This is the accepted version of the following article:

Choi, Y., Cooper, R., Lim, S. and Evans, M. (2010), National Support for Design: Developing Propositional Models. Design Management Review, 21: 60–69, which has been published in final form at http://online-library.wiley.com/doi/10.1111/j.1948-7169.2010.00096.x/abstract.

National support for design, the development of propositional models

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Many governments around the world acknowledge the role and value of design and have formulated design policies including national business support programmes in design, and have invested in building the capacity of their design sectors. This paper reports on an investigation of national design policies in the UK and South Korea, and recommends alternative models for developing and implementing these policies.

Introduction

Design is acknowledged as a key tool for enhancing competitiveness and economic success in the face of rapidly changing markets and increased global competitiveness [1-4]. Businesses increasingly recognise the importance of design and utilise it to achieve business objectives and thus increase competiveness. Governments have introduced national design policies to support businesses, particularly SMEs, to develop and implement new products and services [5]. How best to develop and implement such policies is a key issues in this endeavour.

The UK's Design Council (DC) and South Korea's Korean Institute for Design Promotion (KIDP) are government funded national design centres (NDC). Support for design at government level is often manifest in the policies and support provided through NDCs. Our research discusses such support in relation to the UK and South Korea. This informed our understanding of their national design policies and alternative structural models for developing and implementing such policies.

The UK and South Korea demonstrate differences in the level of maturity in their design support yet similarities in design and innovation index ranking [6, 7]. Both countries are regarded as having a clear and effective design policy [8-11] and have applied government design policy and promotion programmes that have intensified the role of design in competitive international market [12]. With the largest design industry in Europe [13], the UK has a strong government-supported design export programme [14]. The South Korean government has invested in design promotion, increased the quality and quantity of design education, and extended the use of design in industry [14] gaining recognition for its ambitious design-policy framework [10].

This research combined qualitative (literature review and interviews) and quantitative (survey) research data to understand approaches to design policy in each country. Twenty-nine in-depth interviews were conducted with key stakeholders in a range of organisations involved with national business support programmes for design.

Design policy of the national design centres (NDCs) in the UK and South Korea

The original focus of the UK and South Korean NDCs was the improvement of product design [15, 16], although this focus has expanded greatly in recent years to tackle economic, social and cultural concerns [3, 17]. The two NDCs now support a much wider range of clients including those in business and the public sector, design education and knowledge application through an integrated approach encompassing both the development and implementation of design policy [18, 19].

Archival study of the history of design policy of the NDCs in this research, however, indicates that in both cases design policy still places more emphasis on economic success [20]. In a recent UK example, the Cox review [21], published in 2005, made five key recommendations to answer to the question how best to enhance UK business competitiveness by drawing on our world-leading creative capabilities? The focus of the recommendations was primarily economic specifically highlighting the UK's future global competitiveness [21, 22]. The Design Council's design plan for 2008-2011 outlines plans for building opportunities and alliances to create new design policies in areas such as public service transformation and sustainability [18]. In South Korea KIDP provides a range of support programmes in design, but the most recent programmes place particular emphasis on supporting businesses (SMEs), whilst only supporting the public sector since 2007 [23]. Both centres have been always been directly responsible to government departments whose remit is to promote the economy, specifically to support business effectiveness and economic success.

Development of support for industry through NDCs in the UK and South Korea

Archival data underpinned a comparison of the national design policies of the NDCs of the UK and South Korea. Evidence indicates that the in the UK support has not been always well-matched with its industrial context. Instances of anachronistic

support of declining industries lagging behind global industrial trends although design policy was developed in collaboration with industrial policy and demands. For example:

- Although the major exports were shifting during the 1950s from textiles and coal to metal and engineering goods and chemicals, the Council continued to support the textile and furniture industries into the 1960s.
- In the 1960s various industries, including textiles, iron, steel, machinery, automobiles, aircraft and shipbuilding, declined as a symptom of deindustrialisation, however, the Council supported stainless steel, aluminium and pottery industries.
- The Council selected two new product categories for 'Design Centre Selection': automobiles and innovative knitwear in the 1980s, but the textile and automobile industries had declined since the 1950s.
- In the 1990s, the Council campaigned in three selected industry sectors: clothing and textiles, furniture, and medical equipment, but only the medical equipment industry really benefitted directly from high-tech R&D, while the other two sectors did not fit the industrial situation, i.e. high-tech R&D base.

