

Design Thinking for Public Service Excellence



Author: Lorenzo Allio

© 2014 UNDP Global Centre for Public Service Excellence
#08-01, Block A, 29 Heng Mui Keng Terrace
119620 Singapore

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in more than 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

The Global Centre for Public Service Excellence is UNDP's catalyst for new thinking, strategy and action in the area of public service, promoting innovation, evidence, and collaboration.

Disclaimer

The views expressed in this publication are those of the author and do not necessarily represent those of the United Nations, including UNDP, or the UN Member States.

Cover image

 BY-NC-ND Nugroho Nurdikiawan Sunjoyo for World Bank / flickr.com/worldbank

CONTENTS

Executive summary	4	Annex 1: References	23
1. Introduction	5	Annex 2: Design Thinking Institutions	25
Design Thinking		Annex 3: 10 Things To Keep In Mind When Applying Design Thinking	26
2. Unwrapping Design Thinking	5		
The 21st Century	5		
Towards A Definition Of Design Thinking	6		
Key Features Of The Design Thinking Approach	8		
Empathizing And Co-Creating	8		
Scaling	11		
Prototyping, Experimenting And Testing	11		
No Designed Innovation Without Stewardship	12		
3. Putting Design Thinking To Work In Organizations	13		
The Blessing Of Catastrophes?	13		
Advancing Through Projects	14		
Relying On Design Labs	16		
4. Institutionalization For Systematic Design Thinking	18		
The Importance Of Values To Anchor Innovation	18		
A New Social Contract	19		
Gearing Up Existing Tools?	19		
Regulatory Impact Analysis	20		
Public-Private Partnerships	21		
5. Concluding Remarks	22		

List Of Boxes, Figures And Tables

Box 1: Relating Creativity And Innovation Through Design	6
Box 2: Empathizing To Explore Mobility Policy Solutions	9
Box 3: Designing Rehabilitation And Creative Progress With Prisoners In Niger	9
Box 4: Co-Creation To Reduce Red Tape In Denmark	10
Box 5: Drawing From The Well Of Behavioural Science	10
Box 6: A Prototype Is Worth A Thousand Conversations	11
Box 7: Using Positive Deviances To Combat Child Malnutrition In Vietnam	12
Box 8: Recovery Through Re-Shaping: The Case Of Constitución In Chile	13
Box 9: How To Empathize And Prototype	14
Box 10: How To Identify And Organize A Project	15
Box 11: Addressing Design Thinking's Institutionalization	18
Box 12: Rejecting Innovation To Defend Values	18
Box 13: Typical Analytical Steps Of Regulatory Impact Analysis	20
Figure 1: From The Old To The New Decision-Making	7
Figure 2: The Design Thinking Approach	8
Figure 3: Stewardship For Adaptability	12
Table 1: Bridging Gaps Through Design Thinking	7
Table 2: Is There a Dedicated Public-Private Partnership Unit At The National Level?	21

EXECUTIVE SUMMARY

This discussion paper was prepared for the Consultation on the Co-design of Public Policy and Services titled 're:thinking public service', organized in Singapore by the UNDP Global Centre for Public Service Excellence (GCPSE) 2-3 December 2013.

The goal of design thinking (design thinking) is to equip governments with innovative approaches to face contemporary challenges such as inter-connected and diffused economic and social patterns, more complex problems, blurred governance boundaries, and reduced trust in public action.

Design thinking is an explicit human and user-centred approach. It leads to solutions that are progressively refined through an iterative process of providing voice to end-users and engaging them in shaping decisions (professional empathy and co-creation); of considering multiple causes of and diversified perspectives to the problems at hand (scaling); and experimenting initial ideas (prototyping and testing). As such, it is most promising when innovation rather than adaptation is needed.

Drawing from private sector experiences, design thinking seeks to stimulate creative thinking within the decision-making process and accelerate the synthesis of increasingly effective and efficient policy solutions. Framing the problem correctly from the start is a pre-condition for the effective unfolding of the phases of policy formulation, development, adoption and implementation. Designers hence act as stewards for enhanced interactions both across administrative compartments and on the interface between the public administration and the 'real world'.

If implemented well, design thinking approaches help improve decision-making, contributing to a more comprehensive problem definition; reduced risks of duplications, inconsistencies or overlaps; minimized unintended consequences and more legitimized and effective decisions.

