

Title

Design for social enterprises: How to form a design–innovation ecosystem for social enterprises.

Abstract

Design has attracted attention for its capacity to contribute to the development of social enterprises, which pursue creating both social and economic value. However, in the social enterprise context, design is still used in few areas, and it is difficult to ascertain the extent to which design can comprehensively and strategically impact the growth of social enterprises. Aiming to deepen the understanding of the potential of design in the social enterprise context, this research explored the current composition of the design–innovation ecosystems (DInEs) for social enterprises in the UK and South Korea. The research examined the current utilisation of design by the key stakeholders of the social enterprise ecosystems using a combination of qualitative and quantitative research methods. The research results reveal that the two countries share some issues regarding utilising design in supporting social enterprises from systematic and practical perspectives, highlighting the necessity of building a strategic approach that can be used to develop a systematic DInE which design can be utilised more strategically and systemically to enhance the long-term sustainability of social enterprises.

Keywords

Design, Design–innovation ecosystem, Social enterprise, Social enterprise ecosystem

Introduction

Businesses have long acknowledged design, as it plays an important role in giving them a competitive edge and achieve differentiation in the marketplace through innovation (Cooper, et al., 2016; Cox, 2005; Design Council, 2011; Hernández, et al., 2018; Micheli, 2013). Design is now also increasingly being used to solve complex societal problems and fulfil social needs (Bason, 2016; Brown & Wyatt, 2010; KIDP, 2019; Manzini, 2015; Meroni & Sangiorgi, 2011). Accordingly, some design scholars and practitioners have developed ways to utilise design at the system level to strengthen its impact on the society and economy (Love, 2007A; 2007B; Moultrie & Livesey, 2009; Raulik-Murphy & Cawood, 2009; Sun, 2010; Whicher, 2017). However, social enterprises that aim to create both social and economic value (British Council, 2015; Cagarman, et al., 2020; European Commission, 2015) have rarely been viewed as

beneficiaries in these studies (Whicher & Walters, 2014). Although design academics and practitioners have recently shown increasing interest in demonstrating the role and impact of design for social enterprises (Chou 2018, Creative Dundee 2017, DTUL 2017), design in the social enterprise context is still used rather narrowly. For instance, existing design studies addressing social enterprises focus on (i) applying design thinking to processes that identify problems (DTUL 2017, Selloni and Corubolo 2017) and (ii) using design to enhance their contribution to social innovation (Manzini 2015, Pérez, Hands and Mckeever 2017). Thus, a debate concerning design's contributions to the growth of social enterprises is lacking, especially in terms of research conducted from a systematic perspective (Kwon, et al., 2021). There is also insufficient evidence to show that the key players of social enterprise ecosystems, including governments, intermediary organisations and social enterprises, recognise the impact of design and strategically apply it for the growth of social enterprises. In this context, the following research question was raised: *How can design be strategically and systematically used to support the growth of social enterprises?*

This research aimed to explore the current roles of design in social enterprise development, considering different aspects of the growth of social enterprises and identifying key considerations that can be utilised to structure a design–innovation ecosystem (DInE) for social enterprises. A DInE for social enterprises is a theoretical construct that describes the environment that activates and supports the design of social enterprises to strengthen the role of design in and influence on the growth of these enterprises. To address the research question and achieve the aim, this research undertook the following steps: (i) understanding the current state of the design utilisation by the key stakeholders of the social enterprise ecosystems (e.g. the government, intermediary organisations and social enterprises); (ii) identifying key drivers for and barriers to utilising design for supporting social enterprises; and (iii) extracting key considerations that can be used to create an environment that activates and strengthens design utilisation in supporting the growth of social enterprises. The research adopted inductive principles, using a combination of quantitative and qualitative research methods, to identify the design usage patterns of various stakeholders in the social enterprise ecosystem and explore the elements and relationships that can systematise this phenomenon. The study also employed a comparative case study approach to understand the substantial design utilisation of key stakeholders in social enterprise ecosystems in different cultures, including understanding the similarities, differences and patterns across current design utilisations for social enterprises in the UK and South Korea. These two countries were selected for the comparison because they

demonstrate similarities (e.g. the maturity of institutional support for social enterprises) and differences (e.g. approaches to supporting social enterprises in design: a bottom-up approach in the UK and a top-down approach in South Korea). The findings are principally used to map out the current composition of DInEs for social enterprises in the UK and South Korea. The researchers also anticipate that the key findings of this study will provide a practical understanding of the current composition of DInEs for social enterprises in different cultural settings, which can aid in optimising and improving the current DInEs for social enterprises through a systematic approach to strategically utilise design in the social enterprise context.

