

# Researching Design Policy Ecosystems in Europe

**Abstract** Design is often a tacit component of policymaking, and so it is often difficult to pin down its role and contribution to innovation policy. As an area of policy and policy research, design suffers from misconceptions about what it is, and what it offers. We propose the Design Policy Ecosystem as an overarching model that works in two ways: it identifies and categorizes existing policy actions and instruments that are examples of design policy and maps the field of organizations working to support these policies in a given national context. After quantitative data gathering, framework development, and testing with policymakers, experts, and advocates from fourteen European countries, we translated the framework into an online evidence-based resource platform intended to raise awareness about the landscape of design policy across the EU. The framework locates and organizes design policy-related actions in ways that policymakers, intermediaries, innovators, and interested parties can better understand the strengths and weaknesses of their Design Policy Ecosystem, and reveals the most appropriate areas where design could be a lever for development.

## Keywords

Design policy  
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Design Policy Ecosystem

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1 A number of EU policy documents substantiate this vision. For more information, see [https://ec.europa.eu/growth/industry/innovation/policy/design\\_en](https://ec.europa.eu/growth/industry/innovation/policy/design_en).

2 Commission of the European Communities, "Design as a Driver of User-Centred Innovation" (working paper, Brussels, Commission Staff Working Document, 2009), 9, accessed April 29, 2018, <http://ec.europa.eu/DocsRoom/documents/2583/attachments/1/translations/en/renditions/native>.

3 Ibid.

4 Michael Thomson and Tapio Koskinen, eds., *Design for Growth and Prosperity* (Brussels: Commission Staff Working Paper, 2012), 15, accessed April 15, 2018, [http://europeandesigninnovation.eu/wp-content/uploads/2012/09/Design\\_for\\_Growth\\_and\\_Prosperty\\_.pdf](http://europeandesigninnovation.eu/wp-content/uploads/2012/09/Design_for_Growth_and_Prosperty_.pdf).

5 Gisele Raulik-Murphy, Gavin Cawood, and Alan Lewis, "Design Policy: An Introduction to What Matters," *Design Management Review* 21, no. 4 (2010): 52–59, DOI: <https://doi.org/10.1111/j.1948-7169.2010.00095.x>.

6 Terence Love, "National Design Infrastructures: The Key to Design-Driven Socio-Economic Outcomes and Innovative Knowledge Economies," in *Proceedings of the International Association of Societies of Design Research (IASDR 2007): Emerging Trends in Design Research*, ed. Sharon Poggenpohl (Hong Kong: The Hong Kong Polytechnic University Press, 2007), 1–26; Anna Whicher, Gavin Cawood, and Andrew Walters, "Research and Practice in Design and Innovation Policy in Europe," in *Leading Innovation through Design: Proceedings of the DMI 2012 International Research Conference*, ed. Erik Bohemia, Jeanne Liedtka, and Alison Rieple (Boston: Design Management Institute, 2012), 289–308; Raulik-Murphy et al., "Design Policy"; Peter Swann, *The Economic Rationale for a National Design Policy* (London: Department of Business, Innovation and Skills, 2010), accessed April 29, 2018, [http://www.dx.org/site/design\\_exchange/assets/pdf/Economic\\_Rationale\\_for\\_National\\_Design\\_Policy\\_UK.pdf](http://www.dx.org/site/design_exchange/assets/pdf/Economic_Rationale_for_National_Design_Policy_UK.pdf).

7 An Innovation System is a "set of institutions that (jointly and individually) contribute to the development and diffusion of

## Researching Design Policy

In this article, we ask, "What exactly is design policy?" And, more specifically, "What is the appropriate perspective and framework to adopt when researching this topic in the European context?" We will first explore how to identify the general nature and characteristics of design policy. Then we will look at the particular context of European design policy – a continent characterized by socioeconomic diversity – after which we will flesh out the notion of how to consider (and fund) design that takes place as part of broader innovation policies.

Design policy is acquiring new emphasis, due to the recent attention to design in the European Commission innovation strategy, which has led many EU nations to explore design as a driver of socio-economic growth on their own.<sup>1</sup> The European Commission recognizes design as an important lever for innovation, with one working paper describing it as

"a multifaceted and broad concept with no commonly agreed definition. There is agreement that design can be both a verb and a noun – an activity (to design) and the result of this activity (a design) – but the understanding of what the activity of design actually entails varies."<sup>2</sup>

Design innovation has become a source of new meaning for products and services,<sup>3</sup> as well as a process of "people-centered innovation by which desirable and usable products and services are defined and delivered."<sup>4</sup>

Despite traces of evidence in policy documents, it is difficult to find a systematic research approach to design policy. Design policy is defined as "the process by which governments translate their political vision into programs and actions in order to develop national design resources and encourage their effective use in the country."<sup>5</sup> This description is linked to a range of design policy models<sup>6</sup> that look at why governments ought to support the design sector and how they should support design activities and processes. Their aim is, therefore, to identify the most relevant areas for investment to support design in a specific National Innovation System.<sup>7</sup> Many existing models focus on ways to prove design's contribution to economic growth, for example by proposing business cases that have used design as a critical success factor. Anna Whicher's Design Ecosystem<sup>8</sup> identifies design's role in the context of innovation according to nine key components – actors, designers, users, research, education, promotion, policy, funding, and support. Critiques<sup>9</sup> of this position have remarked that it defines design policy mainly in terms of how it serves the design profession, unlike other types of policy whose focus is on societal systems more broadly. Such criticism challenges the notion that design policy is relevant to academic research and institutional practice. However, more recently, this critical perspective has been complemented by scholars who consider design policy "not as a rational, problem-solving activity but as a socially based, collective activity for generating solutions to complex problems and challenges."<sup>10</sup> This position moves design policy far from the interests of a specific sector and proposes a novel research challenge: explore design not as an independent domain but as part of the broader sphere of innovation policy. Thus far, academics have under-researched this shift – references to approaches and tools capable of defining a design-driven logic that can support and inform innovation policy are few and far between. Further investigation is needed to understand the rationale and frameworks that will clarify a taxonomy of design policy as part of innovation policy and capture the characteristics of design policy in this domain.

In this article we propose a framework that researchers and policy designers can use to identify, classify, explore, and depict what we call a design policy ecosystem. We look into establishing a more cohesive policy framework for design, and report on how this presents several challenges, starting with the uncertainties

linked to categorizing public policy. Categorization is a complex and varied task, and any attempt to do so without a clear set of rules and filters would be futile. Therefore, the proposal we develop here sets filters on two main levels: design policy scale (to limit the object of investigation) and innovation policy objectives (to clarify government priorities leading to investment in design in the context of innovation). The framework analyzes innovation policy goals on the basis of the taxonomy proposed by Nesta researchers Jakob Edler and his colleagues,<sup>11</sup> which distinguishes between supply-side policy instruments (that impact innovation generation efforts) and demand-side policy instruments (that impact beneficiaries requesting, buying, or applying innovation). Innovation policy goals grouped thusly reveal three macro areas of design policy, namely: (1) *framework conditions* useful to support design innovation, (2) increase of *human capacities* (connected to design) in companies and organizations, and (3) improvement of the *assets* needed to increase profitable use of design. We applied this understanding to existing policies to build a taxonomy and a framework – the Design Policy Ecosystem framework. Our framework enables government policymakers to collect the kind of evidence that can support their initiatives by revealing strengths and weaknesses in local design policy landscapes.