Design thinking challenges traditional public policy formulation and decision-making. It first of all requires specific skills rarely available in public sector environments (ethnography, behavioural sciences, communication, design and architecture, to name but a few). It also breaks down organizational and procedural silos, contesting established hierarchies or bureaucratic categories. Innovation or design labs have been established with more or less direct affiliation to governments to serve as catalysts for the design thinking change; however, this is usually in an effort to make the labs independent from political or administrative capture.

Labs advance on a 'project' basis through typically small-scale and local (controllable) initiatives that deliver meaningful impacts, prove effectiveness and, possibly, create momentum. How labs approach decision-making is more important than the end-result, although successful projects bear significant potential for lesson-drawing and the progressive institutionalization of design thinking. For this reason, the logistical arrangements of the labs are as relevant as the type of expertise they manage to mobilize.



© BY Anthony Easton / flickr.com/pinkmoose

A critical juncture in mainstreaming design thinking practices appears to be the distinction between applying design thinking to public service delivery as opposed to policy formulation. Especially in the latter dimension, where uniformity and legal certainty are arguably more required, the institutionalization of design thinking in traditional decision-making appears to date more as a goal to aspire to than a lesson to learn from.

Existing tools might be used to leverage design thinking mainstreaming (the discussion paper specifically suggests considering encompassing forms of regulatory impact analysis). Yet design thinking is likely to become more institutionalized if it results from a new social contract arrangement in which there is more trust in the well-intentioned nature and effectiveness of the 'trial-and-error' and 'learning-by-doing' approaches. Expectations about what design thinking can deliver must nonetheless be managed. This requires educated communication strategies to explain the nature and role of design in decision-making to citizens, stakeholders and – most importantly – to policymakers and bureaucracy agents. Training and concrete involvement in projects are key because they bring public administrators outside their office, confront them with real-life situations, and help them directly grasp users' challenges and expectations.

Design thinking does not seem to necessitate specific preliminary governance capacities which, if lacking, would prevent developing countries from embracing it. However, one cannot deny that design thinking requires skills that developing countries might find particularly challenging to exploit within the public decision-making process. A number of factors may affect the propensity of emerging societies to appreciate the nature and benefits of design thinking including political and social resistance, degree of maturity and self-awareness of individuals and civil society as a whole, deference to authority, and the power distance between the state and citizens.

1. INTRODUCTION

The Global Centre for Public Service Excellence is a joint initiative of the Government of Singapore and UNDP. It was established in September 2012 to do three things: promote evidence on how best to create and sustain excellence in public service, support innovation and reform, and convene events that encourage new ways of tackling reform. The Global Centre is a catalyst for new thinking, strategy and action in the area of public service, striving to enhance the quality of the activities of UNDP and its partners.

Social, economic and political processes are complex and happen differently at different times in different contexts. At the Global Centre, we aspire to discover, distil and disseminate evidence of 'what really works' to promote effective, efficient and equitable public services. Research findings about development processes agree that there are no blueprints, easy answers or quick fixes. Yet better evidence will help us learn, from both theory and practical experience, those general principles and transferable solutions that may best inform local practices.

This paper builds on the 'Theory of Change' developed by the Global Centre. It holds that four factors were critical in the rapid and sustained development Singapore and other examples success: 1) effective co-operation between a country's political and administrative leadership; 2) a strongly motivated public service; 3) government capacity for long-term planning, foresight and handling of complexity, while 4) retaining the capacity to innovate.

Design thinking

An increasing number of governments are or envisage using design approaches to innovate and co-create public policy interventions with professionals, the private sector, civil society representatives, third sector organizations and citizens. In design thinking, stakeholders are called upon to play a responsible, active and constructive role in shaping decisions. They are no longer considered merely passive receivers at the end of the regulatory, administrative and public service delivery chain.

Public Service Innovation (PSI) Labs and design centres are being established in various parts of the globe – both in industrialized and emerging economies – to foster innovation, spin off initiatives in different public institutions and levels of governments, and train civil servants in the application of design thinking approaches.

The paper was prepared for the Public Service Innovation Lab's Consultation on the Co-Design of Public Policy and Services, Singapore, 2-3 December 2013. The consultation¹ provided an opportunity for experts and practitioners to discover and debate public service innovation trends and applications. Two discussion papers were prepared for the event, one on social innovation and the other on design thinking.

This paper supports UNDP's evidence-building work on design thinking. It illustrates how design thinking approaches have contributed to solving public service challenges, and explores the potential that is yet to be tapped. It also outlines forms and degrees of institutionalization of design thinking within public service administrations. It is intended as a contribution to stimulate discussion, not as full review of literature and practices. The aim is to trigger interest in deeper understanding and continued comparative research in the coming years.