Research Background

In numerous positive statements, design has been acknowledged as an important factor driving innovation in enterprises (Cox, 2005; Design Council, 2011; Innovate UK, 2015; Mozota, 2003; Na, et al., 2017), the public sector and society (KIDP, 2019; Manzini, 2015), especially in terms of the value of design in solving economic and social problems (Design Council, 2020; Innovate UK, 2020). However, there is still a lack of knowledge as to how to use design effectively, efficiently and systematically to consistently yield innovation (Gaynor, et al., 2019; Raulik-Murphy & Cawood, 2009; SEE Platform, 2012; Thenint, 2008; Whicher & Walters, 2014). To tackle this lack of knowledge, design scholars and practitioners have developed the concept of DInE, which has transformed its terminology from ‘design infrastructures’ to ‘design system’, ‘design ecosystem’ and then ‘design–innovation ecosystem’ (FMEE, 2013; Love, 2007a; 2007b; Moultrie & Livesey, 2009; Raulik-Murphy & Cawood, 2009; Sun, 2010; Whicher & Cawood, 2012; Whicher & Walters, 2014; Whicher, et al., 2018) based on the recognition of the correlation between innovation and design. The definitions of and approaches to DInEs are slightly different, but the principal objective of DInE development is to accelerate the more systematic and effective use of design for enterprises, the public sector and governments. However, previous studies have often focused on integrating design into the innovation system (Whicher & Walters, 2014; Whicher, et al., 2018) and evaluating and strengthening national design competence (FMEE, 2013; Love, 2007a; 2007b; Moultrie & Livesey, 2009; Raulik-Murphy & Cawood, 2009). In addition, although Whicher and Walters’ (2014) study considered social enterprises as a design user group within their DInE model, their considerations are still insufficient to implement the ecosystem in design for supporting social enterprises. As such, there is still limited data concerning the development of social

enterprises through a DInE, especially in terms of how design can be systematically used to support the growth of social enterprises while considering the different aspects thereof.

To explore the DInE for social enterprises, this research considered the critical research contexts of social enterprises, design and their ecosystems (see Figure 1) in practical settings. The research selected certain countries – the UK and South Korea – as case studies to gain a comprehensive understanding of the overall configuration of the social enterprise ecosystem, particularly regarding the use of design within such ecosystems to support the development of social enterprises. The two countries show similarities and differences. For instance, both countries demonstrate similarities in the level of maturity of their social enterprise ecosystems, which include long-term governmental support for social enterprises and various policies nurturing vibrant ecosystems (Agapitova, Sanchez and Tinsley 2017), as well as an understanding of design at the national level, defined by the public recognition of the leading role of design in innovation, corporate profitability and long-term performance (Design Council 2018; KIDP 2018). Nonetheless, the two countries have adopted slightly different approaches to supporting social enterprises. For instance, the UK government tends to focus on investing in social impact rather than providing direct support to social enterprises, while the Korean government endows both national and local governments with the responsibility of cultivating new markets for social enterprises and providing them with direct financial support (Choi, Berry and Ghadimi 2020). Moreover, the UK and South Korea have demonstrated different development and operation mechanisms in their design support programmes (DSPs) that target social enterprises. For example, the principal approach adopted in developing the UK's DSPs is the bottom-up approach, which is led by multiple stakeholders (e.g. local governments, public bodies and universities) who recognise the importance of design for supporting social enterprises. However, in South Korea, the DSPs have been developed based on the top-down approach through the government's strong leadership, which includes institutional and financial support (Kwon, et al., 2021).

