet era, many teachers are defensive and retain outmoded practises. There is not enough visiting faculty input to have appropriate impact on students and teachers. Lack of money leads to parochialism for young teachers, and lack of mental growth leads to parochialism for old teachers. Finally poor infrastructure restricts modern teaching practices (hardware and software). Doctoral studies were mentioned as a key area for development.

Design and craft are not seen as antagonistic. Rather, they inform each other. The strong artistic and skill tradition in craft is seen as a valuable heritage. Building curricula where the traditionally single-material based approaches meet can enrich this.
> Summary

Design education in Estonia suffers from a number of intra- and extramural problems:

- Lack of funding and technical infrastructure at the EAA
- Need for generation shift in EAA faculty
- Lack of education in contextual skills, e.g. management and business skills
- Lack of internationalisation in education
- Lack of infrastructure for research
- The solid base of craft education needs reformulation to free its full potential
- Lack of design consultancies to offer possibilities for practice
- Lack of demand for design services from business and from the public sector
3 Design demand
The purpose of studying demand is to identify the degree to which Estonian businesses need and use design services. The study of demand is primarily a qualitative study based on interviews with Estonian companies. Additionally, a questionnaire analysis concerned with evaluating possible design policy measures has been carried out.

Both samples are extremely small due to budgetary limits. In addition, both samples are skewed. They almost exclusively involve companies that have demonstrated interest in design. From a strictly statistical point of view the small samples do not allow many firm conclusions. However, we have a strong belief that the study — due to the quality of respondents — provide useful results. Such results would not have been reached by a small random sample of all Estonian companies. This would necessarily include many companies that have never given design any thought.

3.1 Qualitative study

The qualitative study is based on interviews with 12 companies. The companies have been selected with advice from the Estonian Ministry of Economic Affairs and the Estonian Designers Association. All choices were approved by the Estonian Ministry of Economic Affairs.

<table>
<thead>
<tr>
<th>Company</th>
<th>Products</th>
<th>Employees</th>
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</thead>
<tbody>
<tr>
<td>Artec</td>
<td>Electronics</td>
<td>30</td>
</tr>
<tr>
<td>Baltika</td>
<td>Sanitary equipment, furniture for bathroom and kitchen</td>
<td>100–199</td>
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<tr>
<td>Estoplast</td>
<td>Lighting</td>
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<tr>
<td>Flora</td>
<td>Cleaning products</td>
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<td>Gento</td>
<td>Glass-aluminium constructions, shower cabinets, baths and whirlpools</td>
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<td>Jalax</td>
<td>Furniture</td>
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<td>Nurme Vabrik</td>
<td>Clothing, sports wear</td>
<td>350</td>
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<td>Olde Hansa</td>
<td>Restaurant franchise chain</td>
<td>*100</td>
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<td>Tallina</td>
<td>Ceramics</td>
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<td>Viisnurk</td>
<td>Furniture, skis, wood products, heating</td>
<td>500–999</td>
</tr>
</tbody>
</table>

*in Estonia

The interviews were designed to include the following topics, but interviewees were given the possibility to expand:

1. Brief company history.
2. A brief overview of company business, organisation, production, market.
3 Company use of design in the past and now.

4 Company relations with designers, including employed designers, free lance designers, design consultancies, and design services.

5 Query on possible design services the company may need, including:
   - Design management
   - Branding
   - Graphic design
   - Product design
   - Environmental design

6 The meaning of design to the company in terms of added value.

7 Future directions or changes in the use of professional design services.

8 Awareness (to be evaluated by interviewer).

9 Company sources of information concerning design.

10 Barriers to higher demand for design services.

After conducting the interviews we synthesised the answers and kept respondents anonymous. We have structured the answers around four themes:

   - Use of design
   - Awareness of design
   - Sources of information
   - Barriers to increased use of design.

> Use of design

The companies interviewed for this project use design and design services in a wide variety of ways.

We suspect that there may be distinctions in the intensity of use according to industry sector. For example, it is evident that the clothing industry is more design intensive than the dairy industry. At the same time, a company that manufactures functional clothing for a traditional market may be far less design intensive than a dairy firm that finds a way to develop, brand, and market a high quality cheese aimed at gourmet shoppers.

Learning more about such a pattern requires studying specific industrial sectors. It also requires studying individual companies across these sectors.

One way of differentiating intensity involves a series of transformations that also affects the issue of added value. This is the growth:
– From subcontracted business to their own business
– From domestic sales to export sales
– From manufacturing parts to manufacturing whole products
– From anonymous products to branded products
– From production oriented business to market oriented business

In some cases, this also includes growth:
– From material to immaterial products
– From products to services
– From services to experiences

In addition, some of these firms also involve a move:
– From general sales toward company-owned shops or showrooms

In at least one case, the entire company strategy is based on sale of own products and services linked to direct customer experience of the company’s own-shop environment. This new firm in the service and experience sector was built specifically around this strategy.

Companies in industrial sectors typified by these changes are more likely to become design intensive than companies that do not. They must become more design intensive to compete. In this sense, companies in the primary economic sector may do reasonably well without using design, especially if they supply goods and services to other companies for working, reworking, manufacture, and sale. In contrast, companies in the tertiary economic sector must use design to compete against other firms that typically make extensive use of design and design services. Companies in the secondary economic cover a spectrum in between.

This project involved more or less design intensive companies in industry sectors that are relatively design intensive. Among these companies, there is a clear difference between companies in different kinds of industries. A company that sells fashion is involved in a sector that is design intensive and highly aesthetic. A company that sells chemicals is located in a sector that is highly functional with only little attention to aesthetics. There are also considerable differences between companies in the same intensity sector.

Several important factors influence current attitudes toward design and design services. On the one hand, Estonian companies and their executives recognise that the rebirth of independent Estonia brought with it a radically transformed economic environment. As one manager put it, “the Estonian economy is only ten years old.” Awareness of the challenges and opportunities of a market economy are profound.

Nevertheless, decades of Soviet domination and a long hibernation in the socialist command economy leaves companies without resources and it finds many executives without the habits and knowledge needed for high-level competitive performance. This clearly affects what companies know — or do not know — about design and design services. More important, it often means that companies have little information or knowledge about the widely recognized contribution that design makes to companies in the international and European markets.
As companies move up the design maturity scale, this affects the use of design and design services in several ways. This report will consider four main issues:

1. Design management
2. Product design
3. Graphic design
4. Branding

A fifth issue will become important in the future, service and experience design. While this field is important to some Estonian firms – Olde Hansa is a good example – it plays a small role in the general Estonian design field. While service and experience design will require serious attention in a few years, it is such a small part of Estonian design today that we give it little attention here.

>>> Design management

Companies that use design rapidly come to focus on design management issues. None of the companies in the study currently designates an officer whose job title covers design management or strategic design. Nevertheless, all of these firms have someone who works with and supervises design. The most design intensive firms have a senior executive for whom design is a major strategic priority. While these executives have many responsibilities in addition to design, they work closely with design and their job includes the work done by design managers or chief design officers (CDOs) elsewhere.

One or two firms in design intensive sectors may consider a special design manager role in the future.

Other firms, equally design intensive, have explicitly decided not to devolve design management from a general management role to a specific function. There are two reasons for this choice. The first is that some of these firms will always have too few members of the management team to support a specific design position. The other is that some firms believe design so important as a company-wide concern that a specific design function would isolate design rather than integrating it into the general flow of company activities.

The design management services that companies use are nearly always internal. At the same time, some firms benefit from design consultancy advice in limited or even in general ways. This advice is not always labelled as design management advice, but the interviews suggest that several kinds of consulting services include design management functions in the scope of consulting activities.

For some firms that maintain a product development staff, the product development positions obviously incorporate the design management function. When design management is linked to product development, it also involves trend analysis, styles, cross-cultural marketing, and market research. These services are expensive to buy. At the same time, small firms cannot easily expand staff. This makes it difficult for small firms to expand into design on the managerial side.

In other companies, design is related to the marketing function, and design management is located with marketing managers, along with product development.
At some firms, design management is closely related to the technical side of production. For nearly all firms the central design management challenge today lies on the production side. This is because design involves construction and technology work to realise possible new designs and then to implement them in production.

The relations among managerial issues, technical issues, marketing issues, and the design process affect executives and designers alike. This also involves the challenges that companies face in working with external designers, as most companies do. The fact that few companies have a design management specialist means that design management expertise is shared in a network that generally includes three groups: internal company executives, internal company technologists and production specialists, and external designers. The findings of this study suggest the need for greater knowledge among managers and executives on the design process and product development. This is linked to the importance of educating professional designers in managerial and technical issues.

Even though awareness of design is high among interviewed firms, one issue is not clear. This is the relationship between a comprehensive and coherent design strategy and general corporate strategy. Companies tend to apply design and design activities to products and services on a one-by-one basis.

At the same time, some firms recognise the importance of design strategy, linking it to a comprehensive corporate approach. An executive at one firm thinks in terms of a strategic model resting on a few key concepts. The first concept requires control of production. While some production may be outsourced, the firm maintains responsibility for the customer. The second concept involves building a strong relationship to the consumer. His firm’s own brands and shops are a channel from the producer to the customers. The brand concept works equally well for companies without their own shops. Some firms develop a third level of design strategy when they take branding to a higher level through product narratives. For example, one firm has developed a concept of product narratives that build the idealized experience of product into product promotion. Another company makes a highly interactive product that creates its own conceptual environment whenever it is used.

Some firms feel they are in sectors that involve feelings and emotions. For these, design is a natural part of the full company strategy. Other firms make products that are not inherently emotional. As a result, they may underestimate the degree to which human emotion affects the consumer and customer choices that surround their products and influence their markets.

At some firms, one promising development involves finding low cost experimental ways to develop and integrate design activities into the firm.

The fact that many Estonian firms still engage in subcontract production for foreign firms has several implications for design and design management. Customers who subcontract to Estonian firms typically bring their own designs for production, sometimes with prototypes. Estonian firms manufacture the product. Some also produce subcontracted sample copies for trade fairs or market testing. This experience can be valuable because it gives Estonian subcontract producers a chance to learn more about different markets in projects paid for by the firms that have contracted for Estonian production.
Another source of external design management services involves brand partnerships and networks with other firms, including partnerships in which those firms brand and market Estonian products exclusively in local markets. This represents an important area for the future growth of some companies in the sample, and it probably fits other Estonian firms as well. Some companies will do well to nurture such partnerships even while developing their own brands.

One company has now been co-operating with one serious design firm. The company has an internal product development council with representatives from marketing, sales, production, the executive board, and the design agency.

As we state earlier in this report, companies manage design in three ways. First, a company must manage the design of products. Second, the company must manage the design process. Third, the company must manage the design of the company. Together, these management functions are known as design management. The use of design as a strategic corporate resource has become an important issue in businesses around the world.

>>> Product design

Product design is the most important single design activity for nearly every company interviewed. The specific nature of product design varies according to the company and its products.

One tendency that cropped up in several interviews was the possibility that not all firms see product development in the context of design. For some reason, product development is often seen as a core function linked to the core activities of the firm, while the term design is associated with advertising and secondary services.