Background information and evidence underpinning the paper was obtained through selected secondary literature, websites and blogs, as well as e-mail exchanges and conversations with design thinking practitioners. This final version of the paper includes a number of elements raised during the December 2013 consultation.

The discussion paper is structured as follows: First is a summary of the main features of the design thinking notion, its conceptual origins, and its evolution when applied to from the private sector to the public sector. By relying on relevant examples and applications, the subsequent parts of the paper consider how design thinking approaches are deployed, and consider promises and challenges for their mainstreaming within decision-making. Annexes provide additional information, including references and a list of design thinking institutions.

2. UNWRAPPING DESIGN THINKING

This chapter summarizes the main features of design thinking, its conceptual origins and its evolution when applied to the organization and procedures from the private to the public sector. The chapter also presents the main methods and tools characterizing design thinking in relation to the various functional dimensions of government action.

The 21st century

Design thinking has emerged as a promising innovative approach to public service organization and decision-making, in response to the concomitance of a number of new global phenomena.

- **Increased inter-connection and diffusion** – The world in the 21st century is characterized by faster and faster interactions that spread vertically and horizontally across levels of established governance. We no longer live in well-defined, discrete territorial and jurisdictional systems of governance in which single, clearly identifiable and legitimated (public) actors address societal problems. Globalization has brought unprecedented opportunities for both developed and emerging countries but it requires a structural re-adjustment along the global-national-local axes.

¹ See <http://www.undp.org/content/undp/en/home/ourwork/capacitybuilding/publicservice/PSI-Lab/>

- ▶ **Increased complexity** – The challenges that governments are called upon to tackle today are increasingly complex and multifaceted (Power, 2004). This constitutes a major shift from the past, when problems were simple, knowable and independent. Modern challenges may relate to un-defined or overarching societal goals (e.g. climate change and global warming); uncertain risks posed by specific exposures to single chemicals (e.g. an endocrine disruptor) or posed by using determined technologies or processes (e.g. nano- and bio-technologies); or lifestyle risks such as obesity, tobacco or alcohol consumption.
- ▶ **Blurred governance** – Governments tend towards extensive primary legislation combined with complicated implementation processes involving rule-making or adjudications. This is notable when they are exerting their public risk management functions responding to the concerns and desires of citizens and stakeholders. Within this context, a ‘regulatory state’ (Majone, 1996) and also an ‘administrative state’ (Lawson, 1984) has emerged in which the executive frequently acts as the regulator, the administrator and the arbiter, sometimes confusing the traditional separation of powers designed to protect citizens from poor quality or arbitrary decision-making. Accountability, rule of law and the quality of decision-making may suffer when decision-makers are disjointed from those affected by their decisions.
- ▶ **Reduced trust** – Long before the financial and economic crisis of 2008, public institutions in general had experienced a steady decline in trust (Blind, 2007; Bouckaert, 2012). Trust and confidence in government are directly correlated to the public’s expectations, and the more citizens are educated and mature, the higher their demands for high-quality and timely policy interventions. A decline in trust can significantly hinder policy implementation, making citizens and businesses more risk-averse and delaying investment, innovation and employment (Murphy, 2004). Winning the challenge of regaining and maintaining trust is crucial for contemporary governments and can be accomplished through structural reforms (Fukuyama, 1995; Lofstedt, 2005; OECD, 2013b).

The 21st century experience highlights the widening gulf between the sophistication of contemporary challenges on the one side, and the ability of the governments’ organizational, procedural and methodological tools to handle that sophistication on the other. As the rate and scale of change increases and the nature of problems becomes more and more intricate, established individual public agents are less in a position to tackle them with own capacities, or without affecting other jurisdictions. At the same time, policy interventions by public authorities and/or private actors are likely to be more intrusive than in the past, while each individual choice becomes more and more relevant systemically.

Governments have so far tended to cope with these developments by engineering increasingly refined solutions without denaturing the intrinsic organizational and cultural rationale of public service. The past model of societal governance based on increasingly specific and numerous silos of deep expertise no longer appears fit for its purpose. Governments are required to work at the intersection of multi-disciplinary, multi-actor knowledge. To answer the right questions correctly, solutions are less likely to be found in any one single silo, however sophisticated it may be, but in a mix. It appears now to be the time to take an innovative plun-ge.