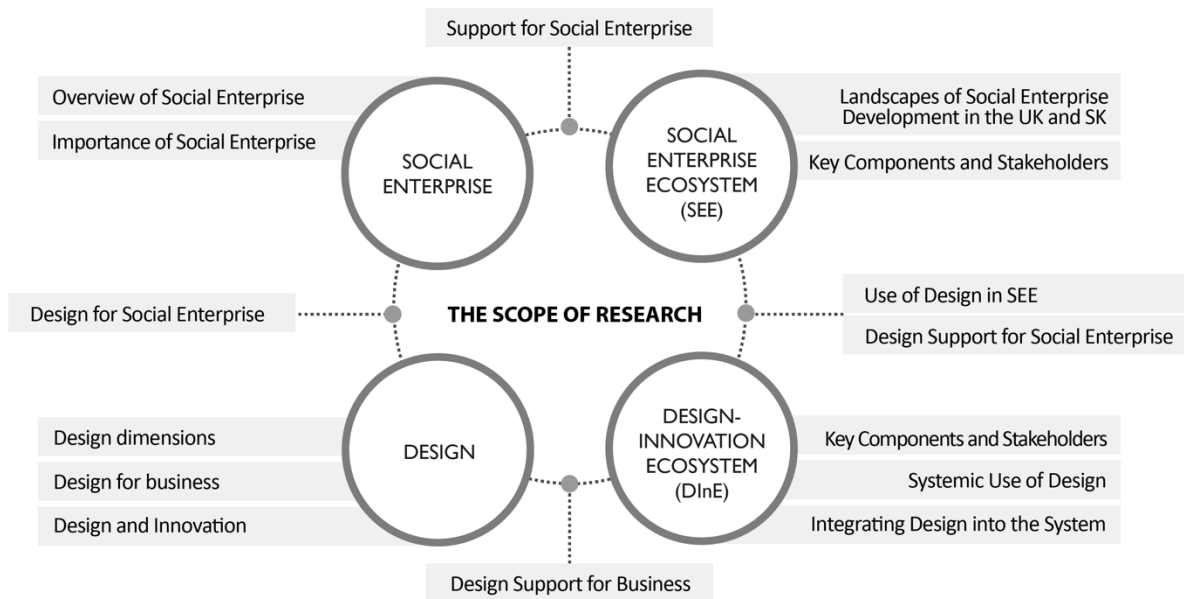


Figure 1 Scope of the research

Research Methodology

Considering the research aim, this research applied a combination of exploratory and descriptive research. Since exploratory research is particularly useful when the knowledge of a phenomenon is insufficient (Gray, 2014; Saunders, et al., 2007), it was applied to examine the particular phenomenon of design utilisation for social enterprises to understand the specific domain of the DInEs of social enterprises. On the other hand, descriptive studies are often used to explain the relationships among situations, people or a combination of events (Gray, 2014) to provide an overview of the phenomena (Hedrick, et al., 1993; Neuman, 2014); thus, it was adopted to find key elements that could be used to form a DInE for social enterprises based on the understanding of the detailed, accurate situation of the design understanding and utilisation of the key stakeholders of the social enterprise ecosystems.

The research consisted of three phases: (i) exploration, (ii) investigation and (iii) analysis, to address the research question. The first phase explored the current configuration of social enterprise ecosystems in a practical setting. The UK and South Korea were selected as case study countries based on their similarities and differences regarding social enterprise and design. The analysis of the historical development of social enterprise landscapes (including ecosystem development) in the two countries enabled an understanding of the key features of the respective social enterprise ecosystems, including the key stakeholders. Design utilisation in support of social enterprises was subsequently investigated in terms of the perception, role

and use of design in the context of the support for social enterprises of the ecosystem's key stakeholders. This phase incorporated qualitative and quantitative methods, including a literature review, case studies and exploratory interviews. The exploratory interviews were conducted with fourteen social enterprise experts (UK: $n = 9$; South Korea: $n = 5$) and eleven design experts (UK: $n = 6$; South Korea: $n = 5$).

The second phase focused on investigating the approaches to design support (i.e. DInE mechanisms) in the UK and South Korea to understand the current DInE configurations for social enterprises and explore the key drivers of and barriers to supporting design in the social enterprise context. This investigative phase used in-depth case studies, questionnaire surveys and in-depth qualitative interviews with social enterprises and intermediaries (social enterprise support bodies, design support bodies, design practitioners and academics) to obtain insights into design support practices and analyse design awareness and needs. Approximately twenty DSPs were identified from the literature review and the exploratory interviews with design and social enterprise experts. These cases were used to better understand the current mechanisms of design support for social enterprises, exposing the characteristics of the DSPs (including support content, delivery methods, stakeholders and the relationships among stakeholders). The subsequent questionnaire survey, which explored design awareness and utilisation among social enterprises, was administered to around 800 social enterprises in South Korea then 105 responses were received. A series of in-depth interviews with twenty-two social enterprises (UK: $n = 12$ and South Korea: $n = 10$) compensated for the limitations of the questionnaire survey. For in-depth interviews with experts in the design and social enterprise sectors, purposive sampling was used to identify and select particular individuals who had rich knowledge about or experience with the topic of interest (Creswell & Clark, 2011) to maximise the efficiency of data collection and validity of the data (Bryman, 2016). The target interviewees were design and social enterprise experts with experience contributing to designed social enterprise support practices, including DSPs for social enterprises, in the UK and South Korea. Meanwhile, in-depth interviews with twenty-eight design and social enterprise experts in the UK ($n = 17$) and South Korea ($n = 10$) were conducted to (i) identify the details of DSPs for social enterprises and (ii) understand the practical issues that key DSP stakeholders face.

The third research phase entailed analysing the key elements and aspects that should be considered when developing a DInE for social enterprises by mapping out the current

composition of DInEs in the case study countries and utilising key observations extracted from the discussion and synthesis of quantitative and qualitative data collected in the previous phases.