### Exploring the Gaps in Design Policy Research

Design’s prominence within the broader context of innovation has been growing steadily in recent years. This emphasis is the result of advocacy by the European Commission, who has made an explicit commitment to encourage its inclusion in innovation policy since 2009.<sup>12</sup> That emphasis brings three key issues to light:

1. Design has no commonly agreed definition and is often (wrongly) associated with the aesthetic shape of material objects;
2. The design process often falls under the umbrella of R&D and is a component of marketing or other similar forms of value creation; and
3. Different levels of design awareness are emerging across Europe, which has led to a distinction between (so-called) *leaders* and *followers*, depending on the degree to which a country incorporates design into its national innovation strategy.

European policymakers and local governments have begun to include design as a key priority in their industrial and innovation policies. A growing number of EU member states have recently developed national design strategies, for example Estonia (2012), Finland (2013), Latvia (2014), and more recently Ireland (2016) – the rationale being that design-driven approaches to innovation are one of the best ways to address contemporary innovation challenges presented by complex societal issues associated with ageing, employment, healthcare and welfare system reform, changes in production paradigms, and so on.<sup>13</sup> Despite these positive elements emerging in policy practice, the connection between design and innovation in the academic literature remains blurred and fragmented,<sup>14</sup> especially in the field of Innovation Studies, where design is often classified as a subset of R&D processes. Although policy practice is seldom influenced by academic positions, governments have aligned with mainstream conceptions by including design mainly in R&D and marketing-related forms of innovation, and barely any research has sought to challenge this perspective – to this day, innovation scholars who advocate for design are a minority. As a result, design policy research has developed as an independent area of investigation, and design policy practice has found a more comfortable niche as a new area of investment only occasionally connected to other policy areas – such as business, tourism, and culture development – establishing a position in practice

new technologies. These institutions provide the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store, and transfer the knowledge, skills, and artifacts which define new technologies.” Naubahar Sharif, “Emergence and Development of the National Innovation Systems Concept,” *Research Policy* 35, no. 5 (2006): 745, DOI: <https://doi.org/10.1016/j.respol.2006.04.001>.

8 Anna Whicher, “Design Ecosystems and Innovation Policy in Europe,” *Strategic Design Research Journal* 10, no. 2 (2017): 117–25, available at <http://www.revistas.unisinos.br/index.php/sdrj/article/view/sdrj.2017.102.04>.

9 Jonathan M. Woodham, “Formulating National Design Policies in the United States: Recycling the ‘Emperor’s New Clothes?’,” *Design Issues* 26, no. 2 (2010): 27–46, DOI: [https://doi.org/10.1162/DESI\\_a\\_00003](https://doi.org/10.1162/DESI_a_00003).

10 Mike Hobday, Anne Boddington, and Andrew Grantham, “Policies for Design and Policies for Innovation: Contrasting Perspectives and Remaining Challenges,” *Technovation* 32, no. 5 (2012): 278, DOI: <https://doi.org/10.1016/j.technovation.2011.12.002>.

11 The main reference we have used is Jakob Edler, Paul Cunningham, Abdullah Gök, Philip Shapira, “Impacts of Innovation Policy: Synthesis and Conclusion” (working paper, Nesta Working Paper Series no. 13/21, 2013), 6, accessed July 30, 2018, <https://www.nesta.org.uk/report/impacts-of-innovation-policy-synthesis-and-conclusion/>.

12 The hypothesis considers design as “a driver and tool for user-centred and sustainable innovation and differentiation, complementary to technological R&D,” underlining that “increased use of design could increase European competitiveness.” European Commission, “Design as a Driver of User-Centred Innovation,” 7. This also refers to fostering non-technological innovation to promote the vision of “an innovation-friendly, modern Europe.” José Manuel Barroso, “An Innovation-Friendly, Modern Europe” (speech 06/784, European Technology Platforms seminar, December 6, 2006, Brussels, Belgium), accessed April 29, 2018, [http://europa.eu/rapid/press-release\\_SPEECH-06-784\\_en.htm?locale=en](http://europa.eu/rapid/press-release_SPEECH-06-784_en.htm?locale=en).

13 This perspective was a prominent one at the International Design Policy Roundtable (IDPR) organized by DesignSingapore (November 2017). The roundtable served as a common platform for organizations around the world to share experiences, discuss best practices, and exchange ideas to overcome challenges. Invitees included heads and program leads from international organizations that promote the use of design in driving innovation and transformation in the business and public sectors. Participants were from Singapore, New Zealand, the UK, Denmark, Taiwan, Hong Kong, Spain, Australia, Germany, and Thailand.

14 Hobday et al., "Policies for Design"; Marzia Mortati, "A Framework for Design Innovation: Present and Future Discussions," *Design Issues* 31, no. 4 (2015): 4–16, DOI: [https://doi.org/10.1162/DESI\\_a\\_00347](https://doi.org/10.1162/DESI_a_00347).

15 Here, I refer to the hypothesis proposed by the European Commission that considers design as a driver for user-centered and sustainable innovation that—complementarily to technological R&D—could increase European competitiveness and its economic growth. European Commission, "Design as a Driver of User-Centred Innovation," 7.

16 UK Department of Culture, Music and Sport, *Creative Industries Economic Estimates* (London: The Crown, 2016), accessed April 18, 2018, <https://www.gov.uk/government/statistics/creative-industries-economic-estimates-january-2016>.

17 Ibid., 7.

18 Design Council, *Design Industry Research* (London: Design Council, 2010), accessed April 29, 2018, <https://www.designcouncil.org.uk/resources/report/design-industry-research-2010>.

19 Ibid., 2.

20 Ireland Department of Jobs, Enterprise and Innovation, *Policy Framework Design in Enterprise in Ireland* (Dublin: Department of Jobs, Enterprise and Innovation, 2016), 2, accessed August 7, 2018, <https://dbej.gov.ie/en/Publications/Policy-Framework-For-Design-in-Enterprise-in-Ireland.html>.

21 Ibid.

that diminishes the broader presence of design in innovation policy. If we accept that the inclusion of design in innovation policies may give rise to more effective innovation policies and solutions, then research that helps build our understanding of design's potential contribution becomes important.

The European Commission points out different levels of design maturity displayed by its member states, and the divide between leaders such as Denmark (where there has been a dedicated national strategy since 1997) and followers such as Bulgaria (where design is implicit in innovation policy). This is a key insight for not only policy practitioners, as it helps establish parameters for policy learning, but also for design policy researchers, as it sheds light on a landscape of contrasts that would benefit from further direct observation, data, and field evidence. On the one hand, policymakers in advanced contexts seem convinced that the design sector contributes to economic growth,<sup>15</sup> and yet on the other, most national and regional contexts still struggle to incorporate the strategic potential of a design-driven innovation approach. One reason for this could be that existing models and frameworks do not adequately frame the design policy landscape. Another possibility is that the kind of data that can foster understanding and justify investment in design is sorely lacking. Very few design metrics exist, and design measurements are not included as part of official statistical innovation programs—the EU Innovation Scoreboard or Community Innovation survey, for example—on the basis of which innovation policy priorities are often decided. To explain this further, we will consider the status of design in the UK, Ireland, and Denmark.