Few firms use internal designers. These tend to be the larger and more successful firms, particularly one firm in fashion and consumer goods. The vast majority of firms work with external designers or design firms on a contract basis. All firms intend to expand their use of design. The major challenge involves finding properly educated designers who are willing and able to work within the constraints of company resources and company culture, working effectively to meet the specific challenges that each firm must address.

For some firms, this even means seeking designers in other countries, especially when designing for export from Estonia to foreign markets. As these firms develop more products for export, they expect to work more often with designers from outside Estonia. They believe that partnerships with designers — especially foreign designers — can offer important opportunities. This is especially the case with designers who have strong name recognition.

Companies that do not seek Estonian design services today offer several reasons. First, they cite the lack of available appropriate design services in Estonia. Second, they argue that their business is employing their own employees rather than providing jobs for Estonian designers. They would like to work with Estonian designers, but not at a risk to their own company development. Third, working with foreign designers means knowledge transfer from other markets into Estonia. Companies that work with foreign design firms generate new knowledge and tap into the knowledge these designers learn by working in international markets.
The greatest challenge is financial. Despite the costs of design, however, there is a clear growth toward the use of professional design services. One manager notes that his firm does not yet have enough production to justify using professional product designers. Even so, he says, “more and more companies are using professional designers. It is a coming field, related to the shift from price to quality.”

Companies that use designers successfully now succeed best when they work with designers who know company needs, situation, and production methods. Since internal designers automatically gain experience in these issues, this is a conscious challenge in choosing and working with external designers on a contract and project basis. In some cases, companies that had full-time designers in the past moved to contract work. In several cases, good designers who were too expensive to maintain in fulltime work now work on project contracts.

Product design is also linked to design management and design research. For example, one firm uses scenarios to imagine how their products will be used.

>> Graphic design

Graphic design seems significantly less important to most Estonian firms than to comparable firms elsewhere. Estonian companies tend to use advertising agencies for their graphic design work. While interviews revealed high awareness of product design as a specific professional function, the results suggested that there is little differentiation in Estonia between most graphic design functions and services supplied by the advertising industry.

In some cases, however, graphic design takes on a more important role. One good example of this involves packaged goods. Packages and labels are a central element in differentiating one product range from another. To a lesser degree, this is also the case for companies offering shops, restaurants, or experience centres. For them, graphic design is a necessary part of the comprehensive branding experience.

For makers of such products as furniture, however, graphic design seems to be relatively insignificant. This will probably change as Estonian firms compete more effectively in international markets.

Nearly everyone sends graphic design out of the firm. One manager explains that good graphic design is a necessity, but that the firm cannot afford to support a single top quality graphic designer within the firm.

>> Branding

Most companies are aware of product branding as a strategic resource used to differentiate individual products and services. While these firms are aware of branding and how important branding is, most brand development seems to grow naturally from company history rather than because of strategic planning and investment. There are exceptions. Three firms have made an immense investment in brand building over the past few years, with great success. In contrast with most Estonian firms, these firms are large enough and wealthy enough to afford such an investment.
The challenge of building brands may differ radically in different sectors. For example, furniture branding is a relatively new field. Furniture brands are less common than consumer goods brands or sports products brands. There are over 100,000 furniture producers worldwide today. Successful branding requires resources in addition to good design. While these resources are obviously available to major companies working with well-known designers, some companies find ways to create brands and brand awareness for the products or for the firm. These issues, in any case, affect and are affected by price level. Price level and market size make a difference to branding decisions, along with consumer tastes and decisions that determine purchasing patterns. To succeed in brand building generally requires larger production runs and greater sales volume than is typical of Estonian furniture manufacturing. It requires furniture producers to address resource questions including production possibilities, production volume, financing, and human resources.

Awareness of corporate branding in Estonia is less clear than awareness of product branding. The difference becomes visible in the way that business leaders speak of product branding and corporate branding. There is significant awareness of product branding, even among companies that have not yet created successful brands.

The weak use of corporate branding by Estonian firms fits the general pattern we observe. Companies still in transition from production-oriented companies to consumer-oriented companies have begun developing competitive products and services. The first stages of design development in a firm require scarce resources, financial, material, and executive. As companies succeed with the specific products and services, they accumulate the internal resources and skill to apply design more widely. Successful companies can also afford the investment in corporate branding that identifies producers of goods and services. While corporate branding is valuable and important, it often involves a significant investment. Unlike product branding, corporate branding is not tied to a specific revenue stream. A company must therefore be able to dedicate relatively free resources to corporate branding.

The findings of this study suggest that corporate branding will be an important future step for Estonian firms. First, these firms must establish strong, profitable products, and develop strong, stable brands. This should provide the financial resources and internal knowledge base that companies need for successful corporate branding. The success of individually branded products and services should help companies develop the depth of financial resources needed for corporate branding. The experience gained in building branded products and services should help firms to develop the knowledge and skill to work with corporate branding. Exposure to international markets and competitive environments should make the value to corporate branding clear.

This is visible in many ways. For example, the product development manager at one firm speaks of the importance that manufacturing source identity can have for Estonian companies. This offers interesting opportunities on an emotional level. The example he gives is the clear identity of clothing manufactured in Europe as contrasted with the uncertainty of clothing manufactured by child labour or slave labour in the Far East.

Several firms believe that branding and design development are central to survival even in domestic market. They argue that design and branding represent a unique opportunity in Estonia, because the market in a small nation such as Estonia permits building strong brands in a relatively short time.
Branding also offers important competitive advantages before Estonia enters the European Union. Estonian companies must concentrate on quality at a good price. In the long term, however, it will be increasingly difficult to sell on price alone.

The manager at one firm that has had a resounding success in developing its new brands states that brand development is important for “the challenge of selling higher quality at a higher price. You cannot treat the consumer as stupid. The consumer knows that washing powder is washing powder. We intend to sell intelligent products in an intelligent way. This is a different approach from the approach taken by the multinationals.” For this company, branding is also a way to shape products specifically for the Estonian market.

Several firms are aware that they need to develop more of their own products rather than simply manufacturing products under contract for other firms. At the same time, available resources and constraints mean that this development will take years. This is linked to company awareness of changing economic conditions. Companies can safeguard against change by developing more of their own products under their own brands. Even so, this may not be cost-efficient for smaller companies with limited resources. This requires a significant investment and the return on investment may take a long time. As one manager put it, “you cannot spend what you do not have.”

The growing importance of export markets for Estonian companies will make foreign partners and foreign consultants increasingly important. According to the head of one firm, the reason for the importance of consultants is that there are not enough Estonian experts in the various niche markets, especially foreign niche markets. Another executive states that his company would consider using a design consultancy if they could find one. They do not do so, he explains, because there are no design consultancies in Estonia.

The move into branding will be particularly challenging. To brand, companies must know the target markets. They must understand the feelings of the target audiences and the ideas they have about new products, potential and real. This will place an increasingly great emphasis on the need for high quality information.

Companies that use design services will continue to do so to an increasing degree. None will use fewer design services than they use today. One executive points out that his growing firm will continue to need the same kinds of design services they need today. He emphasises the need for good designers and good engineers, and he emphasises the increasing need for designers and engineers who can work together.

In some sectors, growth into likely areas will bring new challenges for design. This is especially the case with firms that manufacture products that are used in environments or products that involve use in specific kinds of situations. In office furniture, for example, the current Estonian practice involves selling single pieces rather than selling an environment. The future will involve more companies that sell a full work environment. This places an emphasis on research into workplace needs and working relations. In terms of design services, this will mean a need for designers and specialists trained in areas organized under the larger rubric of design research.
According to this executive, all too often the "designer and the seller fail to recognize the needs of the client. The future requires greater understanding of the client's human needs. Design must work for these needs as contrasted with working on visual effects. The market needs these kinds of services as well."

"In the early years, we manufactured what we liked. We made things for ourselves without thinking about the customer. Today we think of customer needs."

"Last year, we commissioned a study from a designer to identify future directions. We see a greater emphasis on human needs, social needs. We are working with this now, but it takes time. It is difficult to explain this to our own staff. We have been working with this for six months." This executive emphasizes the need for educating customers. "It is also difficult to explain this to the customer," he says. "It should not be difficult. It saves them money when they buy the right thing rather than buying the wrong thing."

Some firms have set specific goals for the next stage in design development. For example, one company has decided that it will begin to work in brand building when it reaches a certain level of growth over today's income, while another, slightly higher level will allow them to consider corporate branding.

One company specifically plans to bring more design in-house. The management team believes that they need more sale and production volume to justify this transition with the added resource requirements it implies. At the same time, they see this as a necessary step to future growth, and they recognize that this implies adding design management to the internal executive capacity.

An executive in this same company is carefully preparing for the future by studying branding. He has been studying branding for two years to begin work in this area. Branding decisions in a medium sized company must be made at the board level and supervised from the direct management level. They may later use consultants to work with branding. First, they want to understand and master the work on their own.

The main impetus that leads companies to plan more use of design was stated by an executive at one of the most successful firms examined in this study. "We do not see a time when people will be using less design than today," he said. "Since more people are buying more things from everyone around the world, the need for design grows."

> **Awareness of design**

Two issues in the interview are closely related to each other. The first involves the degree to which Estonian companies are aware of design, understand design, and know how to apply design. The second involves the added value of design to companies at this stage in Estonian economic development.

All companies in the interview sample recognise that design can add value to a company. All agree with this straightforward proposition.
How design actually adds value is closely related to the company itself. While design adds value, design is also an investment. This investment means one thing to a small company operating under severe budget constraints. It means something else to a large, well-financed company. This in turn, is related to company history, present circumstances, to the nature of the business, the industry sector, and the market.

The way that each company uses design to add value is related to three issues. These are general awareness of design as a conceptual category, general understanding of design as a frame of reference, and knowledge of how to apply design as a specific range of information linked to policies and action.

We originally intended to investigate the level of design awareness. In conducting interviews, we discovered that the awareness of design as a category is not always linked to understanding, and we further learned that general understanding is not always linked to important specific knowledge for application. Since these three together create added value, all must be considered in a constellation. For this reason, we decided not to use our original scale, and moved to a richer conceptual structure.

The first issue in the conceptual structure is company awareness of design.

Awareness is the degree to which a company is aware that design and design process exist. This includes awareness of general design information, design issues in the industry sector, design at comparable firms, and the design process as a management theme. It may also include awareness of how design might be useful to the company itself.

The second issue is explicit company knowledge of design.

Awareness and knowledge are two different issues. Awareness is information. Knowledge is understanding. While information is abstract, knowledge is situated. Situated knowledge is embedded in the work flow and processes of the firm. Knowledge is clearly related to the company and understood by the company.

Company knowledge is developed when company staff members work with design in a direct sense. While knowledge does not always mean successful application, knowledge requires the attempt to apply information. This is how knowledge grows. It is also important to note the distinctions between explicit knowledge and tacit knowledge. Explicit knowledge is linked to information. It is located within the company, but it is not entirely integrated into company culture and behavior. In contrast, tacit knowledge is integrated into company activities, linked to application.

The third issue is company application of design.