These observations were derived from descriptive statistics of the quantitative aspects of the questionnaire surveys in Microsoft Excel, and a combination of thematic and content analysis approaches for qualitative data (case studies and interviews). The data collected from the questionnaires were analysed based on four key subjects of the survey: (i) social enterprise profile, (ii) state of the social enterprise's design utilisation, (iii) the social enterprise's experience of design support (e.g. DSPs), and (iv) the social enterprise's perception of design. Nine themes were defined to analyse the data collected from the in-depth case study: (i) programme operation type, (ii) programme operation level, (iii) programme size, (iv) programme funder, (v) programme organiser, (vi) programme deliverer, (vii) support contents, (viii) programme strengths and impacts, and (ix) programme weaknesses and problems. The themes were established to explore the critical contents comprising and influencing the cases. The interview data were analysed thematically and processed in four stages: (i) transcription, (ii) translation, (iii) thematic and content analysis, and (iv) selective coding. Interviews were conducted in English and Korean, and recoded for the transcription and translation. Given the interviews featured semi-structured questions, the researchers manually categorised the responses according to each question's key themes. Combining thematic and content analysis allowed researchers to selectively code and synthesise (based on the clusters of responses) the opinions and insights collected from different experts. Figure 2 presents an overview of the research process.

Research phase		Purpose	Method
Phase one	Exploration	<ul style="list-style-type: none"> - Understand the research context - Explore the research gap - Examine the current configuration of the social enterprise ecosystem in real settings - Explore design utilisation for social enterprises 	<ul style="list-style-type: none"> • Literature review: Social enterprise, Design and Ecosystem • Case study: UK and South Korea • Exploratory interview: 25 experts <ul style="list-style-type: none"> - 14 Social enterprise experts (UK: n=9, South Korea:n=5) - 11 Design experts (UK: n=6, South Korea:n=5)
Phase two	Investigation	<ul style="list-style-type: none"> - Investigate design support practices for social enterprises - Understand the perception, utilisation and insight of design for social enterprises of the intermediary organisations - Understand the state of design utilisation of social enterprises and their design needs 	<ul style="list-style-type: none"> • In-depth case study: DSPs (UK:n=6, South Korea:n=14) • Questionnaire survey: 100 valid responses from SEs • In-depth interview: 50 experts <ul style="list-style-type: none"> - 22 Social enterprises (UK:n=12, South Korea:n=10) - 18 Social enterprise experts (UK: n=11, South Korea: n=7) - 10 Design experts (UK: n=4, South Korea: n=6)
Phase three	Analysis & Comparison	<ul style="list-style-type: none"> - Discuss and synthesise the key findings (map out the current configuration of the DInE for social enterprises) - Extract key considerations 	<ul style="list-style-type: none"> • Quantitative data analysis: <ul style="list-style-type: none"> - Content analysis - Microsoft Excel - Graphic forms to represent the results • Qualitative data analysis: <ul style="list-style-type: none"> - A combination of content and thematic analysis approaches - Selective coding

Figure 2 The research process

Principal Findings

Design utilisation in government support for social enterprises

This research identified different levels of design utilisation by the UK and South Korean governments in supporting social enterprises by examining their strategies and action plans (see Table 1). Although the research intensively investigated the UK government support for social enterprises (Cabinet Office, 2006; 2010; DTI, 2002; HM Government, 2018; Scottish Executive, 2007; Scottish Government, 2016; 2017; 2021; WCC, 2020; WGNW, 2005; 2009), it was unable to collect facts that demonstrate how the government use design in supporting social enterprises and, especially, how the government intervene to support the design of social enterprises. The finding indicates a minimal support for the design of social enterprises and the need to consider how to develop government support effectively and strategically. Nevertheless, several identified facts led this study to anticipate possible situations in which design can support the growth of social enterprises, thus aiding in developing optimised design support according to government action plans. For example, the action plans for social enterprises that the governments of England, Wales and Scotland developed contain similar targets for improving digital technology in the social enterprise sector (HM Governments, 2018; Scottish Government, 2017; 2021, WCC, 2020). The English government specifically mentioned developing an online platform to facilitate partnerships and collaboration between investors and social enterprises or charities (HM Government, 2018)

using a user-centred design approach. This recommendation was significant in helping this research to understand how design can be applied to address government strategies or action plans for social enterprises.