In South Korea, KIDP acted similarly in supporting industries with support often being ill-matched to exports and industrial trends. Even though KIDP was established expressly to support exports it supported some declining industries. Until the 1980s it focused upon supporting packaging industries [24]. For example:

- In the 1960s, the government was focused primarily on styling products and packaging in light industry such as clothing and wigs, rather than developing functions or researching consumer needs overseas where the products would be exported.
- Although major exports during the 1960s were Textiles and Plywood and the electronics, automobile, and shipbuilding industries enjoyed rapid growth, traditional handicrafts, toys, furniture, basic electrics and home appliances were supported by the NDC.
- In the 1980s, the design centre supported broadly the same industries as in the previous decade, whilst the government mainly focused on developing high-tech industries. Light industry, however, still produced the major exports.
- The NDC during the 1990s did not focus on any particular industry while hightech industries were in hyper-growth.

In the UK, support was offered by the NDCs, even to some declined and declining industries because the rationale of the Design Council was to prevent further decline and encourage a resurgence of those industries. It is also debatable, as the Geddes Report [25] mentioned, whether the directions and policy underpinning declining or moribund industries are capable of fully adjusting to the rapid changes of global industry. This raises the question of whether the NDCs perhaps failed to adequately research industrial development and changes, taking the findings into account when developing policy, and/or it should have followed the government's direction rather than making its own decisions.

Recently the Design Council and KIDP have been supporting businesses across industry, and responding to industrial trends by supporting dominant industries in line with industrial policy and demand, e.g. supporting high-technology industry [23, 26]. However, each respective NDCs support for emerging industries could be considered to lack independent foresight, particularly for the private service industry. This indicated that both South Korea and the UK's NDCs support for industry has been reactive rather than proactive, as a result of their lack of autonomy and their dependence on government and/or government funding.

Proactive or reactive

Direct accountability to government departments generally means the NDCs has limited autonomy in the development and implementation of design policy often leading to a reactive response to government policy directives.

A more proactive contribution to policy can be achieved by engaging in new and innovative practices underpinned by research [27]. Researchers believe a proactive rather than a reactive approach should be adopted in developing and implementing policy, as a proactive approach can identify anticipated problems and design appropriate strategies to resolve them before they occur [28]. To be proactive, it is suggested that governments should have a longer-term policy, because an anticipatory approach, emphasising the importance of acquiring information and knowledge, provides a foundation for activism and innovation [29].

A reactive approach to policy-making operates, however, with a different set of assumptions [29]. Such assumptions dictate that governments have limited and

short-term objectives for sectoral development, intervening only to correct short-term failures of the market mechanism [30] as the historical review of the Design Council and KIDP suggested.

To operate effectively NDCs should therefore have more independence from government and become more proactive and react earlier in the rapidly changing environments of industry. Our study indicated that NDCs should also be more involved in the development and implementation of design policy, and committed to ensuring outstanding stakeholder satisfaction through more proactive anticipatory and participatory approaches. Our position here is that NDCs should be able to discover, diagnose and resolve issues before they affect the design sector and the wider economy, independent of political agendas.

Government-led or non-government-led

Two contrasting routes to developing design capabilities are: a government-led design policy, and non-government-led (non-profit organisation-led) design. In this study, design policies implemented by the NDCs are classified as a government-led design policy, because they are directly responsible to the government departments which fund them, even though the NDCs might argue that they function independently from the government.

Government intervention

Government intervention is generally regarded as an important factor not only in international business operations [31] but also as a means to articulate the rationale for the formulation of the policy development process [32]. Many believe minimum government intervention is most appropriate in the longer-term, but that the requirements of government intervention should not mean governments directly subsidise markets [33, 34].