Design thinking is an innovation with promise for government.

Towards a definition of design thinking

The origins of the term ‘design’ lie with the private sector and conventionally revolve around the art and science to shape objects and symbols creatively and in an innovative manner (box 1) (Ralph/Wand, 2009; EC, 2009b). Increasingly, the notion of design is expanding into shaping decisions – and this is when design becomes ‘strategic’ (Brown, 2009).

Box 1: Relating creativity and innovation through design

‘Creativity’ is the generation of new ideas. These ideas can be either new ways of looking at existing problems, or of seeing new opportunities, perhaps by exploiting emerging technologies or changes in markets.

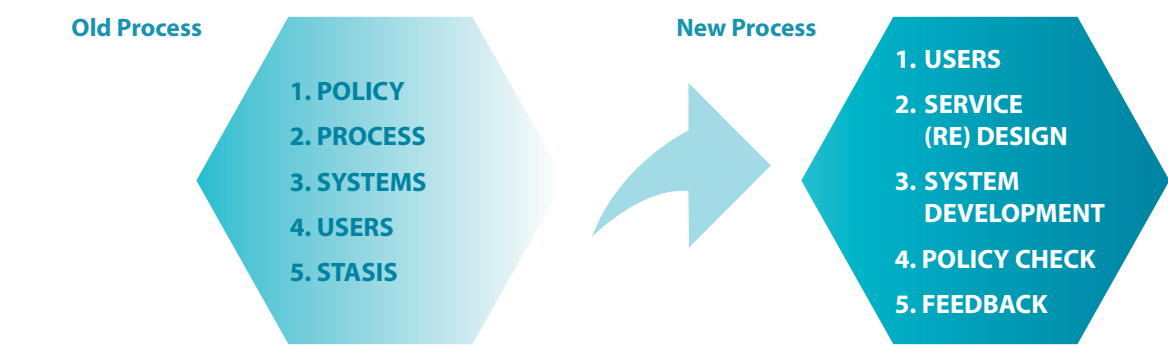
‘Innovation’ is the successful exploitation of new ideas. It is the process that carries them through to new products, new services, new ways of running the business or even new ways of doing business.

‘Design’ is what links creativity and innovation. It shapes ideas to become practical and attractive propositions for users or customers. Design may be described as creativity deployed to a specific end.

Source: Cox (2005)

Design thinking puts end-users needs – rather than legacy and policy – at the centre of the policy formulation system, shifting paradigms and creating a new decisional process (figure 1).

Figure 1: From the old to the new decision-making



Source: adapted from Bracken (2013)

Bason (2010:138) provides a synthesis of what design thinking has become to represent in public service innovation. He considers design thinking as principally a structured and systemic “attitude” or a ‘way of reasoning that allows bridging and managing the two opposing (yet complementary) cognitive styles constituting knowledge acquisition and implementation of public policies: the “analytical-logical mind-set that characterizes most large organizations and professional bureaucracies, and the more interpretative, intuitive mind-set that characterizes the arts and creative professions” (table 1).

Table 1: Bridging gaps through design thinking

Analysis (splitting)	Synthesis (putting together)
Rational	Emotional
Logical	Intuitive
Deductive	Inductive
Solutions	Paradigms, platforms
‘Thinking it through’	Rapid prototyping (think through doing)
Single discipline	Multiple disciplines, T-shape
Elegance	Impact, value, diffusion

Source: Bason (2010:139)

‘Design’ acts in this context as a multiplier throughout the decisional process, as it enables a broader range of questions and potential solutions (alternative options) to be elaborated and developed more quickly. It also helps make abstract assumptions and analyses more concrete and tangible. Design thinking places enhanced attention to the crucial phase of decision-making: problem definition. Framing the problem correctly from the start is a pre-condition for the effective unfolding of the phases of policy formulation, development, adoption and implementation.

A decision-making process informed by design is thus more likely to be successful if strategic designers are brought in at the earliest stages of decision-making, when abstract and theoretical delineation meets with conceptualisation geared towards more concrete outcome demands. Ideas are refined through continued iterations while they are developed, moving quickly across organizational or policy silos. Using design to involve end-users further smooth the process. Overall, the task of strategic designers is to serve as synthesizers amongst a group of peers in the quest for policy effectiveness and efficiency.

Design thinking is thus mostly concerned with how decision-making processes are organized and function and how collaboration and cross-fertilization can be fostered and guided across organizational structures and policy disciplines. Design approaches leverage on visual representations as an important and iterative means of communicating complex – even contradictory – relationships, which would be difficult or impossible to explain in text and numbers alone.