In the UK, the British Department of Culture, Music, and Sport<sup>16</sup> regularly releases a report on the economic value produced nationally by the creative industries. It provides an overview of new jobs created, the contribution to GVA (Gross Value Added), and national exports produced. The report identifies design—product, graphic, and fashion design—as a sector of the creative industries. Among the key findings of the 2016 report (the most recent) was that the design sector showed the greatest increase in GVA in the 2013–14 fiscal year (16.6%) growing at an average of over 9% each year.<sup>17</sup> Other sectorial reports and studies also exist in Britain, including the Design Council's 2010 report *Design Industry Research*.<sup>18</sup> It relates the results of a national survey of 2,200 design businesses, including in-house design teams, design consultancies, and professionals working in diverse design fields (communications, interior, product, fashion, and service). The report offers a comprehensive look at the UK design sector, from design business practices to geographic concentration, financial performance, and types of clients. Survey results revealed that there are an estimated 232,000 design professionals whose combined fee income (including in-house budgets and freelance work) came to roughly £15 billion in that year. The sector grew 29% between 2005 and 2010, despite the relatively small size of most UK design businesses (more than the 60% have less than 5 employees).<sup>19</sup> Even the strength of this data has not been enough to help Britain develop a more comprehensive design policy strategy.

In 2015, Ireland launched the *Irish Design Footprint* initiative, which included a study of their design innovation ecosystem. The study concluded that "design has a significant economic impact on the Irish economy: workers engaged in design roles in Ireland are found to be employed right across the economy, and exports from the Design Sectors contributed circa twenty percent of total Irish exports in 2012."<sup>20</sup> The initiative led to Ireland's first national strategy for design, the *Policy Framework for Design in Enterprise in Ireland* (2016),<sup>21</sup> which looks at increasing the use of design-driven innovation in business, developing specific design skills, and scaling up the sector.

Denmark, on the other hand, launched its national design policy program in 1997—a first in Europe. At the time, there was no systematic evidence



demonstrating the strengths, weaknesses, and potential of the design sector in the country. The primary driver was the commitment of a political system that understood the importance of the sector and wanted to deploy its vision to innovate at a national level.

From this brief analysis, two gaps in design policy research emerge. On the one hand, the presence of design-driven approaches is highly underrated among innovation policymakers, and on the other, field research findings seem poorly understood. Those who seek to advocate for national design policy lack not only quantitative support (in the form of metrics and data) but also qualitative support (due to a lack of design culture and awareness among policymakers). Bridging these divides may be the key to advancing the field of design policy research and increasing its societal impact.

## Building a Taxonomy: How to Identify Design Policy as Part of Innovation Policy?

Given the lack of a cohesive design policy framework and the diverse (European) experiences with design policymaking thus far, a well-structured research program and framework seem crucial to a deeper understanding of design policy and a more comprehensive picture of its connection to innovation policy. This research journey presents several challenges, beginning with how to categorize public policy,<sup>22</sup> an area so complex and varied that often the best way is to start by defining the policy domain – health, education, welfare, and so on. Without a clear set of rules and filters, any attempt to describe even one of these complex areas is futile.

With these constraints in mind, we built our initial taxonomy by mapping out existing European policies that explicitly include the word “design” in their titles or objectives. The result was a list of 548 elements<sup>23</sup> – including reports, strategic documents, and official declarations.

After analysis, our results turned out to be flawed: not only were the numbers too high, considering the low uptake of design policies by European nations, but countries like Italy were showing very few results despite the existence of relevant initiatives known to the authors.<sup>24</sup> We needed a finer filter to sort our data, to prevent the inclusion of innovation policies without design-related aspects<sup>25</sup> and accommodate what we saw as the *tacit dimension of design in policy* – design innovation listed or included (explicitly or not) among the objectives of existing policy actions. We therefore chose to filter by *design related policy actions* and *institutional policy objectives* that include design activity.

The first of our key research criteria sought to identify existing *policy actions connected to design*. These could be anything from more extensive programs to smaller initiatives such as design competitions, awards, voucher schemes, norms and regulations governance, prototype development, services acquisition, and so on; and might include an explicit reference to design or be part of a wider policy targeting innovation and/or the creative sector. Therefore, with this research criteria we hypothesized that even though a policy might not explicitly advance design practice(s), smaller measures were representations of the extent of a country or region’s investment in design. Because of this, a crucial skill in this type of investigation is the necessity of a curatorial element to identify design where this is not stated explicitly.

After fixing this criterion, we opted to further categorize our findings (design policy actions) as:

- *Policy* – an instrument or set of regulations by which national or local governments determine and enact rules, activities, and other processes to support design at large;

<sup>22</sup> Paul Cairney proposes a wide categorization that considers policy objectives identifying three types: (1) distributive policy, giving resources to a precise group of beneficiaries; (2) redistributive policy, taking resources from a group to give them to another; (3) regulatory policy, using penalties and incentives to influence behaviors. However, this is an initial taxonomy that can be understood further in Paul Cairney, *Understanding Public Policy: Theories and Issues* (NY: Palgrave Macmillan, 2012) and Paul Cairney, *Policy and Policymaking in the UK* (NY: Palgrave Macmillan, 2015).

<sup>23</sup> This list was gathered during two European co-funded research projects carried out between 2012 and 2017. The first was called DeEP—Design in European Policy (2012–14) (<http://www.deepinitiative.eu/>) and the second Design for Europe (2014–17) (<http://www.designforeurope.eu>). Both projects contributed to understanding how different European countries support design and enriching the associated data through systematic research. These are gray documents, and thus not available to the public.

<sup>24</sup> An example is the Bollenti Spiriti initiative, a policy implemented by the Puglia regional authority in Italy. It has a design component—the development of creative start-ups is one example—even if design is not explicitly included in its title or stated objectives. For more information, see <http://bollentispiriti.regione.puglia.it/>.

<sup>25</sup> Given the broad nature of innovation policy, a research criterion is important to differentiate where design innovation is incentivized or other types of innovation are supported.

26 Edler et al., “Impacts of Innovation Policy,” 6.

27 Ibid., 7.

28 Ibid.

- *Program/Initiative* – smaller actions (such as programs, awards, competitions, and so on) intended to achieve part of the objectives of existing policy (that explicitly addresses design or the creative sector); or
- *Project* – a one-time, experimental action launched by an institution to test new programs or test existing actions on new beneficiaries.

The second filter focuses on how institutions have invested in design *to fulfill innovation policy objectives*. We used this filter for our analysis of innovation action objectives, which we further classified using Jakob Edler and his colleagues’ two-dimensional taxonomy (reported in Table 1).<sup>26</sup> In the left-most column, the authors distinguish between supply-side policy instruments (that impact innovation generation) and demand-side instruments (that influence entities requesting, buying, or applying innovation); in the rest of the table, they propose instrument categorization by aim. These aims are to (1) increase R&D investment; (2) increase non-financial capabilities, including (2a) measures to improve and increase the supply of skills, and (2b) measures to enable access to expertise; (3) strengthen system-wide capabilities; (4) enhance innovation demand; (5) improve framework conditions for innovation, including regulations and standards; and (6) facilitate exchange and dialogue about innovation.<sup>27</sup> We chose Edler’s categorization of innovation action objectives because it offers a broader appreciation of policy instruments and goals for innovation. In some cases, policy instruments included by Edler and his colleagues are primarily designed for other policy fields, but are acknowledged as equally affecting innovation development – in other words, the conditions under which innovation is undertaken. We found this to be appropriate to the nature of design innovation as well, which we define as a multi-dimensional concept.