Table 1 Comparison of design utilisation in governmental support for social enterprises in the UK and South Korea

	UK	South Korea
Design within governmental support	N/A	As a factor necessary in developing social enterprises and improving their competitiveness
Opportunities to adapt design in governmental support	<ul style="list-style-type: none"> - As a factor influencing companies' competitiveness in the wider aspects of innovation - To improve social enterprises' digital capabilities - To develop specialist business support tailored to the needs of the sector - To develop a strong local support system 	Design can be a component of the social enterprise support system
Strengths of governmental support for the design of social enterprises	N/A	<ul style="list-style-type: none"> - Assists intermediaries to develop design support by providing them with groundwork and directions (e.g. financial resources) - Encourages interactions among design and social enterprise areas
Weaknesses of government support for the design of social enterprises	Minimal governmental support	<ul style="list-style-type: none"> - The government's lack of design understanding causes limited design support content - Provides only short-term support (from annual government budgets)

In contrast, governmental support for social enterprises in South Korea illustrated how the government influences the use and development of design to support social enterprises (Korean Government, 2012, 2018; MOL, 2008). For example, although the role of design in the social enterprise support plans of the Korean government changes according to the principal aim of each plan, the government specifically includes design into the national support plan for social enterprises as an essential factor for their development and improvement (Korean Government, 2018). It includes how the competitiveness of social enterprises could be increased by improving their products and services. In this regard, the government plays the role of facilitator in supporting the design of social enterprises, leading the development of design

support by highlighting its importance and providing the essentials: strategies, including groundwork and directions, and financial resources to relevant stakeholders (e.g. social enterprise and design support bodies). This finding supports the belief that design can be applied to enhance the competitiveness of social enterprises and develop specialised business support, which forms part of the UK government's support for social enterprises. The finding also indicates the importance of developing a design support strategy (DSS) that is connected to social enterprise support strategies or action plans at the government level. However, it is crucial to be mindful of the government's limited awareness of the use and impact of design in its support for social enterprises.

Design utilisation in intermediary organisations' support for social enterprises

This research identified two types of intermediary organisations that play a role in design utilisation in the UK and South Korea: Design-led social enterprise support programmes (DSESPs) and DSPs. DSESPs adopt design as a strategic approach to nurture social enterprises, enhancing the ability of key stakeholders to influence the evolution of the enterprise's ecosystem. In contrast, DSPs consider a more comprehensive range of design disciplines to assist the growth of social enterprises; thus, these programmes provide various forms of design support to social enterprises to improve their businesses (e.g. products and services) and organisations. Thus, DSESPs indirectly affect the growth of social enterprises, while DSPs directly influence their economic growth by enhancing competitiveness and sustainability. This research, therefore, focused on investigating DSPs, especially their operating mechanisms (including the types of support content, the key stakeholders involved, the types of key stakeholder relationships), to understand how design can be supported in social enterprises, given the considerable capacity of DSPs to enhance the long-term sustainability of such enterprises. This research chose a total of twenty DSPs from the UK ($n = 6$) and South Korea ($n = 14$) that could meet the selection criteria required of in-depth case studies: (i) the programme is aimed at social enterprises or considers social enterprises as one of its beneficiaries and (ii) the programme provides design support as a tool or an approach to support the growth of social enterprises. By analysing these twenty DSPs, this research understood the commonalities and distinguishing characteristics of the UK and South Korea's DSPs. Notably, DSPs in the UK and South Korea demonstrate similar but distinct weaknesses that correlate with the critical challenges that intermediaries face in using design to support social enterprises (see Table 2).

Table 2 Comparison of DSPs in the UK and South Korea

	UK's DSPs	South Korea's DSPs
Key driver of DSP development	Various stakeholders	Government
Main type of support content	Design strategy and designing process	Designing and design for systemic change and culture
Principal type of DSP delivery	Workshop	Hands-on, matching and funding
Principal type of stakeholder relationship	Partnership/collaboration	Employment
Strengths	<ul style="list-style-type: none"> - Focus on long-term support - DSPs enhance the interactions among different stakeholders - DSPs enable a greater understanding of end-users - DSPs impact the organisation's mindset - DSP participants share insights and experiences with other participants 	<ul style="list-style-type: none"> - Strong and varied support from the government - Active involvement of universities for programme delivery - One-to-one support by providing matching support between design practitioners and social enterprises
Weaknesses	<ul style="list-style-type: none"> - Lack of DSP cases - Unbalanced design support content due to stakeholders' limited design understanding - Minimal involvement of design practitioners - Poor continuity (i.e. one-off events) - Lack of correlation between government strategies and action plans for social enterprises and DSPs - Lack of follow-up support 	<ul style="list-style-type: none"> - Unbalanced design support content due to stakeholders' limited design understanding - Limited roles of design practitioners - Focus on short-term support to address design issues - Lack of follow-up support - Lack of collaborative relationships among stakeholders - High dependence on financial support from the government