Application is related to knowledge in an important way. Study and experience create knowledge. By applying design, companies and their staff members discover design and design issues for themselves. They learn about design and the design process, and they come to know what design means and how it can be made to serve the company. Finally, they integrate this information and experience into a knowledge base embedded in the routines and social memory of the firm. At this point, knowledge becomes tacit. This brings new challenges to companies, since it is vital to maintain a robust level of explicit knowledge linked to the tacit behaviours that put knowledge into action.
Companies have a higher level of design awareness than design knowledge. They have a higher level of general design knowledge than of the specific knowledge that is developed through applied experience.

In this, design resembles any issue that demands awareness, general knowledge, and the direct knowledge that emerges from application.

The move from awareness to knowledge and from knowledge to successful application parallels a related series of transformations in the different companies.

As earlier mentioned, many of the companies we interviewed are moving or have moved upward across a scale of value-added products and services that we described earlier in this report. This is a move:

- from subcontracted business to their own business
- from domestic sales to export sales
- from manufacturing parts to manufacturing whole products
- from anonymous products to branded products
- from production oriented business to market oriented business

Most of the firms we studied work with products. A select few firms are also working with services or interaction, and these firms are moving:

- from material to immaterial products
- from products to services
- from services to experiences

While the pattern works differently in each firm and in each industry, the general pattern is clear. The pattern moves from generic and undifferentiated products and services to specific and identifiable products and services.

The design process helps companies to differentiate products and services in function, appearance, and market recognition. Therefore, design is closely related to the added value created by differentiated products and services.

With a few notable exceptions, Estonian businesses today are just beginning to move up the scale of design maturity.

All the firms that we interviewed are aware of design. They have a high level of awareness and interest.

The level of general knowledge in Estonian firms is weaker than awareness. This is an outcome of Estonia's political and economic history. In the past, Estonian companies have had few opportunities to acquire information or general knowledge of design. Until the rebirth of an independent Estonia, they had no reason to do so. Now, Estonian industries must catch up to international standards in developing general design knowledge.
Estonian firms are even weaker on design application. This is an outcome of limited knowledge and a low level of design maturity in today’s market. This reflects and leads to the difficulties that Estonian companies experience in the international market. While this situation is linked to the common situation of subcontract production, it can also be described in terms of the chicken-and-egg paradox linked to current market conditions. Estonian companies are low on the scale of design maturity because of their low level of engagement in competitive international markets. At the same time, Estonian companies have a difficult time competing in the international market because of low design maturity. Estonian firms will compete more effectively in the international markets as they move upward on the scale of design maturity. To move upward on the design maturity scale, firms must move from awareness to knowledge by acquiring information, through study and experience, and finally by mastering the ability to apply design and embedding design knowledge in company culture.

Sources of information

Access to operational design information is a central issue in using design. Design requires knowledge. This makes sources of design information important.

Design information sources depend on the industry. Design-intensive industries such as fashion or furniture create accessible networks for design information. In contrast, the continuous flow chemical production industry does not generate design information in the normal course of business. Even though chemical firms may well use design for business-to-business sales or for consumer packaging, the industry itself does not generate natural forums of design information.

All firms in all sectors gather design information at trade fairs. Some industries have special services for design information in the form of trend analysis, consulting firms, subscriber services, and specialised design journals aimed at the specific industry sector.

Most firms gather information from low-cost public sources such as Internet, competitor showrooms, competitor displays, competitor literature at trade fairs and exhibitions, competitor catalogues, and magazines.

Firms that make products for retail sales also gather information by studying the kinds of stores in which their products and similar products are sold. These range from department stores for clothing to supermarkets for washing products and packaged goods. Several firms identified sales and marketing staff as important intermediaries between their markets and company designers.

Managers at some firms also believe that designers must be a source of design information for the companies they serve.

Several companies harvest design information from customer contacts.
Another source of information involves subcontracted production for foreign and domestic firms. Contract specifications provide useful information on the needs of those markets served by the contracting firms. In this sense, the contracts provide market information in a distilled form. This is a partial proxy for market research. While the research is limited to a specific product or series of parts, it nevertheless offers valuable information and insight into the design requirements of active markets.

Potential clients and customers are an equally valuable source. In this area, another important source of information comes from current or potential customer response to proposed products, product ideas, and prototypes.

Many of the companies would welcome more good channels of information on design for products and services in their industry. Several also stated that they seek good channels of information on production techniques, especially on high quality mass production methods.

There is also a need for good basic information on design and the design process.

Few companies seem to have a structured way to develop and apply simple, low cost techniques to gather and analyse structured design information. Estonian companies today acquire and use design business intelligence in a pattern that is more random than systematic and more episodic than regular.

International markets have become increasingly design conscious and transparent and the domestic Estonian market is beginning to follow international patterns. This makes current information on design and marketing a necessary resource for Estonian companies.

Design information is an important form of business intelligence. Because design involves a spectrum of trends and issues in an interconnected knowledge economy, useful design intelligence cannot be limited to information in the specific trade or sector of any firm. Best practices and successful companies in design intensive sectors eventually influence firms in other sectors. Design information must therefore focus on sectors and firms that are design intensive as well as on the specific competitors and sector of any firm.

Access to good design information is one of the areas that can be most important for the growth and development of Estonian industry.

### Barriers to increased use of design

Companies reported a number of problems and barriers to using and implementing design. These include both general issues and issues that are specific to specific companies because of the industrial sector, the kind of product involved, or the firm’s location. We will focus on three general issues,

1. Designers
2. Costs and risks
3. Size of markets, production, and companies
While there are many lesser problems in using design, any possible design policy must be aimed at solving major problems and overcoming essential barriers. As policies begin to meet appropriate goals, appropriate measures can address lesser issues. While some of these issues are significant, it is difficult to address them on a policy level.

One example of such an issue is a problem for companies outside Tallinn. These companies note that most designers live and work in Tallinn, and they state that the difference in wages and the distance make it hard for them to employ and work with designers. While these are legitimate problems, there is no way to address them comprehensively in a national design policy. Some policy proposals – such as an icebreaker program – will make it easier for these companies to work with designers on a first-time basis. If such projects are successful, it is possible to hope that the firms and the designers they work with will find ways to cooperate on new projects. Nevertheless, it is difficult to develop a general design policy that solves this problem for firms outside Tallinn.

We have identified many similar problems. Even though they are genuine and significant on some level, we do not see them as general barriers to the use of design. This section addresses only large-scale, general barriers.

It is also important to note that some issues affect all firms in all industries. These are natural to business, and it is difficult to solve them with a design policy proposal. Market issues are an example of this kind of problem. It is difficult for companies to predict market needs, and companies want to increase the level of education and awareness among customers to sell high quality design. They also want designers to learn more about markets and marketing problems. While this is partly an issue for design education, it is also a general marketing problem for all firms in all industries. Therefore, we do not see this as a specific design policy issue except in those limited areas where a specific design policy can make a difference.

> Designers

Some problems and barriers involve general issues of design knowledge and design expertise. While companies need design and want to work with designers, many state that they have problems finding skilled designers. Companies want to bring more product design expertise to Estonia, whether through education or through access to higher quality service from abroad.

The central problem lies in the training and experience of professional designers. Estonian designers have a strong reputation for artistic ability. Nevertheless, they seem to be weak in the skills and knowledge that industry requires. Estonian education tends to produce people who know design or technology but not both.

The biggest gap for designers lies in the area of production skills and technical knowledge. While companies require designers that have a sense of how a product should look and feel, they also need designers with technical production knowledge that allows them to understand how artefacts must be produced.
Several companies mentioned the specific needs of design education in relation to their industry. For one example, few Estonian designers have the expertise required for IT products. While designers from the EAA are good in furniture design or fashion design, they have little experience in design for industrial production in high technology areas such as IT.

One problem in the furniture industry involves working with Estonian designers for export. Successful furniture designers must know the needs and preferences of the target markets. Estonian furniture designers do not know the big markets. In some cases, Estonian furniture designers do not seem to understand the Estonian market, designing artistically interesting furniture that is not suited to the market. One example was a beautifully designed furniture series that won much praise but never sold well because the individual pieces were too big for average Estonian homes. To contribute to true added value, designers must have solid knowledge of the sale and marketing process, styles, sales techniques, and all aspects of the value chain.

Finding knowledgeable designers is one of the problems. Again, the problem lies with education and training, and it lies in the fact that younger designers cannot learn skills from older designers who do not themselves have the necessary knowledge and experience. For example, Estonian design education places little emphasis on usability and reliability studies for product design. These are essential for mass production of high technology products. Designers who lack these skills and knowledge cannot work successfully in this field. Other areas that require development are psychology of engineering and ergonomics.

Technical skills are also important, and few designers understand technical and scientific formulas for different factors. Equally important, designers need greater knowledge on production costing. Firms also want designers who have knowledge of such human factors as product development, marketing, and sales. Designers lack knowledge of markets and marketing. While some of this can be studied in school, there is also the issue of better cooperation and a richer learning network. Designers and companies together must learn more about marketing. Designers and companies must learn to speak the same language in addressing market needs.

 Costs and risks

The increased use of design brings new problems to a firm. There are always problems in design. Fashion changes, style changes, market needs change. Even something simple requires design. Once a firm begins to work with design, the needs increase rather than decreasing.

External designers also represent a problem for some firms. Design is expensive. Estonian designers are not as cheap as they used to be. There are good designers in Estonia, and they increasingly know how valuable they are. Some of the executives interviewed also said that designers want royalties that are too high to be affordable.

Companies that do want to use design understand that part of the value of a designer may be his or her reputation. Attracting famous designers is difficult. Few companies can afford the fees and supply the resources that famous designers require.
Several executives state that the cost of design services is the single greatest barrier to using design services. This is true for contract work and consulting as well as for working within the firm.

Finances and economic issues are vital to Estonian companies. The size of Estonian firms makes this issue particularly problematic. Managers worry that introducing a new design requires a huge investment with no guarantees that any product will sell. This is a big risk for a small company. Design, manufacturing, marketing, and advertising are all costs.

Design requires an economic base. Design is an investment that should yield rewards. At the same time, costs come first. Even though a company may understand the uses and potential value of design, design-related expenses are a problem for a company with an eye on the budget.

Executives also worry about the cost of product development in relation to sales. Good design means work and effort. This raises costs. Companies have problems with costs in the entire Baltic region. It is a matter of purchasing power and an image issue for sales.

>> Size of markets, production, and companies

Market size – and the size of production runs – pose special problem in relation to the economics of design. The scale of Estonian industry and the kinds of investment needed for new products are a challenge. Many firms require a minimum production run to justify making the product. This means that market size plays a role in production development. Here, too, we see a chicken-and-egg paradox. While companies must design products for large enough markets to gain the production scale needed to justify design, they cannot afford to produce the products until they are already active in the larger markets that justify design costs.

This is also true of packaged goods. Packaging involves more than graphics or art. Good packaging comes from Europe, but it is very expensive. Market size makes an important difference in packaged goods. Companies also need bigger markets than the Estonian market to justify working with some kinds of product design.

Other factors affect the use of design services. Most important among these is the size and location of Estonian companies. Most companies must work with part-time designers. While this is sometimes a matter of choice, it is more often a necessity. Few Estonian firms can give fulltime work to a designer. They do not have enough work to justify hiring a full-time designer. This makes it difficult to keep a designer focused on the specific problems of a company.