We used the innovation policy aims and related instruments identified by Edler and colleagues<sup>28</sup> in our original categorization to identify and describe design related innovation policy goals in one of three categories: (1) *framework development* includes any framework improvement, discourse facilitation, and innovation demand enhancement that supports design innovation; (2) *human development* describes any organizational investment in improving and increasing internal (design) knowledge, skills, and expertise; and (3) *asset development* includes increases to R&D spending, plus investment in developing the systemic capabilities that will increase an organization’s capacity to profit from design. Table 3 provides an overview of this re-categorization.

Table 1. Innovation policy instruments and objectives (Edler et al., "Impacts of Innovation Policy," 7).

Title and Instrument	Overall Orientation				Goals			
	Supply	Demand	Increase R&D spent	Increase non-financial capabilities	Systemic capabilities, complementarities	Enhance demand for innovation	Framework	Discourse
				Skills	Access expertise			
Fiscal incentives for R&D	•••		•••	•				
Direct support to R&D and innovation in Firms	•••		•••					
Access to finance, publicly supported venture capital and loan guarantees	•••		•••					
Policies for training and skills on improving innovation capabilities in firms	•••		•••	•••				
Innovation and human resources and employment protection	•••		•••	•••				
Support measures for exploiting intellectual property	•••			•••				•
Entrepreneurship policy	•••			•••				
Technical services and advice	•••			•••				
Cluster policy on innovation	•••				•••			
Policies to support collaboration for R&D and innovation	•••		•		•••			
Innovation network policies	•••				•••			
Measures to stimulate private demand for innovation		•••				•••		
Public procurement policies		•••	••			•••		
Pre-commercial procurement	•	•••	••			•••		
Innovation inducement prizes	••	••	••			••		
Standardization and standards	••	••				•	•••	
Regulation	••	••				•	•••	
Technology foresight	••	••						•••

The table reports the taxonomy proposed by the original source. Dots denote the relevance of the overall orientation and the stated goals to the various innovation policy instruments (••• = strong relevance; •• = moderate relevance; • = minor relevance).

29 The final list of design policy actions is available online at <http://www.designpolicy.eu/design-policy-beacon/catalogue/>. Users can navigate the list by filtering by framework, category, country, beneficiary, or coverage. These policy actions originate from four EU countries Italy, the UK, Luxemburg, and Poland. Further policy data from other source nations will be forthcoming.

Using these two filters, we were able to locate 64 relevant design policy actions from the initial list of 548 elements. The design policy action filter was particularly helpful, as it enabled us to exclude irrelevant reports and more general documents and focus on smaller initiatives like design competitions and voucher schemes. The policy goals filter allowed us to more precisely categorize policy items and make further sense of the overall design policy approach in each country. Finally, we understood that policy goals often overlap because often several are pursued concurrently by a single action (especially those with wider aims and more extensive budgets).

The list of 64 policy actions is reported in Table 2 in a simplified version (without including quantitative data linked to budgets, full descriptions, durations, and numbers of editions), to give a sense of the analysis performed, the extent to which policy goals overlap, and partial results obtained. This represents an ongoing result in the analysis and development of the framework used to test the categorization. To achieve more extensive results (i.e., reading the characteristics of a design policy ecosystem in a country), we had to further build and refine the framework – as explained in the following paragraphs – and integrate the list of design policy actions directly talking with local experts. This was useful not only to find missing actions but also to confirm understanding of local design policy characteristics.<sup>29</sup>

Table 2. List of Design Policy actions.

Action Title	Type of Design Policy Action			Country	Design Innovation Policy Goal		
	Policy	Program/ Initiative	Project		Framework dev.	Human dev.	Asset dev.
1. A Designer for Enterprises		●●●		Italy		●●	●●●
2. Bollenti Spiriti	●●●			Italy		●●	●●
3. Creatività e commercio – spazi espositivi per l'attrattività territoriale		●●●		Italy		●●●	
4. Eventi e luoghi per l'innovazione nella moda e nel design		●●●		Italy	●●		●●●
5. DeCò – Design è Competitività		●●●		Italy		●●	●●●
6. Disegni+3		●●●		Italy		●●	●●
7. Design and Craft for the Trentino Region		●●●		Italy		●●●	
8. Design Competition Creatività 3		●●●		Italy		●●●	●●
9. Moda e digitale: nuove soluzioni tecnologiche per il terziario e la filiera della moda		●●●		Italy			●●●
10. Excellence with Impact	●●●			Italy		●●●	
11. Fondo Nazionale per l'innovazione		●●●		Italy	●●●	●●	●●
12. Incentives for Companies	●●●			Italy	●●	●●	●●●
13. Magazzini Aperti		●●●		Italy	●●		●●
14. Next Design Innovation			●●●	Italy			●●●

(Continued on next page...)



**Table 2.** (Continued)

Action Title	Type of Design Policy Action			Country	Design Innovation Policy Goal		
	Policy	Program/ Initiative	Project		Framework dev.	Human dev.	Asset dev.
15. Piano d'azione per la Moda e il Design (2014–2015)	●●●			Italy	●	●●●	●●●
16. Piano Operativo Nazionale Cultura e Sviluppo (2014–2020)	●●●			Italy	●	●●	●●
17. Prodotti tipici industriali			●●●	Italy	●●		●●
18. Programma Nazionale per la Ricerca 2014–2020	●●●			Italy		●●	●●
19. Qui / Ora – Io / Noi Piemonte Handmade			●●●	Italy		●	●●●
20. Territori creativi		●●●		Italy		●●	●●
21. Trentino Design 3.0			●●●	Italy		●●●	
22. Trentino sviluppo – Punto design		●●●		Italy		●●●	
23. Chiasma Funding		●●●		UK	●●		●●
24. Cracking Ideas Competition		●●●		UK	●●●		
25. Creativeworks London Boost		●●●		UK		●●●	●●
26. Creativeworks London Entrepreneur-in-Residence Scheme		●●●		UK		●●	●●
27. Creative London Research-in-Residence Scheme		●●●		UK		●●●	●●
28. Creativeworks London Voucher Scheme		●●●		UK		●●●	●●
29. Design Support for Science and Technology		●●●		UK		●●●	
30. Designing Demand		●●●		UK		●●	●●
31. Fluid Diversity Mentoring Program			●●●	UK		●●●	
32. Innovate Vouchers		●●●		UK		●●	●●
33. Innovate UK Creative Industries Strategy 2013–2016		●●●		UK	●●	●●	●●
34. Knowledge Exchange Hubs for the Creative Economy		●●●		UK		●●●	●
35. Learning Technologies – Design for Impact		●●●		UK		●●●	
36. Metamorphosis 2015			●●●	UK		●●	●●
37. NowCreate			●●●	UK	●●●		
38. RSA Student Design Awards		●●●		UK	●●●		
39. The SBID International Design Excellence Awards 2015			●●●	UK	●●●		

(Continued on next page...)