One of the strengths of the UK's DSPs is their design support content, which influences participants' understanding of design roles. The DSPs used design to explore and solve the problems and opportunities of social enterprises; thus, most of the UK'S DSPs involve an organisational mindset rather than hands-on design support. Another strength of the UK's DSPs is that they encourage a better understanding of the stakeholders in the ecosystem, as

well as of the DInE for social enterprises, by providing interactive workshops with various stakeholders, including public bodies, design support bodies, social enterprise support bodies and universities. Moreover, all the DSPs were developed based on collaborative relationships (e.g. partnerships) among stakeholders, ultimately influencing the development of the social enterprise ecosystem by expanding the stakeholder network and enabling stakeholders to explore valuable opportunities to use design to develop the ecosystem other than just for social enterprises.

In terms of the strengths of South Korea's DSPs, the majority of them were launched through active governmental support at a central, regional or local level, making the government a critical stakeholder. This characteristic, in particular, seemed to be a factor influencing the operation of the DSPs as repeated programmes. Second, it was identified that the interaction between the social enterprise and design sectors is encouraged by providing matching and one-to-one support to social enterprises. This characteristic of South Korea's DSPs is impactful as it introduces design to social enterprises and increases their design awareness. Furthermore, it greatly influenced systemic change and the creation of a culture that promotes interaction between the social enterprise and design sectors, thus encouraging social enterprises to use design and design professionals to develop design interventions in the social enterprise sector.

However, DSPs in neither country were strategically developed. This is primarily due to (i) a lack of design understanding of design among most of the social enterprise support bodies participating in the programmes and (ii) the limited and passive participation of design support practitioners (including support bodies, institutions and universities) in DSP development. Meanwhile, different approaches to DSP development (including critical drivers of DSP development, major types of supporting content, DSP delivery methods and types of stakeholder relationships) appear to influence different weaknesses. For example, in the context of the South Korea's DSPs, governmental support (e.g. social enterprise support strategies, action plans and funding) influences social enterprise DSP development. This finding might explain the weaknesses of the UK's DSPs (e.g. the lack of DSPs designed for social enterprises and the lack of correlation between DSPs and national/local social enterprise support strategies or action plans). Furthermore, it was observed that the multi-stakeholder-led nature of the UK's DSPs significantly impacts the facilitation of interactions between social enterprises and the design sector, providing valuable opportunities for stakeholders to

understand design and expand the stakeholder network. Within this context, the DSP workshop model is considered an effective means of strategically providing design support.

Design utilisation and design needs in social enterprises

This research identified that social enterprises in the UK and South Korea understand the impact and benefits of design on business slightly differently. For example, while UK social enterprises view design as a strategy influencing business operations and development, South Korean social enterprises consider design as a process that contributes to the development of existing or new products and services. However, despite these different understandings, social enterprises experience similar difficulties in terms of utilising design: since most social enterprises are micro- or small-scale enterprises, they cannot afford to invest multiple resources (e.g. time, finances and labour) into design, and they struggle to find appropriate design practitioners who fully understand the concept of a social enterprise or who do not struggle to communicate with design practitioners due to their lack of design understanding and competency. Furthermore, this research recognised that although most social enterprises are aware of the importance of design, they do not fully understand how it can be used or when it can be applied to their products, services or organisational development. Therefore, social enterprises in the UK and South Korea similarly highlight the importance of design support in terms of the business stages.

Discussion

By examining the design utilisations of the key stakeholders of social enterprise ecosystems in the UK and South Korea, the various elements contributing to the DInEs of social enterprises (e.g. strategy, funding and programmes) were extracted (see Figure 3). The following paragraphs detail the key features and current conditions of the elements.