As Alias [35] stressed, the degree of any government's intervention should be commensurate with existing local conditions, available resources and priorities. Government spending in East Asian countries is quite low whilst government intervention is high compared with Western economies [36]. This reflects Asian economies' employment of a more paternalistic government control of agencies than those of the West. By contrast in the West governments try to reduce their role in decision-making and to abolish public provision and production of services [37]. This

suggests that one size does not fit all, in terms of the degree of autonomy between NDCs. Government decisions should therefore be made case-by-case to enable development and implementation of appropriate design policy. Consideration of design NGO-led activities is also necessary, to establish the overall environment and impact of alternative support mechanisms.

Activities of non-government organisations (NGOs)

Several design NGOs currently support designers and the design industry in the UK and South Korea. In the UK, for example, British Design and Innovation (BDI), the Chartered Society of Designers (CSD), and the Design Business Association (DBA) work on behalf of various design sectors, resourced by membership fees from the design industry [38-40]. They do not, however, have a strong role supporting the Design Council's design policy or indeed government policy. For example the BDI participates in Design Council consultations and activities only when required [38], and the CSD's only government-related task is to provide education services to government agencies, educational institutions, student and tutors [41]. In South Korea the Korea Federation of Design Associations' (KFDA) main role is conducting research into the national design policy to suggest policy proposals to the government, to develop the national design policy, and hold design events to raise design awareness. Other design associations, such as The Korea Society of Design Science, The Korea Association of Industrial Designers and Korea Design Firms Association, each have different roles and different aims, supporting their specific focus areas not necessarily related to a government or national policy agenda [42].

It is clear that most of design NGOs are autonomous and work more proactively and freely in the field of design since they are not subject to direct government intervention. It therefore might be argued that they may have a better understanding of an industry's needs and of the developments and changes of that industry. This suggests a need for collaboration between government-led and design NGO-led approaches to design support in order to maximise the synergy between the different organisations, and focus collectively on the design policy.

Collaboration between the NDCs and other government departments

Our study found that in South Korea, many government departments deal with design affairs and often fail to collaborate in their design promotion and support. KIDP is not able to direct collaborative work with these departments because of its perceived lack

of authority within government, despite the fact that it partially or wholly provides services and funding for design development to various governmental departments.

In the UK it is commonplace for government departments to work closely with the Design Council in the development and implementation of new schemes and specific projects. A number of government departments are involved in the implementation of the Cox recommendations and the Council has a 'Government Relations' unit which works in collaboration with government departments such as Business Innovation and Science, or Department of Culture Media and Sport on their specific needs [18, 43, 44]. However, the various funding arrangements and positions in the government structure may cause an unequal collaborative partnership with unequivalent levels of influence and authority between the departments and the Design Council.

What we identified in both countries was a dependence of the NDC on government funding and therefore a direct relationship between political imperatives and NDC policy for the support of design. There is less long term propositions for the support of design and industry based on foresight and long-term planning. In addition, contribution on national policy formation at government level is subject to personal influence and design relevance factors, whilst NGO's may have independence but little influence. This analysis of two countries, two NDCs and national policy led us to develop and propose possible alternative proposals for the development of national design policy.

Alternative approaches/models

The principles arising from our work for alternative approaches for the development of national design policies can thus be summarised as follows:

- the role of design has expanded universally, therefore national design policy should consider all areas which relate to design in society and industry.
- NDCs should have independence to lead the development and implementation of national design policy.
- government-led design policy is more appropriate than non-government-led for developing design capabilities, however, the NDCs need NGO collaboration in the development and implementation of design policy. An independent evaluation of relationship between NDCs and government is also necessary.
- NDCs should be able to react quickly in the rapidly changing environments of industry and should work proactively to (i) understand developments and

changes of industry, (ii) understand business needs, (iii) anticipate future trends in industry. NDCs should also collaborate with universities to conduct rigorous empirical research into the design industry.

- NDCs need to work closely and collaboratively with design-related government departments and Regional Support Agencies, to achieve a national government backed design agenda and enhance synergy between organisations.
- the development and implementation of the design policy should be based on the respective countries' different cultures and political environments.