As noted earlier, production issues affect the economics of design. The scale of Estonian industry is often too small, and the investment needed for new products is often too high for firms to support the minimum production run that justifies making the product.
The scale of production is an issue even for successful firms. Design at one firm often involves production for orders with low unit numbers. This company will rarely produce more than one hundred units. Designers must know how to make products at a low production cost. The products must have a low per unit cost while they must also look as professional as if they were made in a mass production run.

Many small firms have flexible production. Flexible production is both an opportunity and a problem. Prototyping and creating samples are easy. Some companies even do prototyping in a special department. At the same time, many firms require a minimum production run to justify making the product itself. Capacity differences between designers and firms are another issue. Firms that establish relationships with designers cannot realize all the designs that a designer can develop.

### 3.2 Questionnaire analysis

After having completed the interviews and identified certain variations in opinions about problems critical to the use of professional design, we decided to carry through a questionnaire analysis asking for rating of possible design policy measures. By asking companies about their evaluation of possible design policy measures we would apart from their direct opinion about different measures get an idea of how they weighed different problems areas.

Based on studies of design policies in Denmark, Finland, Ireland, Norway and Sweden we designed eleven possible design policy measures. The policy measures dealt with four categories of target groups. Informants were asked to rate the utility of each of the eleven policies on a 1–7 scale:

1. Harmful policy proposal. Do no do this.
2. Not particularly useful but not harmful.
3. Useful but less useful than other measures.
4. Useful. Worth doing if possible.
5. Useful. Should do.

The sample of informants was chosen by the Estonian Ministry of Economic Affairs and included some of the companies previously interviewed. Again, the sampling does not license many statistically valid conclusions. However, some of the ratings are so clear that they must contain a considerable level of truth.
The companies asked were:

<table>
<thead>
<tr>
<th>Company</th>
<th>Products</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrese Klaas</td>
<td>Glass: walls, doors, mirrors</td>
<td>50</td>
</tr>
<tr>
<td>Artec</td>
<td>Electronics</td>
<td>30</td>
</tr>
<tr>
<td>Baltika</td>
<td>Sanitary equipment, furniture for bathroom and</td>
<td>100-199</td>
</tr>
<tr>
<td></td>
<td>kitchen</td>
<td></td>
</tr>
<tr>
<td>Estoplast</td>
<td>Lighting</td>
<td>46</td>
</tr>
<tr>
<td>Flora</td>
<td>Cleaning products</td>
<td>110</td>
</tr>
<tr>
<td>Galvi-Linda</td>
<td>Leather products: bags, purses, notice books, etc.</td>
<td>147</td>
</tr>
<tr>
<td>Gento</td>
<td>Glass-aluminium constructions, shower cabinets,</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>baths and whirlpools</td>
<td></td>
</tr>
<tr>
<td>Ilves-Extra</td>
<td>Outdoor clothes, sportswear, women's wear</td>
<td>438</td>
</tr>
<tr>
<td>Jalax</td>
<td>Furniture</td>
<td>120</td>
</tr>
<tr>
<td>Klementi</td>
<td>Clothes, ready-made, for ladies and girls</td>
<td>700</td>
</tr>
<tr>
<td>Kolm</td>
<td>Leather products: portfolios, purses, handbags</td>
<td>28</td>
</tr>
<tr>
<td>Nurme Vabrik</td>
<td>Clothing, sports wear</td>
<td>350</td>
</tr>
<tr>
<td>Sangar</td>
<td>Men's wear, ladies' wear</td>
<td>687</td>
</tr>
<tr>
<td>Standard</td>
<td>Furniture, office and drawing office</td>
<td>200</td>
</tr>
<tr>
<td>Suwem</td>
<td>Wooden furniture, mostly for children</td>
<td>23</td>
</tr>
<tr>
<td>Tallina</td>
<td>Ceramics</td>
<td>70</td>
</tr>
<tr>
<td>Keraamikatehas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tarmeko</td>
<td>Furniture, office and drawing office</td>
<td>1,300</td>
</tr>
<tr>
<td>Thulema</td>
<td>Furniture</td>
<td>110</td>
</tr>
<tr>
<td>TVMK</td>
<td>Furniture, residential</td>
<td>1,400</td>
</tr>
<tr>
<td>Viisnurk</td>
<td>Furniture, skis, wood products, heating</td>
<td>1,200</td>
</tr>
</tbody>
</table>

The policy proposals and their respective average ratings were:

**Business and industry**

1. **Information and instruction material**  
   Would it be useful to select and distribute concise, literature in Estonian on good design and effective methods for implementing the design process in industry and business?  
   Average rating: 4.55

2. **Free consultancy**  
   Would it be useful to provide consulting services that offer advice on how to use professional design services?  
   Average rating: 4.40
Icebreaker programme
Would it be useful to create a program in which the government supports the cost of design fees to first-time buyers of design services, paying half the cost or more, depending on the project and the cost?
Average rating: 4.20

Designers index
Would it be useful to establish a database of professional designers?
Average rating 5.05

Better education of Estonian designers
Would it be useful to change education in Estonia to ensure that designers learn about the technical aspects of production and some aspects of logistics and operations management?
Average rating: 5.17

Better education of Estonian designers
Would it be useful to change design education in Estonia to ensure that designers learn about business and marketing?
Average rating: 5.65

Travel grants to designers
Would it be useful to support travel and education grants to working designers to help them learn about design and design services in other nations?
Average rating: 4.80

The public sector

Information campaign concerning public procurement
Would it be useful to develop an information campaign concerning design in the public sector so that public procurement offices begin to require competing for contracts on design as well as on price?
Average rating: 4.35
Education and research

9
National design research centre
Professional design depends heavily on knowledge. Would it be useful to develop a national design research centre that works to create, compile, and distribute design knowledge?
Average rating: 4.15

The population in general

10
Design awareness campaign
In the long run, a national reputation for good design is related to broad awareness among the general population. In Estonia, this will require a public information campaign. Would it be useful to organise and fund a public information campaign on Estonian design?
Average rating: 3.95

International audiences

11
Campaign for Estonian design abroad
Would it be useful to organise and fund an international information campaign about Estonian design?
Average rating: 4.45

In ranking the policy proposals are:

- Better education of Estonian designers, marketing 5.65
- Better education of Estonian designers, technique 5.17
- Designers index 5.05
- Travel grants to designers 4.80
- Information and instruction material 4.55
- Campaign for Estonian design abroad 4.45
- Free consultancy 4.44
- Information campaign concerning public procurement 4.35
- Icebreaker program 4.20
- National design research centre 4.15
- Design awareness campaign 3.95

The two most remarkable results are that companies rate 10 out of 11 policy proposals over scale average (4) and that the companies rate two educational measures higher than anything else.

Regardless of what interviewees say in interviews and what designers feel, the high ratings for educating designers reflect that companies want more from designers.

Also the fairly high rating for a campaign concerning a designers index reflects a strongly felt need.
Perhaps the proposal for a national design research centre is phrased wrongly. Perhaps it would have got a higher rating had it been called the national design resource centre or design information centre. While research may sound a little distant and intangible, resource and information sound like something immediately useful.

The relatively low rating for an icebreaker program may reflect that interviewees fall outside the possible beneficiaries as most or all of them already use design. In Denmark, a recently finished icebreaker program has been a success. See appendix 1.

A general design awareness campaign addressed to the general public might result in an increased demand for foreign products. That can be one reason that this proposal got the lowest score.
> Summary

Estonian companies in general are low on a design maturity scale. They produce relatively many anonymous goods and few branded goods. Failure to use of design effectively is both a cause and an effect of this situation.

The current use of design by business and industry very much depends on industry sector. There is also great variety inside sectors. In general, business and industry are improving and want to move upward on the maturity scale. They need encouragement and assistance to increase on upward mobility. Design management is internal and implicit, more often than not close to production rather than marketing. Product design is not always labelled product design. Many companies do not see product development in a design context. Most companies who use professional designers use external designers because of economy. Some companies use foreign designers to be closer to the market. Graphic design is not widely considered a discipline in its own right. Companies tend to buy graphic design from advertising agencies. Most companies acknowledge the importance of branding, product and corporate, but simply haven’t arrived.

Instead of evaluating design awareness on one single scale, design maturity may be looked at in terms of design awareness, design knowledge and design application. There is a lot of design awareness in Estonian business and industry but much less knowledge and still less application. The missing link is not the simple gospel that design exists, but a concrete way to increase knowledge of how design can be applied, and to activate that knowledge. Estonian business leaders are aware of design, but can list a number of reasons that keep them from going on now. The question to be answered is how rather than why.

Estonian business and industry use all available sources of information about design, especially new design. Maybe there is a tendency to be reactive rather than proactive in the search for information looking at what has happened rather than looking at what will happen.

The barriers that keep Estonian business and industry from demanding more design services are — of course — economic. That general fact conceals a number of reasons. Design services may be felt to be very expensive. While the costs are certain, the results on the market are uncertain. Design decisions are decisions under uncertainty. Companies investing in design run a risk.

Companies also state that they have problems finding skilled designers who know business and marketing and technique and the needs of domestic and foreign markets. When rating a number of possible design policy measures Estonian business people rated measures concerned with the designer education higher than anything else.
4 National design policies
This part of the study provides comparative information on design policies as an intellectual starting point for creating a design policy in Estonia. The source is design policy papers from six nations that already have worked systematically with design policies.

Design policies have been selected for study based on substance and possible relevance to Estonia. Most policies here have been developed in Scandinavia. Ireland was chosen as a nation whose participation in the EU has played a decisive role in economic life. Korea was chosen to offer contrast with a former developing nation that has made a successful transition first to industrial development, then to design.

Initial studies showed that none of the EU candidate nations has a substantive national design policy. While some nations do have individual design measures for specific industry sectors, these do not comprise substantive policies comparable to those in Scandinavia, Ireland or Korea. Therefore, none has been chosen for deeper comparison.

The selected national policies are from the following countries:

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>DK Scandanavia, EU</td>
</tr>
<tr>
<td>Finland</td>
<td>FI Scandanavia, EU</td>
</tr>
<tr>
<td>Sweden</td>
<td>SE Scandanavia, EU</td>
</tr>
<tr>
<td>Norway</td>
<td>NO Scandanavia, outside EU</td>
</tr>
<tr>
<td>Ireland</td>
<td>IR EU, outside Scandanavia</td>
</tr>
<tr>
<td>Korea</td>
<td>KR Asia</td>
</tr>
</tbody>
</table>

This study focuses on Scandinavian countries for two major reasons. The policies are thorough, and Estonia aspires to be seen as a Nordic country “with a twist” (see ‘Welcome to Estonia’ published by Enterprise Estonia).

The national design policy papers considered here are:

DK  Regeringens Designredegørelse

FI  Design 2005!
    Approved 15 June 2000

SE  Förslag til nationellt program för design som utvecklingskraft inom näringsliv och 
    offentlig verksamhet 2002
    Period: 2003-
    Not yet approved

NO  Design som drivkraft for norsk näringsliv
    Rapport fra Utvalget for Næringsrettet Design, 2001
    Period: 2002-2010
    Approved 15 June 2001
The study of design policies is based exclusively on these papers. Our basic questions have been:

- What are the policy goals?
- What target groups do these policies seek to affect?
- What actions do they prescribe?

