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# A comparative analysis of strategies for design in Finland and Brazil

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## **Abstract**

This paper reports on work in progress and initial findings of a research project that is comparing existing strategies for design (in promotion, support and policy fields) in four selected countries: Finland, South Korea, Brazil and India. For this specific paper, Finland and Brazil are the case studies compared. The paper explains the criteria for selection of these subjects, based on their stage of development and position on the Global Competitiveness Index (World Economic Forum). The objective of the research project is to investigate how countries with different national contexts adopt different strategies for design in coherence with their positions, weaknesses and strengths.

## **Keywords**

Design Policy, Design Strategy, Case Study/les, Brazil, Finland, Economic Development.

Advances in technology and greater access to the global economy have had a profound impact on national economies. This is reflected in the pressure for countries to compete aggressively. To compete they now have to be able to exploit knowledge for wealth creation across all industries and sectors. In this scenario, design is a powerful tool in helping economies to remain competitive, in particular when exploited by companies interested inadding value and differentiating their products and services in the market.

However, the benefits of design are not yet fully recognised by businesses, in particular small and medium-sized enterprises (SMEs), who remain skeptical in relation to the cost-benefit of investments in this area. It is also well known that they lack resources (both human and financial) to invest in creative and research areas. Investments in design are often seen as extra costs that can be avoided using internal capability. The result is usually poor quality of products/services and ultimately business failure. As SMEs represent typically over 95% of all businesses in a country, this failure impacts directly on a nation's economic health (Bruce, Cooper & Vazquez 1999; Larsen & Lewis 2006; Raulik 2004).

Understanding this shortfall is of crucial importance to appreciate the need for developing design support and promotion programmes. The weakness of the SME

sector; the lack of awareness about the benefits and use of design; the importance of competitive businesses for national/regional economy; and the potential benefit of the use of design justify the need for encouraging companies to invest in design (Enterprise Directorate General of the European Commission 2000). A stronger focus on the development of products and services would help SMEs to become more competitive, strengthening the industry and consequently the economy. This is the reason why some countries are willing to invest in support programmes that will help SMEs to exploit design for their business competitiveness. The commercial success of individual SMEs will contribute to the economic advantage of the country.

A previous study (Author 2007) has identified design strategies in 44 countries around the world, including programmes for design promotion, support for local companies, design education and government policies for design (Figure 1). Design support programmes are schemes implemented to assist businesses to use design in order to improve their businesses (Sung et al 2007, Raulik 2004). As an example, these programmes build "bridges" between design and industry (Dahlin & Svengren 1996). Design promotion initiatives are targeted at the wider public, which includes businesses, usually with the objective of raising awareness about the benefits of design through many different ways (e.g. exhibitions, awards, seminars, publications). Design Education includes the formal education system (e.g. foundation courses, degrees, masters and post graduate courses) and further education (e.g. professional training). The effective implementation of both promotion and support schemes are dependent on a quality design education system. A country or a region must form good design professionals in order to meet the demand that can be raised by promotion campaigns and support schemes.



Figure 1: Presence of design promotion, support and policies in the countries

Support, promotion and education are the main axis for fostering the use of design for competitiveness. However to gain maximum advantage, the implementation of these schemes should be determined by strategic plans or government policies. These four elements (support, promotion, education and policy) are the fundamental elements of a country's design system (figure 2).

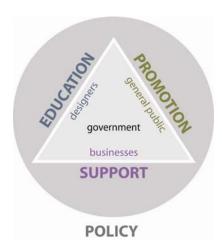


Figure 2: Design System

This paper reports on work in progress and initial findings of a PhD research project that is comparing existing strategies for design (in promotion, support, education and policy fields) in four selected countries. Finland, South Korea, Brazil and India were identified through a criteria that intended to select subjects that would provide meaningful insights on how countries with different national contexts adopt different strategies for design in coherence with their positions, weaknesses and strengths. This is the objective of the PhD research project, which will be demonstrated in this paper through the comparison of design strategies adopted in Finland and Brazil.

## Methodology

This study has started with an exploratory survey that intended mainly to identify where (1) design support had been delivered as part of an economic development plan, (2) design promotion programmes were in place and (3) design policies were in place or in development. The survey was conducted between December 2006 and May 2007 through a structured questionnaire distributed to design support organisations and agencies throughout the World.