**Table 2.** (Continued)

Action Title	Type of Design Policy Action			Country	Design Innovation Policy Goal		
	Policy	Program/ Initiative	Project		Framework dev.	Human dev.	Asset dev.
40. Spark		●●●		UK		●●	●●●
41. Twenty Twenty			●●●	UK		●●●	
42. Knee High Design Challenge		●●●		UK		●●●	
43. UK Creative Industries International Strategy		●●●		UK	●●		●●
44. UK Government Science and Innovation Strategy	●●●			UK	●●	●●●	●●●
45. Innovate UK's Design in Innovation Strategy 2015–2019	●●●			UK	●●●	●●●	●
46. Design Action Group Luxembourg		●●●		Luxembourg	●●	●●	●●
47. Creative Industries Cluster Luxembourg		●●●		Luxembourg	●	●●●	●
48. Design City Luxembourg		●●●		Luxembourg	●●		●●
49. Creative Business Cup – Luxembourg		●●●		Luxembourg	●	●●●	●
50. Luxembourg Design Awards			●●●	Luxembourg	●●	●●	●●
51. Fit for Innovation		●●●		Luxembourg		●●●	
52. Guidelines for Increasing Innovativeness of Economy for Years 2007–2013	●●●			Poland	●●●	●●●	●
53. Stimulation of R&D Activity of Enterprises and Support within the Scope of Industrial Design		●●●		Poland	●●	●●●	
54. Supporting Business Environment Institutions Providing Innovative Services		●●●		Poland	●	●●●	●
55. Design Business Profit Program		●●●		Poland	●	●●●	
56. Regional Innovation Strategy – Silesian Voivodeship (2007–2013)		●●●		Poland	●	●●●	●
57. Design Silesia		●●●		Poland	●	●●●	●
58. Silesian Icon			●●●	Poland	●●●		
59. Good Design Competition		●●●		Poland	●●●		
60. Polish Design Manifesto		●●●		Poland	●	●●●	●
61. Lodz Design Festival		●●●		Poland	●●●		
62. Gdynia Design Days Festival		●●●		Poland	●●●		
63. Diagnosis of the State of Design in Poland 2015		●●●		Poland	●	●●●	●
64. Design for Competition Program		●●●		Poland	●	●●●	●

The table reports the initial design policy actions analyzed and includes a system of dots to denote the type of action and the differing relevance of design innovation policy goals to the various actions (●●● = strong relevance; ●● = moderate relevance; ● = minor relevance).

## Building a Framework: The Design Policy Ecosystem

The results of this preliminary investigation form the foundation for a framework that governments and policymakers can use to locate useful evidence regarding the strengths and weaknesses of the local design policy landscape. The framework generates a holistic viewpoint and a broader perspective on what we call the *Design Policy Ecosystem* framework. By applying the framework, government regulators can better understand the context for proposed policy action and identify areas where design can have the most effective impact on socio-economic growth. The double-sided analysis the framework generates combines results of quantitative policy action research and qualitative interviews with policymakers, intermediaries, and beneficiaries.

The framework – the Design Policy Ecosystem model – is composed of two facets: *design policy categorization* and *design ecosystem mapping*. Policy categorization identifies relevant (existing or past) policy actions, tracks their results, and reveals gaps for future exploration. The mapping tool pinpoints the organizations and bodies concerned with developing and implementing design policy. Like a compass, the framework's two facets serve to orient and help direct initiatives, roles, and relationships within the complex system of governance that supports design innovation.

### *Design Policy Categorization*

The design policy categorization process firstly identifies policy as belonging to one of Edler's seven innovation policy goals<sup>30</sup> (which also reveals categories not covered by existing policy), and further groups these policy objectives into one of three domains. As we described above, these are

- *Framework development*, for direct financial interventions and to support promotion & advocacy creating general awareness of design and its value;
- *Human development*, policies that build design capabilities (organizational and individual ones), and support research through design and for services supply (demand of design-related services);
- *Asset development*, policies that support technical development, networking and collaboration.

Table 3 contains the full list of categories. Section I (Innovation Policy Goals) groups Edler and colleagues' innovation policy goals<sup>31</sup> into three areas as per the main source classification

- Innovation policy goals mainly supporting demand-side innovation;
- Innovation policy goals mainly supporting supply-side innovation and focusing on human capabilities; and
- Innovation policy goals supporting supply-side innovation and focusing on technical enhancements of internal assets.

Section II (Design Policy Goals) lists areas connected to one of the three design policy goal domains (framework, human, asset development). This list of categories covers one part of the Design Policy Ecosystem model and constitutes the taxonomy established in this study. We used this list to review the 64 policies reported in Table 2.

An additional consideration to the categorization process is that a well-organized design policy system should provide public help in each of the three areas listed in section II, to support both supply and demand of design. Because policies have a highly-situated nature and incorporate the common cultural, economic, and social differences of a region, analysis results will be different each time the categorization is applied.

30 Edler et al., "Impacts of Innovation Policy," 7.

31 Ibid.

**Table 3. Design policy goals: categorization.**

I. Innovation Policy Goals (Edler et al., 2013)		
Mainly supporting Demand-side of innovation	Mainly supporting supply-side innovation in terms of human enhancement	Mainly supporting supply-side innovation in terms of technical enhancement
<ul style="list-style-type: none"> <li>• Enhance demand for innovation</li> <li>• Framework improvement</li> <li>• Discourse facilitation</li> </ul>	<ul style="list-style-type: none"> <li>• Increase non-financial capabilities: skills</li> <li>• Increase non-financial capabilities: expertise</li> </ul>	<ul style="list-style-type: none"> <li>• Increase R&amp;D spent</li> <li>• Increase systemic capabilities</li> </ul>
II. Design Policy Goals		
Framework Development	Human Development	Asset Development
Policy actions that provide direct financial intervention and support for the promotion of design, aimed at creating the right conditions for design demand.	Policy actions that build design capabilities aimed at creating the conditions for design supply.	Policy actions that support technical development and seek to improve collaboration.
<ul style="list-style-type: none"> <li>• <b>Financial support</b> Provides direct financial intervention for design-related initiatives (organizations or individuals)</li> <li>• <b>Promotion and advocacy</b> Establishes design promotion and advocacy measures that seek to foster awareness of design and its value</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Capability building</b> Seeks to build design capabilities aimed directly at developing organizational or individual design capabilities that support research</li> <li>• <b>Support for research</b> Improves the quality and applicability of design research for service provision</li> <li>• <b>Services supply</b> Enhances the demand for design-related services</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Technical support</b> Supports technical development; directly addresses technology issues faced by organizations, including those related to networking and collaboration</li> <li>• <b>Networking and collaboration</b> Improves connectivity between collaborators</li> </ul>

**Mapping the Organizations in the Design Policy Ecosystem**

Design ecosystem mapping draws a complete picture of the organizations who work with design policy in a country, and the role they play in policy action design, implementation, delivery, and evaluation. An ecosystem map shows the presence and reveals the absence of different bodies and institutions that support design in a national system. The Design Policy Ecosystem defines five key roles, and five main types of supporting organization.

The key roles are

- *Funders*: bodies, organizations, or groups that have allocated funding for a design policy action;
- *Policymakers*: bodies, organizations, or groups – governmental departments, offices, think tanks, and so on – responsible for creating the action and determining its rationale, course of action, aims, and objectives. They will also generally determine how, and by whom, the policy should be implemented;
- *Intermediaries*: organizations involved in the implementation of a policy or initiative by fulfilling its aims and objectives through practical engagement with the intended beneficiaries, including policy promotion and information dissemination;

- *Beneficiaries*: individuals, communities, or organizations – businesses, public sector organizations, social enterprises, and even regional or local authorities – expected to benefit from the implementation of an action; and
- *Evaluators*: experts or organizations in charge of evaluating the results and impact of a policy action.