We have not studied how and by whom the policies were conceived. We have not questioned the appropriateness of the policies. Finally, we have not investigated whether, how, and to what effect the described policy measures were implemented. We recommend that the effects of selected policy measures be studied in depth in a future study.

For this study we define a design policy as a set of plans to initiate activities promoting the knowledge and effective use of professional design. The underlying assumption is that these activities will cause a desired effect and will contribute to a declared objective.

Five of the six design policy papers define design. All six policy papers define the objectives and the target groups for investing in design. Four of the six policy papers include one or more visions. All six policy papers suggest and describe an array of design promotion measures.

4.1 Design definitions

Five of the six design policy papers acknowledge the difficulties of defining design. Nevertheless, they present one or more definitions and descriptions of design:

DK Design is a creative process, which integrates the physical qualities of a product with aesthetic considerations.

DK Design is both the result as end product and the process which creates the result. Design as a process deals with uniting such factors as technology, marketing, sales and recycling and disposal to create the balance between the commercial, immaterial and aesthetic values of a product.

FI In this programme, design means planning which takes aesthetic and ethical considerations, serviceability and marketing into account and which is targeted at businesses in industry, trade and services and at public sector organizations. The object of design may be a product, a service, communications, the living environment, and a corporate or organizational identity.
In this program, design is an umbrella term covering industrial design, arts and crafts, design management and interior design. Industrial design also includes ceramics, glass, textile and fashion. The program also deals with arts and crafts as part of the entity of design. Graphic design also has points of contact with this entity, especially as regards corporate communication.

Design is the planned and innovative use of available knowledge to form processes, environments, products and services with point of departure in the user's needs.

The design process includes 6 steps:

- Points of departure
- User studies
- Concept and visualization
- Evaluation and choice of concept
- Adjustment and implementation
- Follow up and evaluation

Everything manmade has been given a shape. To many people design means shaping. Design, however, means more than that. Design includes thinking and planning in order to give shape to things in a way that they can be manufactured, used and, finally, destructed.

The word design covers the process, the trade and the final product. Even if the word in its original meaning covers all kinds of manmade objects, visual arts and architecture are normally excluded.

Designers work within a humanistic tradition in the meeting between product and man and to an increasing degree with digital and human interaction. Five factors are important:

- functionality
- aesthetics
- long range identity
- cost efficiency
- cultural, political and ethical relations

Business related design includes three types:

- industrial design
- communication design
- interaction design

At one level design is all about – "what you see is what you get" – colour, imagery, style, precise lines, shapes, texture, a look, a whole gamut of elements, rarely just one on its own. At this level design permeates all aspects of business life, from the product or service delivered, to office layout, website design, corporate imagery.
Design in the context of business management, is the process by which organizations seek to identify and profitably satisfy, existing and emerging needs and preferences in a competitive environment. As a planning process, it applies to the innovative potential of the enterprise with the changing (economic, social, cultural and political, etc) requirements of the market. The role of design in the context of business management is to:

- optimize differentiation according to corporate strategy,
- identify and profitably satisfy, existing and emerging user needs and preferences, and to maximise added-values, and
- make the ‘product position’ visible, understandable and desirable.

4.2 Visions

A vision describes what we would like to achieve in qualitative terms. Most visions describe a future state in a specific number of years. Visions may include elements of wishful thinking as well as forecasting. The border between visions and long-range qualitative objectives is often fuzzy.

Finland, Sweden, Norway and Ireland include national design visions in their design policy papers.

FI In 2005, Finnish design will be based on high-standard know-how which takes into account progress in manufacturing and delivery processes, acknowledges changes in consumer markets, has a user-centred approach, and is capable of using culture-bound innovations in product and service development.

The development of design know-how of the highest international standard will be based on strong input into research and close cooperation between education and industry. This cooperation will promote the national innovation system and competitive production, improve the quality of products and services and create new jobs.

A high-quality, aesthetic physical environment built on distinctive design will create a strong identity for Finland in the vanguard of design and craftsmanship. Design will provide a basis for Finns’ well-being and satisfaction.

SE In 2006 Sweden shall be world leading on creative user focus. That shall be apparent in products, services, environments and communication which meet human needs for utility, pleasure and meaning. It will be possible because Swedish business will be world leading in its working with design processes in Swedish companies. Results will be international competitiveness, high profit, increased export, more and better jobs, more participation and increased perseverance.

NO From 2002 design shall be a driver for the development of competitiveness of Norwegian business on a global market.
The investment in design has in 2010 given Norway a more clear identity based on innovative products and services. That makes Norway interesting both as a partner for trade and cooperation and as a travel destination.

Our overall vision is for Irish design to be perceived in home and export markets as being truly innovative and creative, with a unique and distinct ‘Irish style’ and image, capable of generating premium commercial returns. Underpinning this vision, it is essential that, within the Irish business area, design is regarded as an integral part of the whole business development process, and recognised for its strategic importance as a key differentiator, capable of delivering sustainable competitive advantage and economic wealth.

4.3 Qualitative objectives

Qualitative objectives are the most common way to state policy intentions. The six design policy papers studied here deal with the concept in different ways.

The six national design policies have no common editorial scheme or terminology. They deal with the subject in different ways and sometimes use the same words with different meanings. What one paper calls an ‘objective’ may be dealt with as a ‘measure’ in another paper. One reason for this terminological diversity is a different focus on the means-end chain.

In a means-end chain, every end is a means to another end until the final end is reached. This is an example of a means-end chain:

| Education in design schools | is a means to design know-what and know-how which are a means to a qualified design profession which is a means to well designed products which is a means to industrial competitiveness which is a means to job creation which is a means to economic wealth which is a means to quality of life which is the final end. |

This means-end chain can be constructed with other, fewer, or more links.

The six design policy papers do not share the same objectives. Even main objectives vary. The means-end problem discussed above clearly applies to the main objectives.

DK Competitiveness, welfare

FI Competitiveness, employment, welfare, pleasant environment, citizens’ well being, national identity, cultural image

SE Quality of life, competitiveness, improved public sector, improved national image

NO Increased market shares, better earning, more satisfied customers
NO Innovation based on human related and sustainable value creation
IR Growth of the design sector
KR Enhancing the competitiveness of Korean products

The design policy papers more or less implicitly state a number of other objectives. Some of these are means to other objectives.

The most frequent objectives concern:
- Quality of life
- Welfare
- Job creation
- Competitiveness
- Cultural identity
- International image
- The design sector

Quality of life and welfare may be seen as the ultimate and penultimate objectives for all design policy measures. This is the case when they are mentioned explicitly and when explicit objectives are chosen further down the means-end chain. Quality of life for a country as a whole is clearly influenced by the six other stated objectives. It is also directly influenced by the availability of well designed products and services, and healthy and inspiring work and living environments, which all are influenced by design.

Most of the six design policies that deal with quality of life treat it as a side effect of competitiveness. Sweden, however, states directly quality of life – and shared wealth – as objectives to be served by better designed products and services.

Job creation is a common objective of design policy measures. Job creation is seen as an effect caused by competitiveness.

Competitiveness is a goal in all policies. Most policies focus directly on it. The implicitly accepted hypothesis is that good design gives products added value and thereby makes them more competitive.

Cultural identity is occasionally included under different labels. It is treated as a beneficial side effect.

International image covers marketing and cultural identity. It usually deals with the former rather than the latter.

The design community is indirectly covered by all design policy measures. Many policies address the design community directly.

Readers are encouraged to study the original policy papers to get the full details.
Quantitative objectives

Quantitative results are easier to measure than qualitative results. That may be one reason why qualitative objectives for national design policies significantly outnumber quantitative objectives and why quantitative objectives sometimes include considerable elements of forecasting.

All six design policies include quantitative objectives or forecasts.

DK 80% or more Danish companies will after five years agree that design has an effect on their competitiveness when developing new products (62% in 1997).

DK 50% or more Danish companies will after five years use external design consultants when they develop and design new products (30% in 1997).

FI The aim is that by 2005 30% of possible users of design will enlist the services of qualified designers and half of Finnish enterprises will take design into account in their strategic planning. By 2010 half of Finnish companies will use professional design as part of their business operations and 80% take design into account in their business operations.

FI 200 new enterprises will annually adopt design as part of their operations.

FI 10 design firms in Finland shall operate in the international market place by 2005 and 20 similar firms in 2010.

SE By 2006 100 enterprises shall annually increase their design abilities, take conscious design decisions and see effects on the market.

NO In 2005, twice as many companies as in 2001 will use design when developing new products and services.

NO In 2005 half of all Norwegian companies will use design when developing new products and services.

IR Future prospects:

– Rise from 3,700 in 1999 to 8,000 in 2003 in design consultancy employment.
– Rise from 2,300 in 1999 to 4,000 in 2003 in manufacturing companies’ designer employment.
– Rise from IR£ 230 million in 1999 to IR£ 500 in design consultancy turnover.
– Rise from IR£ 38 million in 1999 to IR £ 500 million in 2003 in design consultancy export.

KR Specifically, the government has a short term plan to raise the ratio of Korea’s own design development to 65% by the year 2002, and elevate the quality of Korea design to 80–90% of that of the advanced countries.
4.5 National design policy measures

> Organizing the subject

Most of the national design policy papers group their suggested activities under different headlines:

**DK** An improved design policy
- Design promotion in industry and business
- Design promotion in the public sector
- Development of design competencies

**FI**
- Design for national competitiveness
- The standard of design must be raised
- Competitive design service
- Presentation of design culture
- The public sector as a model
- Design publicity strategy
- Implementation of design strategy

**SE** The innovative Caring Society
- Improvement of the power of development in business and public administration
- Manifestations of the Innovative Caring Society
- European Institute for Innovative Caring Design

**NO** Design as a driver for Norwegian design and business
- National design campaign 2002–2005
- Increased institutional activities 2002–2010
- Methodical creation of national design competence 2002–2010

**KR**
- Training of professional industrial designers
- Establishment of design infrastructure
- Nurturing design firms
- Promoting design development of enterprises
- Hosting international design conferences
- Enhancing the public awareness of design

At this point, it may be useful to regroup the suggested activities and classify them according to planned target group. All design policy measures are targeted to one or more of these groups:

- Industry and business
- The design community
- Education and research
- Public sector
- General public
- International audiences
When a design policy measure is aimed at more than one of the above groups, it is listed where it seems to have the greatest impact.

> Industry and business

Most design policy measures state competitiveness as their objective and aim at the industry and business sector, which shall become more competitive by the help of design. Design policy measures directed at industry and business may be promotional, educational or consultative.

Promotional activities inform about the added value case and various kinds of know how. Educational activities improve personal skills. Consultative activities help the businesses in the process to benefit better from the use of design.