From the results of this survey, it was possible to compile a database for the analysis of the design schemes existent in different countries, regions and economic blocks. Statistical analysis was employed to compare a country's profile and their position based on different rankings published on the World Competitiveness Report 2006-2007 (Lopez-Claros et al. 2006), in particular, a country's' stage of development and general rank of Global Competitiveness.

Criteria was then established for the selection of subjects for a qualitative study. Four case study subjects were selected by criteria that:

- identified countries where design strategies (promotion, support and government policies) were in place in each stage of economic development (World Economic Forum) (Lopez-Claros et al. 2006) (see figure 3);
- among the subjects meeting criteria 1, identified the country in the highest position in the Global Competitiveness Index in each stage of economic

- development (the number in front of the name of the country in figure 3 shows the index position);
- defined a group of subjects that represented the different stages of development and the different World Macro regions (United Nations 2000) in order to have a rich variety of national contexts.

World Macro Regions (United Nations)	Stages of Economic Development (World Economic Forum)				
	Stage 1 (GDP p.c. <us\$2,000)< th=""><th>Transition from 1 to 2 (GDP p.c. US\$2,000-US\$3,000)</th><th>Stage 2 (GDP p.c. US\$3,000-US\$9,000)</th><th>Transition from 2 to 3 (GDP p.c. US\$9,000-US\$17,000)</th><th>Stage 3 (GDP p.c. &gt;US\$17,000</th></us\$2,000)<>	Transition from 1 to 2 (GDP p.c. US\$2,000-US\$3,000)	Stage 2 (GDP p.c. US\$3,000-US\$9,000)	Transition from 2 to 3 (GDP p.c. US\$9,000-US\$17,000)	Stage 3 (GDP p.c. >US\$17,000
Africa			45 South Africa ••		
Latin America			58 Mexico •• 66 <b>Brazil</b> •• 69 Argentina ••		
Northern America					6 United States ● 16 Canada ●
Asia	43 <b>India •-•</b> 54 China ••	35 Thailand ◆	26 Malaysia •• 59 Turkey •	13 Taiwan ••∘ 24 Korea •••	5 Singapore ••• 7 Japan •••
Europe			37 Slovak Rep ◆◆ 48 Poland ◆◆○ 51 Croatia ◆	25 Estonia ●● 29 Czech Rep●●● 41 Hungary ●	1 Switzerland • 2 Finland ••• 3 Sweden ••• 4 Denmark •• 8 Germany •• 9 Netherlands ••• 10 UK •• 12 Norway •• 14 Iceland • 18 France •• 20 Belgium •• 21 Ireland •• 22 Luxembourg • 23 Spain •• 33 Slovenia • 34 Portugal •• 42 Italy •• 47 Greece •
Oceania					19 Australia ● 23 New Zealand●●●
	FACTOR-DRIVEN ECONOMIES	•	EFFICIENCY-DRIVEN ECONOMIES	*	INNOVATION-DRIVEN ECONOMIES

Figure 3: Countries and Stages of Economic Development

Figure 3 shows the method that was used to identify the subjects. The table includes only countries where strategies for design are in place, according to the responses collected during the survey. The most interesting subjects for this study are the ones that contain the three levels of strategy (promotion, support and policy). Below stage 2 no country met the criteria. However, Brazil declared to have a policy in development and India, although has no design support in place, already has a policy that can be evaluated in this study.

The case studies presented in this paper were developed through data collected by means of interviews, literature review and document analysis between June 2007

and February 2008. Semi-structured interviews were conducted with representatives of the institutions responsible for the conception and implementation of design strategies in Finland and Brazil. Mindmapping was used to visually illustrate the system of organisations involved in the delivery of design strategies in the countries.

## Case study 1: Finland

The history of design in Finland started in 1875, when Finland was still under Russian regime. Efforts to start a "systematic action to promote industrial crafts and arts" resulted in the foundation of the Finnish Society of Crafts and Design, responsible for maintaining the 'Sunday School' and encouraging manual skills within industry (Stenros 2007). The School of Arts and Crafts remained strong and became an important educational institute, responsible for training many important Finnish designers. In 1973 the School became the University of Art and Design Helsinki, which is currently one of the best Universities for design in the World (Business Week 2007).