The five main types of organization are

- *Government and Governance*: local or national governments, municipalities, and other governmental institutions and bodies;
- *Advocates*: bodies that promote and support design nationally and locally, such as councils, museums, and the like;
- *Consultancies and Professionals (in-house and independent)*: the entire professional design sector, including young creatives, design studios, and so on;
- *Research and education*: schools and organizations, including training and research centers, that provide education and training in design; and
- *Demand*: individuals, communities, and organizations that benefit from design as an external service.

Categorizing existing policy reveals the maturity of design’s penetration in a given policy context, and policy mapping assembles and organizes evidence that can support the uptake of design policy as a broader contribution to economic growth. Overall, the Design Policy Ecosystem framework forms a goal-driven approach that – for the first time in the literature – acknowledges that *design is often a tacit dimension of innovation policy*. If it is true that the most common definition of design policy describes a national strategy that has been identified in official documents, our experience researching the field has shown how partial a picture this type of filter can generate. Our taxonomy has been designed to achieve a higher granularity and detect design policy actions in systems with lower levels of maturity and richness – the majority of design policy instances in Europe. Even where design is not mentioned in official strategies for innovation, smaller actions at other scales – local and regional levels – do exist and can contribute to building a credible case for new policy actions.

For example, Italy and the UK support design in very different ways, even if neither has a national strategy per se. The UK appears to have a more extensive public support system<sup>32</sup> and has adopted policy actions that fund promising ideas and talented young people, and coach businesses to understand the value design can offer to their activities. Italy, on the other hand, suffers from a fragmented public system. Despite the associations of quality and prestige attached to the *Made in Italy* label worldwide, Italian designs and designers receive most of their support from smaller, local initiatives, implemented by regional governments, which typically focus on aesthetic value alone.

But claiming that Italy does not value the contribution of its creative industries and design sector would be incorrect and partially misleading, as certain reports and statistics demonstrate. For example, Italia Creativa<sup>33</sup> is a study on the Italian cultural and creative industries performed yearly for the Ministry of Culture and Tourism. In a recent edition (2017), it reports the sector to be the third largest employer in the country whose production represented three percent of GDP in 2015. By applying the Design Policy Ecosystem framework, we found that in Italy there are six design policies, twelve design programs/initiatives, and four regional projects that support the growth of different areas of the design sector. The situation in the UK is quite similar. There are two policies, fifteen programs or initiatives, and six regional projects<sup>34</sup> that support design innovation and the design sector in various ways. These findings thus corroborate the notion that there is a

**32** The UK has the Design Council, a Parliamentary Group that seeks valuable ways to embed design in governmental services, and a Policy Lab that applies design tools and methods to support policymaking.

**33** EY, *Italia Creativa* [in Italian] (Milan: Ernst & Young Financial-Business Advisors S.p.A., 2016) accessed April 29, 2018, [http://www.italiacreativa.eu/wp-content/uploads/2017/01/ItaliaCreativa\\_SecondaEdizione.pdf](http://www.italiacreativa.eu/wp-content/uploads/2017/01/ItaliaCreativa_SecondaEdizione.pdf).

**34** Further details on Italy and the UK can be found online at <http://www.designpolicy.eu/design-policy-beacon/>.



tacit dimension of design in innovation policy, one that is central to proper understanding of design policy ecosystems. Despite two systems that appear to be polar opposites – one highly fragmented and the other highly institutionalized for design advocacy – they both show appreciation and an appetite for design innovation aimed at increasing economic growth even where it appears not to be funded explicitly through dedicated policy.

### Testing the Framework: The Experts' Opinions

To test the framework, we conducted 23 interviews with stakeholders from 14 EU countries, and 6 workshops with policymakers, experts, and advocates from 6 different EU countries. Table 4 presents an overview of these proceedings.

This practical step in our investigation enabled us to confirm the validity of the framework. But it also revealed several crucial insights.

The first of these was that differences in national design policy investment across Europe most often depended on stakeholders' *understanding* of what design is and what it does.

"In German 'design' is often identified in connection with specific fields of application, such as fashion design, furniture design, and product design. This has somehow diminished the meaning of design locally," said an Austrian participant.

The connotations attached to the word design in different languages actually play a crucial role in its uptake. In countries where English is well spoken, for example Great Britain and some countries in northern Europe, there is greater awareness of design among policymakers and enterprises alike.

The second insight was that to better integrate design with socio-economic growth policies, it will be important to nourish local relationships between influential stakeholders – universities, councils, municipalities, and so on – and advance a more critical understanding of design.

"[The] design [sector] is very weak at the moment, as the government does not understand it.... It seems that only the spirit of design is promoted rather than its real benefits. The practice of design should be reinforced from the field, the bottom of pyramid," noted our French participant.

We also note that senior politicians can play a heavily influential role in creating and delivering impactful programs that use design to create socio-economic value.

"In Denmark," stated the Danish participant, "design emerged quite early as a source of innovation. This happened because, in the 90s, the Ministry understood design as a profoundly important phenomenon, and an asset to invest in."

This type of top-down approach seems part of an older socio-political landscape; the complex socio-economic and environmental demands facing every nation call for the construction of a wider ecosystem. Luxembourg, a country with just over five hundred thousand inhabitants, is one country that would benefit from tracking how other nations create and implement design policy, and what results these policies produce. One participant from Luxembourg said,

"As awareness of design is low in our country, and the design sector is small, we believe that Luxembourg should begin by widening its focus to include creativity and political strengths that come from a wider group."

Finally, interviewees underlined the importance of a balancing design supply and demand, especially in countries where design has proved beneficial to local