DK Information and instruction material
- Media coverage, brochure
- Handbooks and check lists
- Courses and meetings about cooperation for regional business promoters

DK Activities in the new building of the Danish Design Centre
- Exhibitions

DK Practical experience of using design and designers
- Discount on consultancy fees
- Icebreaker program: discount on designer fees

DK Expansion of regional design promotion

DK Financing of development projects, which include design
- The Growth Foundation

FI Upgrading of design services by labour and business centres to SME

FI Encouragement and help to new enterprises to use design

FI Design Centre Finland to promote the use of design in business and industry and to make contemporary design known. The means to this end will be exhibitions, publications, competitions and seminars.

SE Projects, which introduces design in important business areas: Large enterprises and their subcontractors dealing with:
- Vehicles
- Telecommunication
- Medical techniques
- Biotechnology
(Most other countries reckon that great enterprises can help themselves while the SMEs need design support.)

SE Projects focusing on business development
National information campaign to promote the use of professional design:
- Direct mail and mass communication
- Books
- Quarterly
- Design-on-the-way meetings
- Design exhibitions

Education of board members to understand the value of design

More publicity about Good Design Label and its awarding

Survey of the use of professional design in Norwegian companies

Icebreaker program with professional and economic help to first time buyers of professional design

Regional design consultants

Local workshops to introduce professional design to business

Website with interactive knowledge base on business directed design

Introduction of design in business incubators

Establishing of consultancy concerning design in interactive and digital media

Design Resource Centre
Small organization with a strong design advocacy mandate. Its primary role should embrace the following critical areas:
- Promote and heighten the awareness of the value of design
- Stimulate and encourage improved design practice by developing helpful new knowledge
- Foster and encourage greater cohesion and interaction between on the design scene
- Develop a reservoir of relevant design information

Promotion, strengthening and deepening of support by state development agencies to Irish design:
- Strengthen Design Advisory Service to manufacturing Industry.
- Design Audit Programme
- Individual Company Counseling
- New Products Programme
- Design Intelligence Programme

Manufacturing companies to consider more fully the inherent strategic importance of design as a driver of product differentiation and the role that proper design management can play in delivering greater efficiencies and cost savings.
In the year 2001 the Korea Design Center in Songnam City will be completed, in the southeastern suburbs of Seoul. The center will link design information worldwide. It will also furnish advanced facilities to back up the commercialization of good ideas and to bring about successful outcomes in the market.

Design Exchange: The center will hold diverse activities including conferences, seminars, business meetings, banquets, and concerts.

Design Information: The center will contribute to laying the infrastructure of the global design industry by housing design center, business-incubating facilities, and design library.

Design Experience: Design education will be provided to design experts, students, and the general public.

Design Appreciation: The center will put up an exhibition hall.

Providing SMEs design consulting program to enhance design quality of export products and give aid to promising SMEs.

Implementing design research

> The design community

The design community includes design firms, free lance designers and designers employed by industry and business.

The design community is covered by design policy measures for two reasons. One is to help domestic businesses. The other – which overlaps the first – considers designers and design firms in their own right and helps them to increase sales nationally and internationally.

Project for internationalisation of design firms

Continuing education with priority on business know-how.

Business incubators supported by regional labour and business centres will see to the commercialisation of design know-how. The incubators will be used to set up new design service and production firms and to strengthen their competitiveness.

Business incubators to combine small series production in arts and craft with other local business activities

Innovation foundation for professional design to catch new ideas, concepts and products

Program for internationalisation of Norwegian design and Norwegian designers

- Exposure of Norwegian designer products abroad
- Exposure of Norwegian designers and design firms abroad
Grants to Norwegian designers for exposure and development of competencies abroad

Promotion, strengthening and deepening of support by state development agencies to Irish design
- Focus and promote the Business Development Programmes to the design consultancy sector
- Internationalisation of design consultancy services.

Assessment study and preparation of a national training plan for the design sector to be followed by a National Training Plan for Design

Implementation of National Training plan for Design and in the interim develop and deliver certain key Continuous Professional Development (CPD) courses

Industry representative organisations to pro-actively seek to improve industry cohesion and to foster closer relationships with the state development agencies and the education sector

Help to design practices to develop their businesses in a more considered and planned manner and to support development initiatives aimed at strengthening the overall position of the design sector.
- Help to develop the business in a structured and planned manner.
- More effective networking
- Professional development
- Communicate the value-added case more convincingly

Launching business incubator to activate commencement of professional design firms and to provide necessary facilities and assistance

Implementing SMEs design consulting program in which design firms have been placed in SMEs design development.

Hosting the Icograda Millennium Congress Oullim 2000 Seoul in the year 2000

Hosting the ICSID 2001 SEOUL in the year 2001

Education and research

Before designers become professionals, most are students. Design policy measures address design students as well as students of other disciplines with some affinity to design, primarily business and engineering.

Students’ development of competencies
- Multidisciplinary courses
- Focus on trainee programmes

Research and development
- Research Centre Without Walls
DK
Continuing education
– Travel grants
– Master classes

DK
Transparency of design educations
– Working group on titles concerning design educations
– Evaluation of design educations

FI
Design education will be integrated in other technological and business education and the product-development training included in them.

FI
In continuing professional education provided by universities in business management, attention will be given to the strategic role of design in corporate product development.

FI
Degree and research programmes combining design and communication technologies initiated by different universities will be strengthened.

FI
Preparation of design innovation centre Designium.

FI
Reassessment of design education to educate more designers

FI
Multidisciplinary research programme linking design research with research in other disciplines

FI
Reappraisal of contents, quantities and orientation of design education

FI
Expansion of University level curricula towards innovation related issues

FI
Polytechnics curricula to be revised to provide design professionals with sufficient technical and commercial knowledge and skills

FI
Arts and crafts training in product development and business skills

FI
Design appreciation to be included in the comprehensive school curriculum

SE
European Institute for Innovative Caring Design a Swedish centre for European design research and for the study of changed life patterns and value creation. The centre shall also see to Swedish design education on four levels:

– National (design) research school
– Basic and high school education
– Strengthening master educations
– Continuing education for professionals with design competencies

NO
Integration of business directed design into Research Council activities

NO
Evaluation of design education
NO  Education
   –  Education and business dialogue
   –  Design management
   –  Part time study in design

NO  Multidisciplinary Research Centre

NO  Evaluation of the education and research programme

IR  Set up Design Education Working Party to address the Design Education Needs beyond 2000, and to prepare an integrated national third level response

IR  Implement improvements in relation to design education at primary and secondary levels

IR  For the design industry to more pro-actively support the design education sector on an on-going basis

KR  Distributing newly reformed design education materials for elementary and junior high school students and developing the contents and system of the education materials every three years

KR  Establishing standards and assessment criteria for design education institute to encourage specialization of each institute nation wide

KR  Putting educational emphasis on the fields of marketing, engineering, ergonomics, design management, design administration, and multimedia

KR  Supporting IDAS, International Design School for Advanced Studies

KR  Retraining in-house designers every year, and offering industrial design education for art teachers in elementary, junior high and high schools every year

> Public sector

The national design policies state four different reasons for addressing the public sector. Sweden addresses the public sector to improve public service. Finland, Sweden and Norway address the public sector to let it serve as a model for private companies. All countries minus Korea address the public sector to teach private suppliers the role of good design. Finally, Finland addresses the public sector to improve Finland’s image abroad.

DK  Information activities
   –  Publications on possibilities for demanding design
   –  Conferences, meetings, information sharing groups

DK  Practical tools and consulting
   –  Handbook on design for public procurement
   –  Coordination with existing tools for public procurement
   –  Consulting on design
Public/private cooperation on development of design
- Design competitions
- Development contracts
- Design analyses

Furnishing of state owned buildings including Design for Finnish Embassies

Regional and national programmes for design and innovation:
- Development of products and services concerning care and health
- Design of the learning school
- Design of good work and work environments
- The design process as a method for innovation in the public sector

Improvement of public procurements to take conscious design considerations to improve the public environment, which can serve as a model, but also to teach manufacturers that design is important

Instructions to include design in public procurements
- Information material and blueprints for courses
- The deeper purpose is to educate suppliers to stress design

Education of board member candidates in public sector organizations

General public

National design policies address the general population to elevate the national design culture and the quality of life. In a wider perspective, this also involves educating industry for a demanding export market.

Museum of Industrial Art to make Finnish design known

Organisation of local ‘meeting points’ where design issues of broad interest can be discussed. Activities will include exhibitions, meetings, festivals, workshops, publications and more.

Holding annually the Korea Industrial Design Convention where the National design Awards will recognize designers and business managers who have contributed to Korean design and the national economy through design, as well as the government will announce a long-term design promotion plan.

Designating the year 2001 as ‘The Year of Design’

Launching Korea Millennium product in 1999 which refers to creative and innovative products made by Korean manufacturers which answer the wants and needs of the world’s consumers, not only Korean, applying Korean-styled design in a modern way. Approximately 500 Millennium Products will be selected by the year 2003.
International audiences

The design policies of Finland, Sweden and Ireland address foreign markets to increase the national profile and to support exports.

FI  International marketing and publicity of Finnish design together with different operators in the design fields


SE  Strengthen Sweden’s Innovative Caring Society brand in other international events

SE  Establishing of European Institute of Innovative Caring Design a research and education institute devoted to the study patterns of consumption and use

IR  National design policy for Irish design and establishment of ‘Creative Ireland Inc’. (national image)
5 Proposal for a vision
A vision describes what we would like to achieve in a not too near future. The good vision is an ambition and a possibility. It includes elements of both dream and reality. A vision that is only a dream will hardly be taken seriously. A vision without a dream is nothing but a target. The dream makes the difference. What the vision lacks in exactness is made up for by boldness.

The practical use of a vision for the Estonian design sector is to help navigation when setting targets for definite periods and issues. If such targets are not in concert with the vision then either target, or vision, or both should be taken up for reconsideration.

We suggest that the vision for the Estonian design sector includes three elements, which all are instrumental to a successful design sector. The three elements concern knowledge about design, the use of design, and communication about design. The time range is – the necessary political process taken into consideration – set for seven years.

Getting informed
In 2010, the Estonian design sector will have access to and benefit from the most comprehensive design intelligence in the world. A design information centre will monitor what happens on the international design scene – in theory and practice – and see to that this information is distributed to all parts of the design sector. Design education will take place on a truly international level.

Designing
In 2010, Estonian business and industry will be fully aware of the importance of design. Practically all companies will use design for adding value to their products and services. The majority of companies will buy state-of-the-art design services from local and foreign designers. The public sector will spearhead the use of professional design and inspire both consumers and business and industry. Estonian designers will work on a truly international level and sell their services to local and foreign clients.

Informing
In 2010, Estonia has established itself as a locus for professional design. The international markets and design press know that something is boiling and keep an eye on Estonia. Professional designers know that Estonia is a great source of design information. Estonian tourism is recognised for its well-designed facilities and communication.
6 Proposal for a design policy
6.1 Objectives

The immediate objective of the proposed Estonian design policy is to improve the Estonian design sector.

Improving the design sector will strengthen the competitiveness of business and industry.

Strengthening the competitiveness of business and industry will in turn improve employment, earnings, wealth and quality of life.

Improving the design sector will also improve the quality of life through better products, services and environments.
6.2 Information / Design / Information

Information surrounds successful design. This is true of the design process applied to a single product, and it is true of design as a national resource.