Finland became independent in 1917 and this started a process of internal construction, bringing an emphasis and identity to architecture and interior design. The "Finnish style" started with strong influences from Russia and Sweden. In the 1930s, Finnish designer and architect Alvar Aalto started breaking into the international market building a positive reputation for Finnish design.

After the Second World War, the optimistic post-war period was marked by the resurgence of exhibitions. As an initiative of the Finnish Society, Finland was present at the Milan Triennales in the 50s and 60s, winning many prizes for its products. This strategy was successful and soon Finland obtained recognition for its design production.

The image of Finnish design was developed almost at the same time as the other Nordic countries, creating the brand "Scandinavian design". Together with Sweden and Denmark, Finland undertook some successful strategies of international promotion. The "Design in Scandinavia" exhibition was one of them. The collection was exhibited in twenty-four museums in the United States between 1954 and 57, reaching more than a million visitors. Success was due to a combination of efficient public relations, the political strategy of associating with Scandinavian countries (Hawkins 1998), and excitement about the "Scandinavian style": democratic design, use of materials, colours, combining crafts with industrial production, organic forms with everyday functionality.

In the 1970s the use of new materials (plastic, fibreglass, synthetic fibres) combined with new manufacturing technologies gave designers the opportunity to exploit new forms and colours in mass production. Soon the debate on the social needs, use of energy and natural resources started. Ergonomics and the environment became relevant issues in the 80s. At this time, industrial design was starting to receive better recognition in Finland with more industries and more sectors employing professional designers in more significant roles within product development and corporate strategy teams.

Design Forum Finland was established by the Finnish Society of Crafts and Design at the end of 1980s with a mission focused on promoting design among small and medium-sized industry as well as internationally (Design Forum Finland 2007).

The 1990s was a decade of transformation for Finland. The country's economic situation at the beginning of the decade was a severe recession characterized by a major banking crisis, rising unemployment rates, accumulation of government debts and inflation among other factors. Moreover, the collapse of the Soviet Union had a strong negative impact on the Finnish industry. The end of the convenient Finnish-Russian bi-lateral trade left companies in Finland with a negative balance on their foreign trade as well as an old-fashioned industry with out-of-date technologies (Dahlman, Routti & Ylla-Antilla 2006).

The country then started a movement that brought Finland to the lead of the list of competitive countries in the World Economic Forum. A unique aspect of this strategy was the investment in measures with long-term impact instead of immediate solutions, as usually chosen by governments at critical moments. One of the most relevant measures for the context of this research was the ambitious aim of building a knowledge-based country and the plan carried on in order to achieve this goal. Investments in R&D were prioritized. As explained by Dahlman *et al.* (2006) "increasing investments in R&D during times of high unemployment required great political wisdom and courage (...)".

The policy for design was part of this movement. The work started in 1996 when Sitra (The Finnish National Fund for Research and Development) invited a group of representatives of the design community to discuss how design could contribute to innovation, industrial and economic development in Finland. As a result a formal survey was conducted and the report Designed Asset I-II - Design, Industry and International Competitiveness was published in 1998. The establishment of a national system of design to operate with the system for innovation was an important and visionary recommendation in this report. Based on this survey, a second important report was published in 1999, serving as the basis for the Finnish design policy. The report was "a large part a vision of what the Finnish design system should be in 2005. It clearly defined what the impact that the policy should have in quantity and quality of Finnish industrial design" (Valtonen 2005). The official policy, called Design 2005! was ratified by the government and published in June 2000. Three main goals: to improve design quality; to promote extensive use of opportunities inherent in design with a view to improve competitiveness and employment; and to develop the quality of the living environment and promote a distinctive national culture.

Thanks to the government policies, Finland ended the 20<sup>th</sup> century having left an essentially natural-resource based industry to become a competitive knowledge-based economy with the highest investment rate in R&D in Europe – 3.5% of GDP (Dahlman et al. 2006) – and specialised high-tech industry (important global brands were established in Finland in the 90's (e.g. Nokia, Suunto, Metsopaper, Ponsse and Polar).

Figure 4 represents the design system in Finland, as it stands in June 2007. It shows the main stakeholders, categorized according to their role in the system.