**Table 4. List of interviews and workshops.**

Interviews			
Participant Role	Organization	Country	Insights
1. Expert and professor of innovation management	ARC Fund, Bulgarian innovation policy and research institute	Bulgaria	<ul style="list-style-type: none"> <li>- Passionate policymakers play a major role in integrating design innovation in Bulgarian public institutions.</li> <li>- The institutions responsible for design support in Bulgaria are also responsible for the innovation system.</li> <li>- Many interesting projects exist at the regional and local levels, but most are financed with international resources, rather than national or regional programs.</li> </ul>
2. Research associate	Imagination Lancaster, Lancaster University	United Kingdom	<ul style="list-style-type: none"> <li>- Three levels should be considered when investigating design policy: national, regional, local.</li> <li>- Design is usually a tacit component of innovation policy, and often it is new to policymakers.</li> <li>- In the UK, design is mainly funded through national support schemes; support for design changes along with the political landscape.</li> </ul>
3. Founder	La 27e Région, national policy lab	France	<ul style="list-style-type: none"> <li>- France has no national policy for design, although different initiatives are in place to promote its value (mainly for the private sector).</li> <li>- One of the main weaknesses in the national system is the promotion of a political/institutional point of view that does not resonate with professional designers and fails to spread the message to those who don't understand design.</li> <li>- It will be crucial for France's future that design be introduced into the public sector: renewing public sector operations will also benefit society as a whole.</li> </ul>
4. Program director	Danish Design Center, national design center	Denmark	<ul style="list-style-type: none"> <li>- Denmark has the advantage of being a small country where design is integrated at all levels with a special focus on business growth (there is a Ministry of Business and Growth).</li> <li>- The first national design policy was launched in 1997, thanks to the vision of one government minister who understood design deeply.</li> <li>- An important challenge for the future will be to create public/private partnerships and find new resources beyond public funding.</li> </ul>
5. CEO 6. Expert 7. Expert	Estonian Design Center, national design center	Estonia	<ul style="list-style-type: none"> <li>- The design sector is one of several creative industries under the aegis of the Ministry of Culture.</li> <li>- Design is mainly promoted as a tool to help companies develop products and services – ninety-five percent of Estonian businesses use design.</li> <li>- Design culture is also widespread in the public sector, where public servants are extensively trained to understand its benefits.</li> </ul>
8. CEO	Lithuanian Design Forum, national design promotion body	Lithuania	<ul style="list-style-type: none"> <li>- Lithuania has a gap in the promotion of design-driven innovation and the consequent development of design policies: no initiatives are in place, so it will be crucial to work on the ground with the right people and institutions to kick-start the process.</li> </ul>
9. Professor	Vilnius Gediminas Technical University		<ul style="list-style-type: none"> <li>- There is a strong need for Lithuanian cases that can demonstrate the value of design to public decision makers; connecting different experts working in the field from across the country will have an enormous impact on efforts to raise awareness about the benefits of design.</li> </ul>
10. Professor	School of Design	Ireland	<ul style="list-style-type: none"> <li>- Ireland has only recently begun to invest in the notion of design as an integral part of innovation processes ranging from the development of goods and services to strategic management techniques in industries.</li> <li>- Design is largely seen to be of value to private sector economic growth.</li> <li>- Commissioned research revealed the significant impact design has had on the national economy. This led the government to invest more in design to seek ways to solve issues related to scale, size, fragmentation, talent, and skills.</li> </ul>

*(Continued on next page...)*

Table 4. (Continued)

Interviews			
Participant Role	Organization	Country	Insights
11. Design management consultant 12. SME performance advisor	Luxinnovation, national business development agency	Luxembourg	<ul style="list-style-type: none"> <li>- There is no financial support for design in Luxembourg at present, and this seems to be far from the interests of the government.</li> <li>- In terms of innovation more broadly, the design sector should be clear in stating its benefits to become more valuable at the institutional level.</li> <li>- Simplified measures should be trialed in the field, initially to raise awareness, but then also to gather facts/data to build on for advocacy.</li> </ul>
13. Curator	Mudam, Museum of Modern Art		
14. Head of European programs	KEPA, national business and cultural development center	Greece	<ul style="list-style-type: none"> <li>- No dedicated design policies exist, but funding for design is integrated into innovation policies, mainly looking at increasing competitiveness in SMEs.</li> <li>- Greece typically sees design as a tool to style products; the notion of using design to improve business processes is completely absent.</li> </ul>
15. Co-founder and director	Institute of Design	Slovenia	<ul style="list-style-type: none"> <li>- The national design ecosystem of Slovenia is quite rich: many actors with different roles are involved in activities and initiatives aimed at supporting design innovation. Despite this wide pool of institutions, design is still not included in innovation processes and its role in business, the public sector, and policymaking is still not clear.</li> <li>- Design is linked to a wide system of actors from different policy areas such as cohesion, development and technology, culture, and entrepreneurship.</li> <li>- A stronger knowledge base about design in Slovenia should be created to understand its role at national level.</li> </ul>
16. Co-founder & design strategist	ThinkDO Studio	Poland	<ul style="list-style-type: none"> <li>- The national design ecosystem of Poland is dispersed.</li> <li>- Design is considered an important lever for innovation, and it is supported by many initiatives and many actors, mainly at a regional level.</li> <li>- Awareness about the value of design for business and the public sector is still relatively limited.</li> </ul>
17. Co-founder	Dedushkov	Hungary	<ul style="list-style-type: none"> <li>- Design is very poorly understood by Hungarian institutions; not a single dedicated support mechanism or program exists.</li> <li>- There is a strong need for evidence to emerge from the bottom up in Hungary. Partnering with other Eastern European countries that have the same level of awareness would enable all involved to more concretely understand/promote the benefits of design.</li> </ul>
18. Management board member 19. Management board member	FFG Austria, Austrian Research Promotion Agency	Austria	<ul style="list-style-type: none"> <li>- In Austria, there is a biased perception of the word design, due to its connotations in German. This is evidenced by the small number of government programs that support design, which largely address the creative industries as beneficiaries.</li> <li>- The Austrian funding approach is traditional and focuses on industries for technological research and the creation of innovative products or services.</li> <li>- To invest better in design, a new awareness should be created about what it means (beyond products and fashion) especially in relation to service provision and strategy development and implementation.</li> </ul>
20. Policymaker 21. Manager	Comune di Milano Unioncamere Lombardia	Italy	<ul style="list-style-type: none"> <li>- In Italy, the landscape of design policy is tacit and diffused – it is a characteristic of the system that can be found everywhere. It is a bottom-up activity that cannot be programmed because of the nature of the creative act, and thus cannot be regulated.</li> </ul>
22. Policymaker 23. Policymaker	Regione Lombardia		<ul style="list-style-type: none"> <li>- The Lombardy Region has a dedicated office to support and promote design. The office coordinates the different components of the profession as these relate to creative development more generally.</li> <li>- Design is considered a crucial sector for the growth and competitiveness of Lombardy, including the attractiveness of the region for tourism (design and fashion especially).</li> <li>- The main design-related activities carried out by the regional authority consist of communicating with young designers, and working on developing (mainly prototyping) their ideas.</li> <li>- To make new, more valuable policies in the future, Italian policymakers will need to understand how to connect the public and private sectors, because they could benefit substantially from one another.</li> </ul>

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Table 4. (Continued)

Workshops			
Title and Objective	Country	Participants (country and role)	Main Output
1. Creativity week Radi! 2014	Latvia	Latvian creative industries, policymakers, intermediaries, and local institutions.	A clearer picture of the creative industries and design policy landscape in Latvia; understanding about how to potentially start a Latvian Design Council.
2. EU Design Days	Belgium	Design and creative industries, European institutions and policymakers.	An appreciation for the importance of sharing evidence that demonstrates the value of design to support the efforts of policymakers, civil servants, and stakeholders in the wider field of innovation policy.
3. Design-Driven Lithuania	Lithuania	Policymakers, entrepreneurs, civil servants, researchers, design professionals.	A better grasp of the design sector in Lithuania, examples of how to create change through design, a list of local insights and demands.
4. Design and Policymaking: Design Policy Beacon – A Tool for Analysis	Italy	Mainly Italian, including policymakers, intermediaries, and business associations.	A clearer picture of the Italian design policy landscape; a list of key actors; a list of the challenges to promoting design more broadly in Italy.
5. Design Policy in Action – The Model of the Luxembourg Design Action Group	Luxembourg	International experts from Lithuania, Luxembourg, Portugal, Slovenia, Hungary, and Poland.	Sharing knowledge, understanding, and strategies for how to promote design policies in different European countries.
6. Design for Europe: Powering Innovation Summit	Estonia	EU-wide design representatives from local institutions, industries, research centers, design councils.	A call to action launched to collect further insights on design policy across the EU.

businesses, and noted the need to strengthen design education to produce top quality professionals.