More than anything else, the lack of information prevents Estonian business from using design as a competitive factor. Changing the current situation into a preferred situation requires gathering, managing, and transacting information.

Information about design is needed in two ways.

First, the actors in the Estonian design sector need more information about design and the design process. The Estonian design sector is still in the aftermath of the Soviet period. To serve business and industry, the Estonian design sector must catch up with the advanced industrialized world. Geographical isolation and lack of knowledge do not lead to success in design. Estonian design must be open to the world, seeking and using the best available information on design and the design process.

Estonian design education must improve to reach international standards. Students and teachers must learn about design thinking and design issues outside Estonia. Estonian design education must emphasize research and theory along with top quality professional practice. Estonian designers must internationalize and compete with designers from elsewhere. Estonian companies must produce artifacts of internationally competitive quality. Estonian consumers must discover the benefits of good design, whether it is Estonian design or design from other countries. As Estonian consumers demand higher quality products, Estonian manufacturers will become increasingly fast learners. They will improve their products for the home market and this process will improve their situation on the export market. The public sector must develop a sense of user-oriented design much as business and industry should.

The key factor in reaching these goals is information. This requires acquiring information globally for local distribution.

Second, Estonia must inform the world about design. This effort has two aspects. The first involves informing the world about Estonian design. The second involves informing the world about design in general.

In terms of marketing, a successful product no one has heard of is not a successful product. Estonia must share information about its design successes with the world.

Estonia must distribute information on many kinds of design to establish itself as a locus of knowledge to which others pay attention. If Estonia becomes known as the nation that distributes the best information on design theory and new design, actors in the design sectors of other nations will be required to keep an eye on Estonia and they will also share information in exchange for access to Estonian resources. A weakness can be turned into a strength.
By establishing Estonia as a centre for knowledge about design, actors in the Estonian design sector will also learn. The best way of learning is teaching. That applies to the macro level as much as to the micro level. Also important, serving as an information resource for the global design industry is a cost-effective way of acquiring advanced design information for local use. Rather than paying others for advanced information, others will eagerly share information for the privilege of participating in the Estonian network. Information must be acquired, generated, and restructured locally for local and global distribution.

At the same time, Estonian firms must design and produce high quality products, services, environments, events and communication and experiences.

A robust design policy for Estonia must lead to increased demand for Estonian design by business and industry and by the public sector. Designers must increase their skills level, improving their contribution to the design process.

Because the Estonian economy is still young, it may be difficult for industry to create the level of demand that will move the Estonian design sector to the higher level that will in turn increase Estonian export of goods and services. To the extent that the market economy and public sector do not yet demand high quality design services, a design policy must provide incentives to create such demand.

Apart from products and services, Estonia must also ‘produce’ competence and knowledge in and outside schools.

Three kinds of activity are needed to establish Estonia as an international centre of design, with all the benefits this entails:

1. Learning
   Estonia must acquire advanced design information.

2. Doing
   Estonia must design and produce high quality products, services, environments, events and communication. Also, Estonia must ‘produce’ competence and knowledge.

3. Informing
   Estonia must inform the world about Estonian design and about leading design theory and practice wherever it takes place.

Estonia’s national design policy should be built around these three components.
6.3 Policy measures

The Estonian Ministry of Economic Affairs requested us to propose priorities for the design policy measures given here. Ideally, all proposals should be put into effect simultaneously. However, if all measures cannot be implemented, we suggest establishing the priorities given in this report.

Specific priorities and an action plan will require a careful cost-benefit analysis made in close cooperation with Estonian experts.
6.3.1 Design information centre

An Estonian design policy must be anchored by an adequate and agile organization.

We recommend a design information centre, which basically comprises a board of directors and a secretariat. The board makes decisions. The secretariat carries out the decisions. The designation, design information centre, stresses the importance of acquiring and disseminating information.

The board of directors should include representatives from government, business, the design community, education and tourism.

The secretariat should have three main responsibilities:

– implement design policies
– act as advisor to the government
– run a design intelligence unit

Implementation of design policies includes both anchoring policy programs operated by other actors and organizing events such as lectures, workshops, meetings and small exhibitions.

Anchoring the policy programs and organizing events will help the secretariat to develop expert knowledge that may result in suggestions for adjusting and changing of policy measures. The design intelligence unit together with Estonian and international contacts will also support these activities.

The secretariat shall also provide advice on design issues to the government and public authorities.

The most resource intensive aspect of the secretariat will be a design intelligence unit, which gathers and disseminates information about design and design theory.

The target group for disseminating information comprises national and international stakeholders. As English is the lingua franca of the design world, all information delivered by the design intelligence unit should in principle be in English and Estonian. The value of sharing information with the world can hardly be overvalued.

The design intelligence unit will:

– Monitor the international and Estonian design scene and gather design information about design theory and design practice. Main sources will be Internet and printed sources.

– Study, edit, abstract, publish, and distribute international and Estonian design intelligence to the Estonian and international design community.
It is of vital importance that the design information centre remains absolutely lean. The board must have a limited number of members to be effective. The secretariat should not be institutionalized in a way that makes the survival and growth of the secretariat more important than the cause it serves. The design information centre should never compete with Estonian designers. Activities should be organized in terms of needs rather than as permanent institutions. The organization must always be able and willing to change. Organizational elasticity must be permanent.

The organization and its results should annually or biannually be evaluated by a professional external auditor.

Organizing

1.1 Establishing a design information centre  PRIORITY

Learning / informing

1.2 Estonian design website  PRIORITY
   State-of-the-art website presenting Estonian design intelligence, Estonian design philosophy, Estonian design and Estonian designers. The design of the website should include a plan for permanent change.

1.3 E-mail newsletter  PRIORITY
   A monthly e-mail newsletter with Estonian and international design news

1.4 Hard copy newsletter
   A monthly printed newsletter, delivered by ordinary mail

1.5 Library  PRIORITY
   A design library with reading room and copying service

1.6 Research service
   Contract information research for Estonian and foreign actors

1.7 Design awards
   Program for yearly awarding of good design. These must be awarded for products and services that can be appreciated by a large audience. An award program will have positive side effects on manufacturers, designers, and the general public.

1.8 Foreign guests  PRIORITY
   All kinds of lectures, seminars and meetings with foreign specialists and leaders. Arrangements can be telecast or webcast to places outside Tallinn.

1.9 Designers index  PRIORITY
   A data base covering approved Estonian designers with educational and professional qualifications and portfolios. The establishment of the designers index will enable the design information centre to recommend designers for specific jobs. Recommendations should whenever possible include three candidates.
6.3.2 Business and industry

The goal of these policy measures is to get more companies to use professional design services to add value to their products and services. Company managements must be convinced that design is relevant to their company. When convinced, they must be encouraged and helped to take action.

The target group includes manufacturing companies – but also other businesses – of all sizes in all parts of the country.

Learning

2.1 Information booklets PRIORITY
Basic information giving answers to frequently asked questions. All publications must include references to further sources of information. Abstracts of good foreign-language literature can be helpful.

2.2 Case magazine
Periodical focusing on – national and international – design based success stories. The magazine can be sold internationally and eventually be a source of income.

2.3 Meetings, seminars, workshops
Regional and national events, which sell the gospel, give inspiration to business managements, and inspire multidisciplinary networking. Foreign lecturers should be used frequently.

Doing

2.4 Design audit program
Free or low-cost audits in which companies are checked wall-to-wall in terms of design.

2.5 Icebreaker program PRIORITY
Financial support to companies that first time buy professional advice and design from approved Estonian designers.

Informing

1.2 Estonian Design website PRIORITY
State-of-the-art website presenting Estonian design intelligence, Estonian design philosophy, Estonian design and Estonian designers. The design of the website should include a plan for permanent change.

1.7 Design awards
Program for yearly awarding of good design. These must be awarded for products and services that can be appreciated by a large audience. An award program will have positive side effects on manufacturers, designers, and the general public.
6.3.3 Public sector

The goal of these policy measures is to help the public sector to become a qualified user of professional design. The suggested measures will induce the public sector to offer better services, to serve as a model to private companies, and to educate Estonian suppliers by demanding design quality. The public sector can be a heavy user of design: hospitals, public transport, public spaces, public (visual) information, etc.

The target group includes ministries, local administrations, and all kinds of publicly owned companies.

Learning

3.1 Information booklets PRIORITY
Basic information giving answers to frequently asked questions. All publications must include references to further sources of information. Abstracts of good foreign-language literature can be helpful.

3.2 Meetings, seminars, workshops
National and local events where experts lecture and participants discuss and establish networks.

Doing

3.3 Competitions PRIORITY
Design competitions with a limited number of invited participants can sometimes be appropriate means to illuminate the field of possible solutions. Competitions also give good publicity that may educate the population in general. However, the real purpose should be kept in mind: inducing the public sector to be a qualified user of professional design.

Informing

3.4 Knowledge sharing PRIORITY
By offering information on essential design results, public administrations can improve their image, inspire other public administrations, and contribute to a general understanding of design. Website and other media.
6.3.4 The design community

The goal of these policy measures is to elevate the skills of the Estonian design profession to the international level. While seeing foreign designers get commissions in Estonia, Estonian designers must themselves internationalise and get jobs inside and outside Estonia.

The target group is Estonian designers, formally educated or self-taught, independent or employed, and Estonian design firms.

Learning

4.1 Continuing education: design PRIORITY
Estonian designers must have access to courses where they can become acquainted with the newest design disciplines as they are practised in the international forefront. If qualified teachers are not available, designers must teach themselves in study circles.

4.2 Continuing education: general business knowledge
Courses where designers learn the business of business to understand their clients better. E-learning is another possibility. Estonian designers will acquire essential language skills if the teaching is in English.

4.3 Continuing education: Managing a design business
Courses where designers learn how to run a small business, from reading the market, and selling their services, to networking with other businesses.

4.4 Travel grants PRIORITY
Support to designers who want to take courses or in other ways educate themselves and make research abroad.

4.5 Benchmarking PRIORITY
A web service mapping the top design studios of the world will help Estonian designers to compare with their international peers and betters.

1.2 Estonian design website PRIORITY
State-of-the-art website presenting Estonian design intelligence, Estonian design philosophy, Estonian design and Estonian designers. The design of the website should include a plan for permanent change.

2.2 Case magazine
Periodical focusing on – national and international – design based success stories. The magazine can be sold internationally and eventually be a source of income. Estonian designers will submit successful cases for consideration.

Doing

2.5 Icebreaker program PRIORITY
Financial support to companies that first time buy professional advice and design from approved Estonian designers.
3.3 Competitions (in the public sector)  
Design competitions with a limited number of invited participants can sometimes be appropriate means to illuminate the field of possible solutions. Competitions also give good publicity that may educate the population in general. However, the real purpose should be kept in mind: inducing the public sector to be a qualified user of professional design.

Informing

1.7 Design awards  
Program for yearly awarding of good design. These must be awarded for products and services that can be appreciated by a large audience. An award program will have positive side effects on manufacturers, designers, and the general public.

1.9 Designers index  
A data base covering approved Estonian designers with educational and professional qualifications and portfolios. The establishment of the designers index will enable the design information centre to recommend designers for specific jobs. Recommendations should whenever possible include three candidates.