“Systemic and inter-connected problems need systemic and inter-connected solutions.”

Brown/Wyatt (2010:35)

“As strategic designers, we often find ourselves acting as the ‘glue’ that binds together multiple types of expertise, multiple approaches, and multiple forms of value in a team working towards a coherent proposition”

Boyer et al. (2013:14)

If implemented well, design thinking approaches can deliver the following benefits to public decision-making:

- ▶ a people-centred perspective;
- ▶ reduced risks of partial approaches;
- ▶ a comprehensive, holistic problem perspective;
- ▶ reduced duplicated efforts, policy inconsistencies or overlaps;
- ▶ enhanced synergies and better addressed trade-offs;
- ▶ integrated and better-targeted solutions;
- ▶ stronger reality-checks at earlier stages;
- ▶ reduced risks of unintended consequences; and
- ▶ higher chances to deliver more complete and resilient solutions.

As such, design thinking appears to deliver its most promising results exactly when applied to so-called ‘wicked problems’² that have no off-the-shelf solution – and when innovation (rather than adaptation through ready-made templates) is needed. An example is when the class and order of challenges is so complex and systemic in nature that it constitutes a new threshold for the progress of civilization.

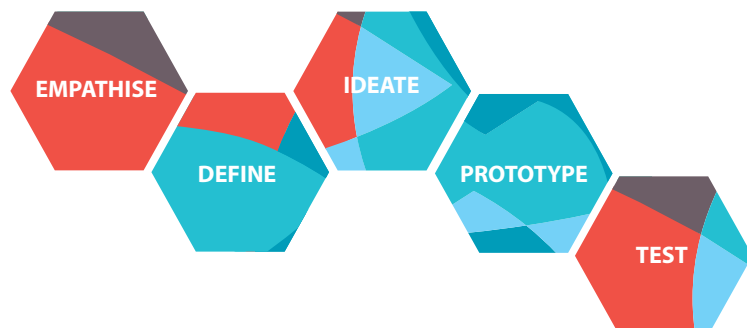
Design thinking is likely to bring maximal added value if design is embedded in the systemic procedure and routine functioning of the executive organization. As it will be addressed below in this paper, the ‘institutionalization’ of design appears to be a critical factor for long-term success.

Key features of the design thinking approach

Design thinking results from a number of essential components that follow a process of empathizing, co-creating, scaling, prototyping, experimenting and testing (figure 2).

Figure 2: The design thinking approach

Source: d.School, Stanford University



Empathizing and co-creating

The best designers do not work alone. Collaboration is essential when faced with a complex challenge because innovation is unlikely to occur in isolation. The most interesting solutions lie at the boundaries of disciplines.

Empathy

Looking at societal problems from the windows of a public administration office building is hardly a recipe for success.

Policies must be designed with people and not only for them.

Design thinking starts with ‘professional empathy’ among clusters of actors (Clarkson et al., 2003). Empathy is the capacity to understand and imaginatively enter into another person’s feelings. As such, it is the cornerstone of a human-centred design process.

“The best solutions come out of the best insights into human behaviour. But learning to recognize those insights is harder than you might think. Why? Because our minds automatically filter out a lot of information without our even realizing it. We need to learn to see things ‘with a fresh set of eyes’, and empathizing is what gives us those new eyes.”

HPID (2010:2)

Developing empathy is about literally bringing public administrators outside their office; confronting them with real-life situations; and helping them directly grasp users’ challenges and expectations (box 2). Developing empathy is process best carried out over a period of time so as to create trust with the users, and appreciate changes in attitudes. Empathy bridges the gulf between the regulators/service providers and the users. It also helps disentangle differences between the the ‘needs’ and ‘wants’ of users.

² Wicked problems are a class of problems (a) for which there is no off-the-shelf solution; (b) that affect the State or society systemically and for which different stakeholders have radically different world views and divergent frames of understanding; or (c) which have no definite formulation. See Rittel (1988).

Box 2: Empathizing to explore mobility policy solutions

The Slovak city of Bratislava set out to improve the access of disabled and handicapped persons to public means of transport. A team composed of people with disabilities, officials from municipality's transport department, students and lecturers of design and architecture from the Slovak Technical University, and UNDP officials sought to directly and personally understand the experiences and emotional needs of users. After a design-thinking exercise, they returned to the office to capture and distil the insights gained and brainstormed on potential solutions.