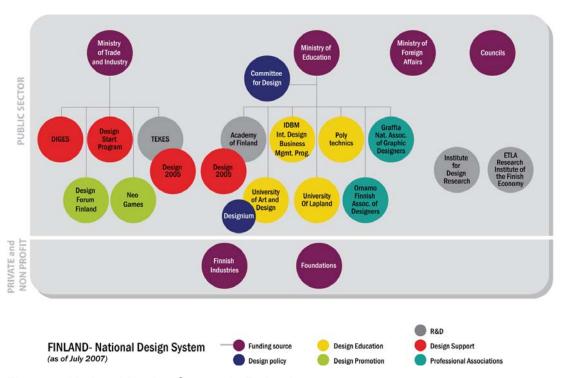


Figure 4: National Design System in Finland

In the Finnish design system it is interesting to note the strong presence of R&D institutions, a characteristic that is not expected to be found in other countries. The Committee for Design and Designium, a research centre for innovation in design, are also unique elements to the Finnish model. Designium, part of the University of Art and Design Helsinki, is an important source of information for the Finnish Government (mainly for government's policy implementation like ministries and funding institutions like Tekes), organising surveys, gathering data and benchmarking design strategies from other countries, information that will support decisions and the development of strategies for the promotion of Finnish design.

DesignStart Programme (ongoing) and Design 2005 (2002-2005) are the main programmes on design support for Finnish companies.

## Case study 2: Brazil

Brazil was the fifth nation in the world to have a dedicated patent legislation, developed as an "effective protection system for the development of the national industry" (Rodrigues 1973 in Rezende 2005). This was in 1809. In 1875 a system for registration and protection of names and images (e.g. logos) was also developed. In 1882 the visionary Brazilian politician Ruy Barbosa delivers a speech entitled "Design and Industrial Design": "...It is design my dear sirs, simply design, this modest and gentle discipline that is purifying, communicative and affectionate of all disciplines, such as the drawing classes taught to children and adults from kindergarten to university, as a mandatory foundation for all social strata...". These

were the early steps of the development of design activity in Brazil. Unfortunately, this vision did not have much impact in Brazil for the following decades.

Industrial design education also had its start in the nineteenth century. This discipline started to be taught in the country in 1850, as part of the evening course at the Imperial Academy of Fine Arts in Rio de Janeiro (Cardoso 2005).

In the 30s and 40s, design emerged among the art movement "modernists" when artists/designers produced specially commissioned objects" (Leal 2007). Recognition of design as professional activity happened a few decades later with two important events: the opening of the Contemporary Art Institute (IAC) of the Art Museum in 1950 and the launch of the Superior School of Industrial Design (ESDI) in 1963 (Cardoso 2005).

The 1950s was a particular progressive decade for Brazil. In 1955 Juscelino Kubitscheck was elected national president with the slogan "Fifty years of progress in five". Brasilia, the national capital, was built during his mandate and the country witnessed many ambitious projects and an economic boom. This favourable economic scenario fostered the opening of many new companies and also increased consumerism. "Some companies commissioned designers to develop their products, including the automotive industry, which was quickly expanding. (...)This time was also ripe for the emergence of the first initiatives in design." Brazilian design was starting to be internationally recognized through awards (e.g. Armchair Mole by Sergio Rodrigues). The 60s was the decade when important Brazilian brands and design icons emerged (Leal 2007).

The 60s was also the decade when the first design promotion programmes established in Brazil: the Brazilian Association of Industrial Design (ABDI) in 1963 and the International Design Biennials in Rio de Janeiro in 1968, 1970 and 1972.

In 1975 the Federation of Industries in Sao Paulo established the first design centre in this state with the objective to disseminate design to companies in this area. This initiative was called Industrial Design Centre NID until 1982 when it became part of the Department of Technology (DETEC). The centre developed quality design work in the field of orthopaedic and hospital equipment (Leal 2007) and was effective in the creation of the "Museu da Casa Brasileira" and its award in 1986 in partnership with the State Secretary of Culture. This remains until today as one of the most respected awards in the country.