4.6 Export support  
Information and marketing support for Estonian designers and design firms abroad.
6.3.5 Education and research

Design education and design research are key factors in the transition from Estonia’s present state to future status as a nation known for design capacity. The goal of these policy measures is to bring Estonian design education and design research up to an international level.

The target group is primarily the Estonian Academy of Arts – which needs a substantial injection of money and hope – along with other educational institutions involved in teaching design, design engineering, and design management.

Learning

5.1 Shared courses  PRIORITY
Where relevant, schools of different kinds – design, business, and engineering – should share courses to create greater learning and increase knowledge transfer.

5.2 International teachers  PRIORITY
The Estonian Academy of Arts and other educational institutions should increase their use of full-time foreign teachers and visiting foreign lecturers.

5.3 International researchers  PRIORITY
The Estonian Academy of Arts and other educational institutions should increase their use of full-time foreign researchers, and guest researchers from abroad. This should be linked to the efforts of strengthening the doctoral education at EAA.

5.4 International research engagement
The educational institutions should participate actively in international research projects as well as in creating content for an Estonian design information centre.

5.5 Traineeships  PRIORITY
The EAA should together with business and industry establish a program for traineeships for design students. Efforts should be taken to make the program equally attractive for the host and the student.

5.6 Travel grants  PRIORITY
The government and private firms should sponsor travel grants for teachers, researchers and students at the Estonian design schools. The benefits regarding mobility that come with the membership in EU should be capitalized intensively.

5.7 Business education  PRIORITY
The design schools must incorporate business education into the design curriculum. All design students should have some exposure to business, manufacturing, logistics, and related disciplines. Also, integrated educations should be considered. The International Design Business Management, IDBM, program in Helsinki can inspire. Also other contextual skills dealing with societal and cultural parameters vital to the professional life should be incorporated in the curriculum of EEA.
5.8 Design education for the business and engineering sector
The business schools and technical schools should offer optional courses in design.

5.9 Primary and secondary schools
Aspects of design education and design awareness should be added to the primary and secondary curriculum.
6.3.6 General public

Estonian design cannot be an enduring success if the general public is not aware of – and doesn’t demand – good design. The goal of these policy measures is to prepare the ground for private and professional demand for good design. The general public should learn that design is more than good-looking objects. It is also about heightened usability and ecology.

The target is also to fuel qualified recruitment for the study of design and for the design profession.

The creation of design awareness can take place directly. It also requires media support. The direct target group is the general public. Media target groups include journalists at newspapers, magazines, radio and television.

Learning / informing

6.1 Exhibitions
   Travel exhibitions in libraries and other public places

6.2 Television
   Television programs on good design

6.3 Print media
   Press releases to stimulate articles in newspapers and magazines

1.7 Design awards
   Program for yearly awarding of good design. These must be awarded for products and services that can be appreciated by a large audience. An award program will have positive side effects on manufacturers, designers, and the general public.
6.3.7 Tourism and public transportation

In terms of turnover and employment, tourism is one of the world’s most important industries. It also has a great influence on Estonian economy. Facilities for tourism and public transportation can become important target areas for new Estonian design. That will be beneficial to both tourism and design. Best of all, it will contribute to Estonia’s coming image as a design country in a powerful way.

The target group comprises all companies working with tourism and public transportation.

Learning

7.1 Study of destination marketing and design for tourism
An international study of destination marketing and design for tourism should be conducted. How can good design attract tourists? What applies to Estonia?

7.2 Information booklets PRIORITY
Basic information giving answers to frequently asked questions. All publications must include references to further sources of information. Abstracts of good foreign-language literature can be helpful.

7.3 Education
Seminars on destination marketing and design for tourism

Doing

7.4 Adjustment of the Welcome to Estonia campaign PRIORITY
While a lot of good thinking has gone into this venture, the verbal and visual result leaves room for improvement. The catch line is not imaginative. The graphic design is not world class. An invited competition among Estonian designers – perhaps allied with foreign partners – will produce a better alternative.

7.5 Competition for better street furniture PRIORITY
Design competition for tourist and transportation facilities.
Bus shelters, information posts, benches, drinking fountains, etc.

7.6 Competition for better communication PRIORITY
Design competitions for the graphic presentation of tourist and transportation facilities: signage, maps, timetables guides, brochures, etc.

7.7 Competition for better websites PRIORITY
Design competitions for national and local tourist web communication.
6.3.8 International audiences

Estonia shall keep the world informed, of its own results and on design issues in general. The goal of these policy measures is to establish Estonia as a design nation and to market the products and services of Estonian business and industry and the services of Estonian designers.

The target group is the international design press, along with design, consumer, and travel journalists at major media. This is primarily aimed at journalists in countries, which influence international design and which are markets for Estonian products and services. The target group also includes potential and actual tourists to Estonia.

Doing

7.4 Adjusting the Welcome to Estonia campaign  PRIORITY

While a lot of good thinking has gone into this venture, the verbal and visual result leaves room for improvement. The catch line is not imaginative. The graphic design is not world class. An invited competition among Estonian designers – perhaps allied with foreign partners – will produce a better alternative. An adjustment of the Welcome to Estonia campaign will have its strongest influence outside Estonia.

Informing

1.2 Estonian design website
State-of-the-art website presenting Estonian design intelligence, Estonian design philosophy, Estonian design and Estonian designers. The design of the website should include a plan for permanent change.

2.2 Case magazine
Periodical focusing on – national and international – design based success stories. The magazine can be sold internationally and eventually be a source of income. The case magazine will present Estonian design in a subtle way by surrounding it with the best achievements from elsewhere.
Appendix 1

The Danish Design Icebreaker Program

In the period 1998-2001 more than 400 Danish SMEs received economic support in a design icebreaker program and received government support to use of professional design in a development project. The participating companies worked with more than 120 designers and design firms, which were prequalified for the icebreaker program.

The criteria for support were that the applying companies:

– were SMEs according to the EU definition: with a maximum of 250 employees, a maximum yearly turnover of 300 million DKK, and a maximum 25% of the company owned by one or more companies

– not had cooperated with or employed a designer the preceding five years

– engaged a fulltime designer on normal employment conditions or commissioned a design firm

The support was limited to 50% of the designer fees, but could not exceed DKK 66,000.

The goals of the Icebreaker program were:

– that 70% of the participating companies got a satisfying result by using a professional designer for a development project.

– that 60% of the participating companies will use designers for design jobs on a regular basis.

An evaluation made when the individual projects were finished showed that

– ca 90% of the companies were satisfied with or very satisfied with the Icebreaker program

– almost 75% of the companies felt that the designers had contributed to increase the design awareness in the management

– almost 80% of the companies experienced having received a lift in competitiveness and financial results

An evaluation of the total program was published April 2003. Among the conclusions of the report were that:

– 57% of the supported companies have continued or plan to continue cooperation with designers.

– 93 % of the companies that continue or will continue cooperating with designers agree fully or agree that design influences the competitiveness. 80% agree fully or agree that design is an investment.
– 89% of the companies that did not continue cooperation with designers agree fully or agree that design influences competition. 86% agree fully or agree that design is an investment.

– the design projects are primarily assimilated in companies where middle management is responsible for the company’s design implementation.
Appendix 2

CASE STUDY

Olde Hansa, restaurant, Tallinn
Based on interview with Jukka Blomqvist, Board Member, Partner

Olde Hansa restaurant located in the medieval city centre of Tallinn opened in 1997. Jukka Blomqvist owns the place together with two friends: an Estonian/Finnish married couple. Before opening they searched for a long time to find the very best location. They found an old warehouse owned by a fishmonger with sales of roughly 500 Estonian kroner per day. On a good day, Olde Hansa’s turnover will pass 500,000 Estonian kroner.

Olde Hansa opened in 1997 as a normal restaurant, but soon began remodelling to introduce the medieval theme. Interiors, service uniforms, table ware, music and food were all medievalised. The restaurant was never closed during renovation. “That would have been suicide”, says Blomqvist. Guests were asked for their advice. This experience was so positive that the restaurant manager suggested prolonging the reconstruction work.

Later, the Olde Hansa theme was franchised. In 2001, the first franchisee opened an Olde Hansa on Tyske Bryggen, the historical waterfront of Bergen, Norway. Next franchise will open in the spring of 2003 on Strøget, the main pedestrian street of Copenhagen. Olde Hansas in Sweden and England are also considered. However, all these developments are just part of a warm-up exercise. Olde Hansa builds on German culture. Germany is the target.

Olde Hansa epitomizes the needs of the experience society. Everything goes together for the total experience. When guests enter the restaurant they will generally be met within 10 seconds. “That’s the cheapest kind of marketing” explains Jukka Blomqvist. “If arriving guests are not met immediately they may leave if the restaurant is empty, or if the restaurant is full, or even for another reason”. If Olde Hansa guests cannot be seated immediately they will be offered free drinks. If Olde Hansa guests cannot be seated within the near future, the waiter recommends a good nearby.

All waiters of Olde Hansa are students. Professional waiters are not employed because they have already learned many habits which shouldn’t be practised at Olde Hansa. Job applicants complete a profile questionnaire on the Internet. Out of 500 applicants, 50 will be invited for personal interviews, and perhaps 20 will be offered a well paid job.

Together with other quality parameters, staff performance is evaluated four or more times a year. Guests are asked to complete a questionnaire dealing with service, food, interiors, and ambience on a scale from –3 to +3 with no zero in the middle. Completed questionnaires confirm Blomqvist’s belief that personal service is the most important aspect of the Olde Hansa experience. Everything is well if the guests are treated well. Evaluations run typically well over 2.5 and sometimes very near to 3. “When you have evaluations beyond 2.5 advertising is superfluous”, says Jukka Blomqvist. Satisfied guests will tell their family and friends about Olde Hansa. Just to be sure, Olde Hansa also evaluates the quality of competing restaurants in the neighbourhood by interviewing guests when they leave. The difference in evaluation is encouraging to Olde Hansa.
Olde Hansa has established a manual that the waiters know by heart. It deals with almost every possible situation: How should they deal with drunken guests? How should they deal with guests who are singing? etc, etc. It covers all these problems and more, including the problems that arise in selling each table several times per day. The rules work. On a good day, the 400 indoor and outdoor seats of the restaurant accommodate a total of 2,400 guests.

Olde Hansa is a theme park which offers a journey through times going back 500 years. Guests who like the taste of medieval food can buy food specialities, which travel well to take home. Guests can also buy the ceramic plates and mugs, knives and forks, furniture and even waiter costumes. All are designed and manufactured specially for Olde Hansa. Historically oriented guests may remember that forks and potatoes were not around in medieval times. They enjoy their knowledge together with meal and music.

www.oldehansa.com gives an impression of the medieval catering empire to come. It addresses an audience of presumptive guests, job applicants and franchisees. It is no surprise that graphics are complete with a special typeface, Olde Hansa Regular embellished with illuminated initials.

Olde Hansa has little to do with modern design. Yet, the thinking behind Olde Hansa includes three important elements that the design sector cannot afford to neglect. In the words of Jukka Blomqvist: “Do your research. Know your clientele. Concentrate.”