Source: europeandcis.undp.org/blog/2013/11/27/applying-design-principles-to-public-policy-oh-how-we-failed/.

We need to learn to see things 'with a fresh set of eyes,' and empathizing is what gives us those new eyes."

HPID (2010:2)

Box 3: Designing rehabilitation and creative progress with prisoners in Niger

Agadez, a Nigerian city at the edge of the Sahara, hosts a prison with 250 inmates. Some 80-90 percent are there due to crimes related to being poor. The relapse into crime is estimated to be 90 percent. The Prison Project was an initiative seeking to making the local community change its mind toward the prison system and see it as a place where prisoners with little assistance could come out with tools to reintegrate into society. The project was a collaboration between the Danish Centre for Culture and Development, a private organization (Pensée Sans Frontières), community leaders (e.g. the Sultan, the Kadi, etc.) and the prison administrators.

The project had concrete educational objectives such as teaching a craft or job to prisoners in tailoring or carpentry. It also had longer-term objectives to enhance interactions across the prison fence and, ultimately, reduce the rate of repeated criminality. The project set up two well-equipped workshops within the prison where classes in tailoring and carpentry could be delivered and where inmates could practice their new skills. The Sultan sent a representative, his Prime Minister, to the opening ceremony of the workshop.

The project also included spiritual support and assistance as well as awareness-raising classes on HIV/AIDS, alcohol, drugs and smoking. Recreational activities were also organized, such as football training sessions.

Monthly meetings were held throughout the project to identify areas for improvements and prescribe remedies.

Sources: <http://www.psf-niger.org>; <http://kennethbalfelt.org/prison-civile-dagadez/>.

Empathizing is likely to lead to a full reconsideration of granted beliefs, conventions and values – especially when supported by the following stage of co-creating. Becoming aware and sensitive to the needs, expectations and constraints of traditionally disjointed actors distresses the respective worldview, or *Weltanschauung*. It allows shifting from a defensive 'expecting and claiming' to a collaborative 'observing, sharing and shaping' attitude (box 3). Empathy feeds inquisitiveness and the desire to know why things work the way they do, which is the most promising foundation of creative 'ideative' work.³

Co-creation

Co-creation is considered as the pivotal component of design thinking (Bason, 2010). It seeks to multiply the productive capacities within the public service tank by involving people (policy users) in the creation of new solutions to the problems affecting them. Co-creation is about 'generative learning' resulting from shared experimentation and comparison of experiences across the public and non-public sectors (Bessant, 2005; Sanders/Stappers, 2008).

Co-creation shall not be confused with 'co-production' (Boyle et al., 2010), which rather defines attempts at leveraging people's own resources and engagement to enhance public service delivery.⁴ Co-creation is key if governments are to address new societal objectives. Bason explains co-creation in two sectors: "In health care, we have witnessed a shift from (...) 'curing diseases' to 'enabling quality of life'. In employment policy, the effort has shifted from 'finding people a job' to 'enhancing employability'" (Bason, 2010:158)

Co-creation implies bringing analysts and decision-makers to confront real-life situations as experiences by the end-users (box 4). Such interaction can take different forms, including through enhanced public consultation and stakeholders engagement practices or through on-site visits and videos.

³ Ideation seeks to widen the horizon of thought. It is "not about coming up with the 'right' idea, [but] about generating the broadest range of possibilities." (Hasso Plattner Institute of Design, 2010:6).

⁴ In other words, co-creation concerns how new solutions are designed; co-production concerns how they are executed." (Bason, 2010:157)

Co-creation implies bringing analysts and decision-makers to confront real-life situations as experiences by the end-users (box 4). Such interaction can take different forms, including through enhanced public consultation and stakeholders engagement practices or through on-site visits and videos.

Box 4: Co-creation to reduce red tape in Denmark

The Danish innovation laboratory Mindlab helped the Danish National Board of Industrial Injuries (NBII) to understand young people's case histories and to come up with new ideas for reducing inconveniences caused by administrative requirements or 'red tape'.

MindLab found that many young industrial injury victims could not fully understand the content of the (several) letters the NBII had sent them. They also had difficulty grasping how their cases were handled and how decisions were reached.