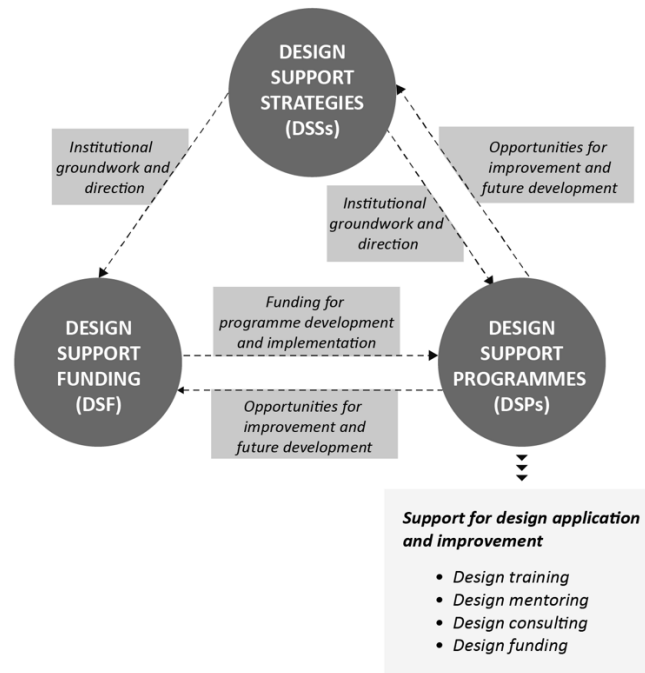


Figure 3 Key components of the DInEs and their relationships

Design support strategy (DSS) represents the strategic design interventions of governments and organisations that support social enterprises and encourage support bodies or other stakeholders in participating in and developing practical support programmes that utilise design. The concept also indicates how governments and organisations understand and use design to support social enterprises, ultimately providing the foundations for the operating mechanism of the DInE. The research identified different approaches to developing a DSS the UK (organisation-led) and South Korea (government-led) adopted. An essential impact of the government-led DSS is the perception of relevant stakeholders, mainly social enterprise support bodies and design support institutes, indicating the need for design support for social enterprises. Moreover, a government-led DSS is built on solid government initiatives to secure financial resources and strategic partners quickly. However, because the role of design in a government-led DSS derives mainly from the government’s limited understanding of design, the government struggle to address the practical design needs of social enterprises and broaden the understanding of design within social enterprise support bodies. Additionally, the current government-led DSS (in South Korea) tends to have a limited impact, benefitting only stakeholders closely linked to the government. Meanwhile, an organisation-led DSS can facilitate the engagement of multiple stakeholders and the formation of strategic relationships among those stakeholders during the strategy’s development while focusing on the stakeholder providing development input and real-world support. However, such strategies can be

challenging to develop and implement because only specific stakeholders with deep design understanding or competence can develop a DSS with minimal institutional support.

Design support funding (DSF) acts as a catalyst for substantial design utilisation within the DInE. It is mainly used to support social enterprises in developing actual implementations in the design context. Although governments or intermediaries provide funding in both the UK and South Korean contexts, they use different approaches in each context, each with its own strengths and weaknesses. For instance, in the UK, DSF is initiated primarily by social enterprise support bodies, which recognise the need to support social enterprises. Therefore, stakeholders raising DSF must appeal to other stakeholders (e.g. governments and public institutions) to obtain the necessary financial resources. During this process, stakeholders can better understand the importance and impact of design in supporting the growth of social enterprises. However, compared to the total number of social enterprise support bodies in the UK, few institutes deeply understand design or recognise the need for design support. Moreover, design support institutes seldom appeal to or lobby social enterprise support bodies regarding the impact of design on the growth of social enterprises. In contrast, one of the unique characteristics of South Korea's DSF approach is that governments (central and local) are directly involved (i.e. most DSF is received from government budgets). Therefore, South Korean stakeholders can easily access financial resources due to this institutional approach to DSF. However, because most DSF in South Korea comes from government budgets, it only covers a short period (e.g. less than a year) and tends to be a one-time event. This can result in missed opportunities for social enterprise support bodies to improve their understanding of design and the impact of design support.

Design support programme (DSP) represents an implementation action that encourages and strengthens the design utilisation of social enterprises and the social enterprise sector by providing various design support contents between the operational and strategic stages of the business operations of social enterprises. The research observed the identified DSPs from the perspectives of suppliers (intermediaries) and consumers (social enterprises). Although DSPs in the UK and South Korea have generally been developed according to different approaches, similar barriers exist among DSP developers, suppliers and consumers in the two countries. For example, three critical issues that DSP suppliers in both the UK and Korea face are (i) the minimal understanding of design among social enterprise support organisations, (ii) a lack of interaction between design and social enterprise support bodies associated with the lack of

understanding of social enterprises among design support bodies and (iii) the lack of business capacity and maturity among social enterprises. Meanwhile, social enterprises (i.e. DSP consumers) similarly identify critical barriers that minimise the impact of DSPs (i) at the operational level, where there is a lack of design support for social enterprises (South Korean social enterprises especially emphasised the deterioration of the quality of design support contents, including minimal consideration of social enterprise business stages, the limited correlation between support contents and short-term support or a lack of follow-up support), and (ii) at the strategic level, where social enterprises in both countries highlight the limited resources, knowledge and design capabilities of most social enterprise support bodies.

Accordingly, based on the understanding of the critical elements of a DInE for social enterprises and the identification of the different conditions of the DInEs in the UK and South Korea, this research was able to map out the current composition of DInEs for social enterprises in the UK and South Korea (see Table 3). The DInEs in the two countries exhibit similarities and differences in implementing design utilisation for social enterprises, allowing this research to identify existing and potential issues that require attention to improve implementation.