“To plan for the next period, education is crucial: we need to combine insights and benefits emerged from the previous editions [of implemented design policy]; promoting design in the long run is not only about launching governmental action but about creating a cohesive sector,” stated a participant from Estonia.

While the interviewees largely expressed appreciation for the Design Policy Ecosystem framework in theory, most said that its application in practice would better help policymakers and design advocates show the local relevance of investment in design. During the workshops, many remarked that there was a need for actionable data. For example, during the Design Policy in Action: The Model of the Luxembourg Design Action Group workshop, held in Luxembourg in March 2016, the invited experts had an advanced understanding of the design context in their country, but were lacking specific evidence to make issues more visible. The same need for evidence to support the local and national dialogue about design as a lever for innovation emerged during Design and Policymaking – Design Policy Beacon: A Tool of Analysis held in Milan in June 2016.

### Testing the Framework: Building a Design Policy Beacon

The *Design Policy Beacon*<sup>35</sup> is a practical application that applies our findings from the literature and the field. The beacon, launched as part of a European co-funded project entitled *Design for Europe*,<sup>36</sup> is a tool that generates information and detailed

35 <http://www.designpolicy.eu/design-policy-beacon/>.

36 *Design for Europe* was a three-year, Europe-wide program focusing on design from three perspectives: policymaking, the public sector, and the private sector. For more information, see <http://www.designforeurope.eu>.

37 This difference is due to the comparably lower attention to design innovation in policy, which increased—as explained at the beginning of the article—with the new policy objectives expressed by the European Commission.

descriptions of design policy actions via an open online platform, which also provides targeted analysis and data visualizations. We created the Design Policy Beacon to support the growing community of policymakers working to make design a key part of national and regional innovation policies. By offering them a powerful, useful, and practical vantage point from which to document areas for potential support and investment, the beacon can help regions create a more robust understanding of their design innovation potential, and also help them use that knowledge to invest in ways that are specifically applied to their design innovation context. And in regions where design is already embedded in practice, it can reveal areas for impactful future investment.

The Design Policy Beacon collates, describes, and categorizes policy actions related to design and the connected ecosystem of organizations – it creates data-driven national design profiles. The beacon is still under construction – once finished, it will provide a dynamic map of design policy backed up by first-hand experiences of policy development and results. Its visualizations reveal trends at the European level, and offer relevant and useful insights about initiatives that were created to respond to specific regional challenges.

Currently, the beacon dissects developments mainly at the national level, given the greater complexity of analyzing the micro – regional, local – level. The task of working at the micro level is challenging due to the lack of previous work in this area and the relatively fragmented understanding of design policy, which becomes a barrier even when interviewing experts for data collection. The central challenges to applying the framework from a practical standpoint are

- Correctly identifying, clarifying, and describing the boundaries of a potentially relevant policy action;
- Diving into mother-tongue documentation, requiring interpretation by local experts; and
- Developing the appropriate editorial formats to publish information and make it accessible to a wider audience of experts and non-experts in design and policy.

Also, during our practical application of the Design Policy Ecosystem framework, we found the following measures dramatically improved the results that the framework filters generated.

- Limiting the scope of results to a specific, relevant time frame – we included only actions implemented from 2011 onwards, due to the substantial differences in the political system and design sector context before that date;<sup>37</sup>
- Involving local experts – as policies are often strictly connected to local knowledge, a network of local experts can provide insights and point researchers in the right direction;
- Using a set of clear, simple data gathering tools – a country analysis guide, a country profile guide, and an expert interview template. These tools illustrate the practical simplicity of the Design Policy Ecosystem and help contributors to provide the right data.

The fourteen consortium members of Design for Europe were initially involved in testing the beacon. After this first iteration, we put out a request for data input to our network of project ambassadors (forty-six, across Europe), and advertised social media channels (with a reach of over sixteen thousand followers). Furthermore, since the beacon's release, the framework can be viewed in Landscape mode where the profiles of Italy, UK, Luxembourg, Poland, and Bulgaria, have been comparatively visualized in ways that clarify the data differently for different types of stakeholders and communicate various patterns.



While the development of a fully-functional map is a constant work in progress – one of the main risks is rapid obsolescence – we have already witnessed some common patterns. For example, every European context included in framework analysis (Denmark, France, UK, Estonia, Lithuania, Bulgaria, Luxembourg, Italy, Austria, Poland, Portugal, Belgium, Hungary, although some of them are not yet made public) still has a fragmented understanding of design. Only Denmark has shown a promising level of maturity as a system, probably due to the political commitment of past leaders who had the vision and ambition to invest in design to grow its industries. As for most other nations, design is absent from their innovation strategies, and the majority are still struggling to build opportunities beyond pilot programs. Even regions who acknowledge the value and importance of design innovation lack a cohesive vision about how to use design to support social and economic growth. And finally, the importance of bottom-up advocacy groups that promote the value of design in their systems of influence – the Luxembourg Design Action Group is a good example – cannot be underestimated. Whether advocacy is the best approach has yet to be conclusively proven, but it brings us closer to answering an important question raised by many experts: *How to get the ball rolling? How, in a practical sense, can we accord design the strategic power and investment it deserves?*

As a partial answer to these questions, our research demonstrates that policy practitioners will need to gather

- The **right people**, with the knowledge, expertise, and influence to support design innovation;
- The **right resources** despite austerity, supported by a critical analysis of the risks and benefits associated with investment in design; and
- The **right evidence**, which should include a broad range of results demonstrating the efficacy of relevant past actions (rather than drawing from case studies) and a compelling approach to measuring and assessing design policy actions that can be upscaled.

### **Concluding Highlights: A Way Forward for Design Policy Research**

This article has discussed a field of research where much critical reflection still needs to be undertaken to help scholars investigate design policy extensively, and enable policy makers to include design innovation in their agenda. During our face to face interviews and creative sessions, the policy experts and intermediaries we spoke to mentioned several key factors that they believed would determine the success of design policy as a field of research and implementation. Each represents an area for future research and policy action.

#### ***Design Embedded in...***

Design policy research has long been treated as a separate field of inquiry, mainly disconnected from other policy fields. However, field analysis clearly shows 1) that each country has a different way of embedding design in innovation, and 2) this is the preferred route versus creating a distinct policy area. The result is a complex picture, requiring appropriate research questions and methods of inquiry that can locate and recognize design policy that is also a part of innovation policy.

#### ***Create a Critical Mass***

Stakeholders from many countries still have a poorly-defined understanding of design practice and its benefits. If design policy researchers were to collaborate with other policy scholars, political scientists, and innovation scholars, their combined expertise and outputs would serve to bridge the academic and policy divide

between what is said about the importance of design innovation for the economy and how that importance is quantitatively demonstrated and promoted.

### ***Better Results Metrics***

Finally, design policy research needs better impact and outcome measurement and assessment tools. This area is ripe for investigation, and critical findings will no doubt support broader scholarly understanding of the benefits of design to policy-making practice. Bridging this critical knowledge gap will also help clarify governments' understanding of the role design can play in socio-economic growth, and go a long way toward creating official and shared methods and systems to measure the value design offers to innovation and other policies.

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