Together with NBII colleagues, MindLab visited twice seven young people who had suffered work injuries. Some of the young people had worked in the health profession. What emerged from the discussions was a real difference between a nurse and a social health care worker when it came to dealing with public sector bureaucracy. A medium-term education enabled a person to better understand forms, questionnaires, rules and consultation of interested parties. This increased their degree of satisfaction with the handling of the case. Discussions in the field addressed the misunderstandings, frustrations and red tape generated by the NBII letters. The people interviewed provided insight into their reasoning and their behavioural patterns. MindLab transformed those insights into specific ideas. Solutions were proposed then adjusted and refined after another meeting with the injured.

MindLab developed four specific ideas, based on streamlining administrative procedures and enhance the communication. It also helped make the injured more aware of what a NBII case involved.

Source: <http://www.mind-lab.dk/en/cases/away-with-the-red-tape-for-young-people-who-have-suffered-industrial-injuries>.

Policy interventions must target changes in behaviour (whether conscious or not) in order to drive and achieve desired outcomes (box 5) (Behavioural Design Lab, 2012).

Box 5: Drawing from the well of behavioural science

Either explicitly or tacitly, most modern public decision-making processes are built on the neo-classical assumption that people are fully rational, hence predictable and controllable. Reality however daily proves that we humans are emotional, inconsistent, subject to several cognitive biases and heuristics, and we react to stress and (positive and negative) peer pressure (Kahnemann, 2011). More consciously embracing a bounded rationality scenario when accounting for human behaviour can make public policies more effective.

Well-designed behavioural studies can offer useful insights to policy-makers by generating supplementary evidence informing decisions (Shafir, 2012). Behavioural scientists can inform governments to apply 'choice architectures' in order to 'nudge' (i.e. gently direct) users to embrace a desired behaviour and outcome, without giving them the impression of being restrained in their free choices (Thaler/Sunstein, 2008). The benefits are to be grasped also in the development policy field.⁵ The efforts to instil behavioural considerations in the traditional decision-making process have led to the establishment of dedicated units – examples of which are the *Behavioural Insights Team* in the UK Government or the Consumer Markets Unit in the European Commission's Directorate-General for Health and Consumers.⁶

Behavioural sciences are mainly intended to complement existing initiatives, not to replace them – not only because they cannot be expected to solve problems they are not meant to address, but also because the existing legal and administrative framework may limit or hinder their efficacy (Alemanno/La Spina, 2013).

The following issues should be considered when applying behavioural sciences to policy-making (van Bavel et al., 2013):

- ▶ identify the most appropriate stage of application;
- ▶ define the role of behaviour in a policy initiative;
- ▶ review the available evidence;
- ▶ estimate the value added of running and/or commissioning a behavioural study; and
- ▶ incorporate the findings of the study into policy-making.

Because such studies require time and resources to be conducted properly, they must be envisaged as early as possible if their findings are to provide effective inputs to the policy formulation phase.

⁵ See <http://europeandcis.undp.org/blog/2013/05/23/behavioural-science-and-development-more-practical-examples/>.

⁶ See <https://www.gov.uk/government/organisations/behavioural-insights-team> and http://ec.europa.eu/dgs/health_consumer/information_sources/consumer_affairs_events_en.htm, respectively.

Against this background, design thinking is a method – or cluster of methods – that has emerged as an component of ‘social innovation’,⁷ structuring the type and degree of collaborative relationships between the public sector and other actors (Ellis, 2010). The goal is to empower, involve and drive public, private and third-sector (non-governmental and voluntary) organizations to create added value for society.

Scaling

Scaling implies identifying and disentangling the problems up-front as webs of factors, looking for direct and *prima facie* indirect causal relationships, rather than moving straight to specifications. Changing the scale at which something is examined or projected highlights different systemic relationships between that same object and its surrounding context. This allows for deepening the understanding of how the object is situated in and affected by the environment.

Scaling is an iterative method that makes the observer – the policy designer – rationally swing from the macro- to the micro-dimension. It thereby enables us to frame multiple and various questions to address a policy problem, filtering down which ones are more relevant and suggesting the order in which they should be asked. Applying scalar thinking increases objectivity, scepticism and compound vision. Scaling is thus an integral part of mapping the problem at hand, which includes looking at the underlying causes, determining baseline scenarios and projecting possible trends in the problem evolution.

Scaling has practical implications for the design of the realistic and effective policy decisions. Decision-makers must be aware not only of the size of the problem, but also of the scale of the possible solutions that can be deployed to address (parts of) it. This has direct effects on the assessment of the impacts that selected options are likely to generate.