Table 3 Comparison of the DInEs of the UK and South Korea

	UK	South Korea
Principal approach of the DInE	Bottom-up (led by intermediary organisation)	Top-down (led by the government)
Key driver of the DInE	Various stakeholders	Government
Principal type of DSS	Organisation-led	Government-led
Principal type of DSF	Government funding	Government funding
Key approach of DSPs	Long-term support	Short-term support
Main objective of design support	Sharing design knowledge, experience and insights	Addressing practical design issues
Principal type of DSPs	Workshop	Hands-on, funding and matching
Principal type of key stakeholder relationship	Partnership/collaboration	Employment

Similarities and common problems with the DInE's current operating mechanisms	<ul style="list-style-type: none"> • Limitations in the current DSSs • Limited design support content • A lack of design awareness among social enterprise support bodies • The passive and limited involvement of design support bodies and practitioners • Insufficient time to conduct DSPs • A lack of follow-up support • Difficulties securing DSF for DSP development • A lack of understanding of the design needs of social enterprises • A lack of evaluation for improvements in the current DSPs
Differences in the current operating mechanisms of the DInE	<ul style="list-style-type: none"> • A lack of DSSs and implementers for DSP development • Insufficient participation of design agencies in DSPs • Substantial dependence on governmental support and interventions • A lack of involvement of other institutions (e.g. public bodies and NGOs) • Short-term support

As shown in Table 3, comparing the current DInEs of social enterprises in the UK and South Korea allowed this research to understand the critical barriers hindering strategic design utilisation for social enterprises. These barriers range from simple to complex, that is, from fulfilling the design needs of social enterprises to encouraging the establishment of strategic relationships among stakeholders within DInEs. Ultimately, these issues indicate that the fundamental problem with the existing DInEs is that design utilisation for social enterprises is not systematically developed and is fragmentary and sporadic. These identifications led to some considerations to address the barriers at (i) strategic and (ii) operational levels to improve the current composition of the DInE for social enterprises.

At the strategic level, the findings indicate that it is necessary to consider developing DInEs in stages. To optimise systematic DInEs that support effective and strategic design utilisation for social enterprises, it is vital to build a solid foundation and balanced environment to counter the current fragmented nature of these ecosystems and guide the various stakeholders in their vital roles (including their relationships), as well as understand the potentials inherent the DInE. At the operational level, on the other hand, it is first necessary to structure component development processes. Among the criticisms of current DSSs, DSF and DSPs is the concern that stakeholders have not strategically considered the development of design support practices, missing opportunities to improve these practices by observing and evaluating previous and current activities. Moreover, because specific stakeholders are involved in the execution of these practices, most stakeholders demonstrate minimal recognition of their existing and potential partners (including resources). Therefore, it is necessary to help stakeholders

understand and evaluate existing and potential resources and partners in an accessible and useable manner to expand and strengthen their networks. Furthermore, design support should follow the business stages of social enterprises. For example, in both the UK and South Korea, social enterprises highlight the need for design that could differentially influence different business stages, indicating the need to expand and subdivide the roles of design in DInEs and maximise the impact of design on the growth of social enterprises.

Conclusion

This research reviewed and compared the current compositions of the DInEs for social enterprises in the UK and South Korea by considering different aspects of the current design utilisation in supporting the growth of social enterprises. The key findings indicate, at the strategic level, the necessity to (i) guide the various stakeholders in their vital roles (including their relationships) so that they can understand the potential inherent in the DInE and, at the operational level the need to (ii) develop strategic development processes of DInE components and (iii) develop practical design support content that can maximise the impact of design on the growth of social enterprises. In addition, the findings indicate that the key features of different principal approaches to structuring and operating the DInEs in the UK (bottom-up) and South Korea (top-down) can be used to develop a hybrid approach that systematically and strategically develops design utilisation by considering the various aspects of supporting the growth of social enterprises.

This research provides the following theoretical and practical contributions. First, the research introduces structural units (DSS, DSF and DSP); thus, academics and practitioners in the design and social enterprise sectors can develop DInE theories and practices by evaluating and improving these critical components. Second, the research identifies the functional roles of design in supporting the growth of social enterprises by examining the current state of design understanding and utilisation of the key stakeholders of the social enterprise ecosystem; thus, social enterprise and design support practitioners can develop their insights into design and its impact on the growth of social enterprises.

Further research is recommended to build a strategic approach (e.g. a framework) that can be used to assist strategic stakeholders in developing a systematic and practical DInE that enables

and strengthens the design support of social enterprises and maximises the design impact for the growth of such enterprises.

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