In the 80s, as well as the Brazilian Ergonomics Association (Abergo), important design centres were also opened in Brazil by the Federal government research institution CNPq. Three 'Associated Laboratory of Product Development/Industrial Design' (LBDI) were established in South, Southeast and Northeast. However, only the first one prospered. Associated to the university's technological centre, this LBDI became one of the most important research institutes in product design of Latin America. The main activities were services to the industry, training and research in design (Rede Design Brasil 2008a). It was closed in 1997.

The transition of the 80s and 90s decade were marked by hyperinflation and economic stagnation. Several economic plans had been tried before, but another one was needed in order to bring the country to stability in a global economy. The first post-military-regime elected president, Fernando Collor de Mello, introduced

policies aimed at removing restrictions on free enterprise, increasing competition, privatizing public enterprises, and boosting productivity. He did not succeed in stopping inflation, but his policies helped Brazil to be introduced on the global market. Suddenly the national industries were facing international competition and needed to seek its products' commercial advantage. Design became an important asset for business competitiveness.

The Brazilian Programme for Design (PBD) emerged in this context. It was created in 1995 by the Ministry of Industry, Commerce and Tourism based in the Federal capital Brasilia but regional programmes were also established in some federation states in the following years. Some institutional and private initiatives also found a favourable time to set up activities. Brasil Faz Design and Objeto Brasil were two of the initiatives for the promotion of Brazilian design both in the country and abroad (Leal 2007).

A design policy for the State of Sao Paulo was launched in 1995 under the title "Programa Sao Paulo Design". This policy was establishing a base for co-operation between various stakeholders in the state and also included the establishment of the Sao Paulo Design Centre which is still in operation (CSPD 2008).

Many other states in Brazil launched their own design policies in the same period. The policies evolved in different ways, depending mainly on the support available from local government, professional associations and leadership. In some states the policy resulted the creation of regional design centres.

This was also the case of the Design Centre Parana created in 1997 with full support from the State government. The centre was established under the umbrella of the State's Institute of Technology. This association was key for the initial focus on product development and innovation. Its main activity was services to the industry, as a bridge between designers and companies. In 2000 this organisation launched the Criação Paraná programme, which was an important design support programme in Brazil, providing a tailored advice programme for manufacturing industries, taking them from the initial stage of the design process to the prototype stage. The programme had two editions which were closed with exhibitions (in 2002 and 2005) of more than 40 products developed during each programme. The programme was based on the experiences of the Glasgow Collection, developed in Scotland/UK from 1997 to 1999. Although the two editions of the programme were successful, the third edition was jeopardized by lack of funding. The Design Centre is still in operation, however, it no longer receives funds from the State government and has been disconnected from the Institute of Technology.

In 2001, the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE) launched a programme that became maybe the most audacious investment in a design programme in Brazil ever. "Via Design" had three streams: assisting SMEs on the use of design, promoting design among SEBRAE, and strengthening the Brazilian infrastructure of design services for SMEs. The third stream was responsible for the establishment of about 100 design centres and/or units around the country. However, financial support from the Via Design lasted only until 2005. After that, the centres had to find own means for sustaining their operation and about 30% of the initiatives closed their doors. SEBRAE is still one of the most important stakeholders in the Brazilian design system. This organisation takes the lead and

with large investment and operational support, implements its own programmes and provide invaluable contribution to other initiatives such as the PBD and Design Biennial.

The first Brazilian Design Biennial took place in 2006 in Sao Paulo and was an important event for the promotion of design in Brazil. It was organised in cooperation between the Ministry of Development, Industry and Foreign Trade with the Programme Competitive Brazil (MBC).

A Brazilian design identity has been a constant topic of discussion for designers in this country. It is also considered an important issue for Brazil's exports. The Marca Brasil Programme (launched in 2000) was one of the attempts to establish an identity. A special government-aided programme called Design & Excellence Brazil is dedicated to supporting Brazilian products on international competitions in particular the iF award.

Creativity is a strong asset for Brazilians and designers have been educated to use this natural talent to develop products and communication. Although Brazil has 331 graduate design courses (Miasaki et al 2006) not all of them provide quality education and some young professionals can be unprepared for work in the industry.

PBD, the Brazilian Programme for Design is the Federal government design initiative since 1995. However, its operation is limited by budget constrains and it also finds difficulties in acting as a coordinator for the various other design initiatives in the country. The document PBD 2007-12 sets up the current policy for design in the country (PBD 2007). This strategic plan was based on three preparatory documents: international and national benchmarks (Raulik 2006; Miasaki et al 2006 and CDP 2006). The aim is to encourage industrial and technological modernization through design in order to improve quality and competitiveness for Brazilian products and services. However, the policy does not distribute actions among the stakeholders.