Based on these principles, alternative structural models for developing and implementing the national design policy are presented below, and advantages and disadvantages of each model are discussed (see Table 1).

Model 1. Development and implementation of national design policy led by NDCs

Many national government organisations now deal with design-related activities. The government activities influenced by design include industry, education, culture, tourism, sport, transport, health and even agriculture. This model, therefore, is one in which design units in each government department work closely with the NDCs and where representatives from each government department are board members of the NDC for the development and implementation of a design policy (see Figure 1).

Figure 1: Alternative model 1 - National design policy led by NDCs

Model 2. Development and implementation of national design policy led by a government department in collaboration with NDCs

Using the model of the previous approach (see above), it may be necessary to integrate all design-related affairs at government level to facilitate the development and implementation of design policies. This model proposes a single government department that is responsible for design and deals with all design-related affairs nationally, working with NDCs on the development and implementation of the design policy (see Figure 2).

Figure 2: Alternative model 2 - National design policy led by a government department in collaboration with NDC

Model 3. Development of national design policy led by a government department and implemented by Regional Support Agencies

This approach is one where a central government department has responsibility for design and deals with all design-related affairs at national level – with no need for a national design body. The government department creates a design policy with support from design NGOs, design research organisations and a Design Advisory Service, and delegates implementation of the design policy to the Regional Support Agencies (RSAs). The Design Advisory Service would help RSAs implement the design policy, with respect to unique regional circumstances (see Figure 3).

Figure 3: Alternative model 3 - Development of national design policy led by a government department and implemented by Regional Support Agencies

Model 4. Absence of national design policy and design NGOs' activities

In this model there is no single preferred model for developing and implementing a national design policy, and it inevitably depends on how individual governments work in different cultures. This model would be led by market forces and demand rather than government driven, i.e. there is no national design policy, and design NGOs offer activities based on their individual aims (see Figure 4).

Figure 4: Alternative model 4 – Absence of national design policy and design NGOs' activities

Assessing perspectives on the model

These propositional models were tested with a survey of eleven respondents involved in national design policies or design-related activities in six countries: Australia, Canada, Finland, Norway, South Korea and UK, in order to understand different perspectives on the recommended alternative models for design policies.

The results indicated that respondents were clearly influenced by both their

geographical and political contexts and their political and cultural environments. They also revealed broad agreement amongst the respondents on the principles for the development of national design policies, but yet no single model was chosen by the majority of respondents. However, most respondents, regarded government-led and/or NDC-led support as both important and necessary in their country. Alternative Model 1 most suited respondents' national contexts, whilst most respondents thought Model 4 would not work in their countries. Western respondents were more negative about Model 2, whilst half the Eastern respondents were positive. Most also felt Model 3 would work in their countries.

The critical issues in relation to the development and implementation of national design policy are autonomy and government intervention. Responses to questions where autonomy issues were raised varied according to the respondent's organisation, for instance those working for NDCs and design-related organisations generally agreed with NDCs independence from government, whilst those working for design NGOs generally disagreed with the idea.

Concern was identified relating to the degree of government intervention in design policy, seeing it as detrimental to design policy effectiveness. Thus, most respondents believed NDCs should lead the development and implementation of design policy, and that an independent of the relationship between NDCs and government would be needed.

Conclusion

The focus of this study is to understand national design policy through the creation of alternative models for developing and implementing national design policies. Evidence was elicited directly from government design policy-makers and implementers, partners, businesses that participated in the support programmes, and other design bodies engaged in supporting industry. Since many governments have formulated design policies including national business support programmes in design in close co-operation with the business sector, to develop design in the face of increasing competition. It is anticipated that academics and practitioners will use the models as a basis for further research and policy discourse that will make such activities most effective and appropriate for national context.

Acknowledgement

The authors would like to thank the Design Council and KIDP for their co-operation, and to acknowledge the support for this research from all the respondents involved in the national design policy and business support programmes in design at NDCs, design NGOs, RDAs, delivery partners and businesses.

Table 1: Summary of the recommendations for alternative structural models for developing and implementing national design policy	

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