Figure 5 represents the design system in Brazil in January 2008. It shows the main stakeholders, categorized according to their role in the system.

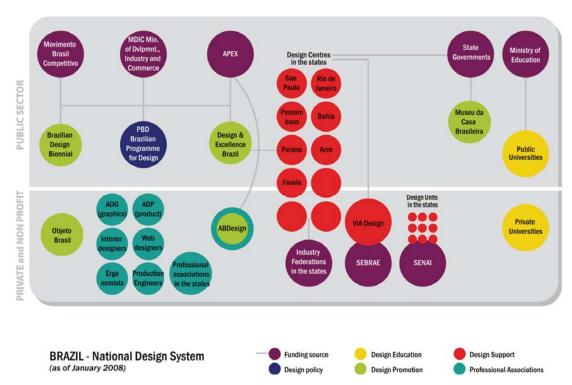


Figure 5: National Design System in Brazil

The Brazilian design system is characterized by a large and diverse number of initiatives, mainly with a short life. Funding for design initiatives is not mainly from government sources. There are important non-profit large organisations that provide a large part of the investments in design in the country e.g. SEBRAE, SENAI, industry federations.

## **Discussion**

This research analyses the case studies in comparison with each country's competitiveness potential, through the Competitiveness Rank by the World Economic Forum (Lopez-Claros et al. 2006). This Rank uses a combination of indicators to calculate the general index. The 2006-07 edition also lists the 125 most competitive economies and classifies them into stages of development according to GDP per capita (see figure 3).

The stages indicate the needs of a specific economy in relation to development policies. According to the level of development, economies need to prioritize different aspects. For example, advanced economies do not need to address problems, such as, basic infrastructure, health system or corruption as do nations at the lower levels.

Brazil is classified on Stage 2 of economic development, the efficiency-driven stage (see figure 3). In this stage, policies should aim to develop more efficient "production processes and increase product quality" (Lopez-Claros2006). This can be achieved in targeting the improvement of higher education, market efficiency and exploitation of existing technologies in order to improve competitiveness.

Finland is on the third and highest level of economic development, the innovationdriven stage. With higher costs for production, these countries cannot afford to compete on price alone. In order to remain competitive they must focus on innovative products of the highest level of technology or design.

Indeed, there is an overall understanding in Finland about the need for design in order to differentiate goods produced in the country. Exploitation of technologies is high, hence the high investments in R&D and innovation. The Finnish design policy clearly associate design with these subjects.

In contrast, Brazil is under performing in innovation and it is due partly to insufficient R&D investment (World Bank n.d.). Moreover, links between design, innovation and technology are still very weak in the Brazilian policy. As explained by one of the interviewees, innovation and R&D are part of the Ministry of Science and Technology's agenda. Design is dealt at the Ministry of Development, Industry and Foreign Trade with almost no dialogue between the two institutions in relation to design initiatives. However, some regional design centres have developed links with institutes of technology. This association can be extremely useful for these regional design support programmes, in particular on the improvement of products and processes' quality. The performance of Brazilian design programmes is also jeopardized by problems in the country's institutions, an intrinsic problem for Brazilian growth. Red tape and bureaucracy are constant problems in the public institutions (Lopez-Claros 2006), which has a negative impact on businesses investments and on the implementation of design programmes.

There are many differences between the most recent policies from Brazil and Finland ('Design 2005!' and 'PBD 2007-12'), among them:

- The Brazilian policy does not mention any actions to be taken within the
  public sector. In contrast, the Finnish policy states "The public sector must
  set an example in the use of Finnish design and its potential in the
  construction of work and operational environments in the information society";
- The Brazilian policy does not include projects within the Arts and crafts sector. The Finnish policy dedicates a topic to the theme "Arts and crafts training – technically trained workers".
- Although there are no specific actions defined, the Brazilian policy does mention sustainability and social programmes, in contrast to the Finnish policy which does not include these issues.

Continuity is a point of contrast between the two case studies. While Finland has been able to develop long term strategies and maintains organisations in operation for even more than a century, Brazilian strategies are mainly short term initiatives and the institutions rarely accumulate more than a decade of history.

This difference seems to have direct relation with the country's political stability and programmes' funding sources. To a certain extent, in Finland funds and government support has not suffered instability due to political changes, as common in the great majority of countries around the world (Soikkanen 2003).

In contrast, Brazilian programmes suffer with frequent changes on the governments' agenda, both on national and regional level. This problem of lack of continuity impact

immensely on the programmes' results. Design strategies are programmes with impact in long term, in particular when the programme aims for improvement in economic development. Results of the implementation of this policy will only be available in the long-term, as with any other economic plan aiming for sustainable growth.

The Finnish culture and countries' population profile is regarded as an important factor for the success of Finnish policies. Castells and Himanen (2002) argue that "in contrast to the crisis of legitimacy experienced by many governments throughout the world, which impairs their action, the Finnish state has been able to make bold policy decisions that paved the way for new technological and economic dynamism of the 1990's." Häikiö (2002) talks about the Finnish favourable environment for business: "a political system cannot produce technological innovation, but it can do a great deal to prohibit, slow down and create obstacles to it."

"Sustained growth is the major challenge for the Brazilian economy. (...) Despite some advances in microeconomic and institutional reforms, activity by the private sector remains stifled by various barriers and regulations that prevent the country from achieving its growth potential" (World Bank 2007). This context also influences the implementation of design programmes, considering that it provides the foundations for this kind of programme to operate.

## Conclusion

This paper presents a comparison of design policies in Finland and Brazil, two countries in different stages of economic development and how they should address their specific weaknesses and advantages through design. This study does not wish to advocate the idea that design is responsible for the economic success or failure of a nation. However, it reinforces previous studies on the idea that design can be a strategic tool that will contribute to economic development.

Finland was until recently a country in economic crises and had to create an assertive plan to recover. Design was part of this plan. The result was a staggering growth rate that raised Finland to second position among the most competitive economies in the World. The stable situation and political continuity, government support and investments, quality education, tradition and reputation in design, stimulus to R&D were all factors that have contributed positively to the success of the implementation of design strategies in Finland.

Brazil faced the opening of their markets to international competition in the 90s. Suddenly design became a crucial element to guarantee a competitive national industry. As a efficiency-driven economy, this country should prioritize the quality of its products, higher education and market efficiency. The Brazilian design policy is willing to tackle these issues however it first faces traditional problems such as weak institutions, red tape, bureaucracy and quality of the education. As a result, design programmes in Brazil have had short lifespans, unclear roles and isolated priorities.

Shouldn't design policies in countries like Brazil also tackle the fundamental issues that create obstacles for the economic growth?

This paper is part of an ongoing research that will also consider South Korean and Indian design policies as case study subjects. The research, a PhD thesis, proposes the two hypotheses below for the data analysis:

**HYPOTHESIS 1:** Countries in the lower stages of economic development (World Economic Forum 2006) are usually characterised by isolated, disjointed and short term design support initiatives with limited vision about the strategic use of design within public policies.

**HYPOTHESIS 2:** Countries in the highest stages of economic development (World Economic Forum 2006) have an approach to design support that is characterised by long term strategies, the successful coordination of individual programmes with stakeholders, high investment and the strategic use of design in public policies focused on competitiveness enhancement.

This study will benefit the increasing number of countries that have been developing strategies for design. Design programmes and policies are models that can be duplicated. However, the resources and conditions for their implementation are not transferable and it makes one country succeed while another fails. Hence strategies and programmes for design should be aligned with wider national and/or regional context, focusing on the weaknesses and strengths of the country aiming to improve its competitiveness.

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After gaining a degree in industrial design Gavin became a partner in a product design consultancy with clients as diverse as the Early Learning Centre, Marconi and Xerox. With the opportunity to develop his skills further he took up an offer to work for Xerox where he became responsible for the product design aspects of all Xerox products manufactured in Europe. In order to understand further how design fits into a practical business context he gained an MBA and has subsequently been working in Wales developing the services of Design Wales. Gavin's current interest lies in how the service sector can make use of design to create innovative and appropriate offerings to customers. Gavin Cawood is currently the Operations Director of Design Wales in the UK.

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