Prototyping, experimenting and testing

One of the most visible outputs of design thinking are policy prototypes. A prototype is an early sample, model or release of a product built to test a concept or process or to act as a thing to be replicated or learned from. Prototypes are conceived to test and trial a new design to enhance precision by system analysts and users. Prototyping serves to provide specifications for a real, working system rather than a theoretical one.⁸

Applied to public service innovation, the idea of prototyping implies that policy solutions elaborated through design thinking are not necessarily an end of and for themselves. The policy endeavour generating a policy prototype should not be limited by the constraints of determined future policy outcomes.

Policy prototypes reflect what designers call ‘sketching’. This approach is very powerful because it allows spelling out an idea without requiring that every tiny detail be specified just

yet. Boyer et al. (2011:38) note its flexibility: “...the written equivalent of a sketch is the bullet-point outline, but whereas an outline only makes sense when read from top to bottom a sketch is more open to interpretation and can be read in many different ways all at once. This inherent pliability of the sketch makes it positively fungible, able to be re-appropriated when conditions or context change.” A prototype of a service can take many forms, such as a graphical user scenario (a storyboard), a film, a play or enactment, or a mock-up of a web interface. Prototyping and testing are tandem activities. Tests refine prototypes and solutions and supplies knowledge on the users, too, which is another opportunity to build empathy. To maximize the utility of testing, prototypes should be conceived bearing in mind the goal of testing.

Applying prototyping to public service innovation goes beyond the traditional notion of ‘piloting’ (Bason, 2010:196-7). Design thinking prototypes blur the lines not only of internal disciplines and hierarchies but also the decisional system and the users. Prototypes are seen as ‘vehicles of change’ or ‘Trojan horses’ (Boyer et al., 2013:17) because their very launch and testing trigger spill-over effects not only on their subsequent refinement but also – and more importantly – on the formation and function of the more diffuse layers around them (box 6). On the other hand, the prototyping of a new public service delivery will set different challenges than designing and testing fully-fledged public policies (Nesta, 2011).

Box 6: A prototype is worth a thousand conversations

In the phase of diagnosis and brainstorming, design thinkers consider a problem as a web, changing scale and perspective points. They make large use of visual devices and graphic sketches, and rely on a diverse group to enrich discussions.

Early prototypes are then build directly by the policy team, initially raw and refined progressively further to the feedback of some of the potential users. By so doing, the team addressing disabled mobility in Bratislava (Box 2 above) ideated and tested four prototypes:

- ▶ app for enhanced communication between drivers and passengers with disabilities (before, during and after the bus journey);
- ▶ redesign of the public space within the bus;
- ▶ ‘taxi-like’ service for passengers with special needs; and
- ▶ web-based route planner.

The first two options are currently being explored at a larger scale.

Sources: europeandcis.undp.org/blog/2013/11/27/applying-design-principles-to-public-policy-oh-how-we-failed/.

⁷ On social innovation, cfr. the UNDP Global Centre for Public Service Excellence's discussion paper on Social Innovation (2014).

⁸ From Wikipedia, at <http://en.wikipedia.org/wiki/Prototype>.

A further notion closely linked to the design thinking experimenting approaches is exploiting 'positive deviances' (box 7). Positive deviance is based on the observation that in every community there are certain individuals or groups whose uncommon behaviours and strategies enable them to find better solutions to problems than their peers, while having access to the same resources and facing similar or worse challenges.⁹ Understanding the reasons for success in these sub-communities bears rich potential for disentangling problems and catalysing effective solutions.

Box 7: Using positive deviances to combat child malnutrition in Vietnam

In the early 1990s, some 65 percent of Vietnamese children under the age of five suffered from malnutrition and most solutions relying on government donations of nutritional supplements were proving ineffective.

A project was launched to observe the food preparation, cooking and serving behaviours of very poor families with children who were still healthy. It found a few consistent yet rare practices. Parents of well-nourished children collected tiny shrimps, crabs and snails from rice paddies and added them to the food, along with the greens from sweet potatoes. Although these foods were readily available, they were typically not eaten because they were considered unsafe for children.

The positive deviants also fed their children multiple smaller meals, which allowed small stomachs to hold and digest more food each day. The project collaborated with 'positive deviants' to offer cooking classes to the families of children suffering from malnutrition. By the end of the programme's first year, 80 percent of the 1,000 children enrolled in the programme were adequately nourished. In addition, the effort had been replicated within 14 villages across Vietnam.

Sources: Brown/Wyatt (2010).

No designed innovation without stewardship

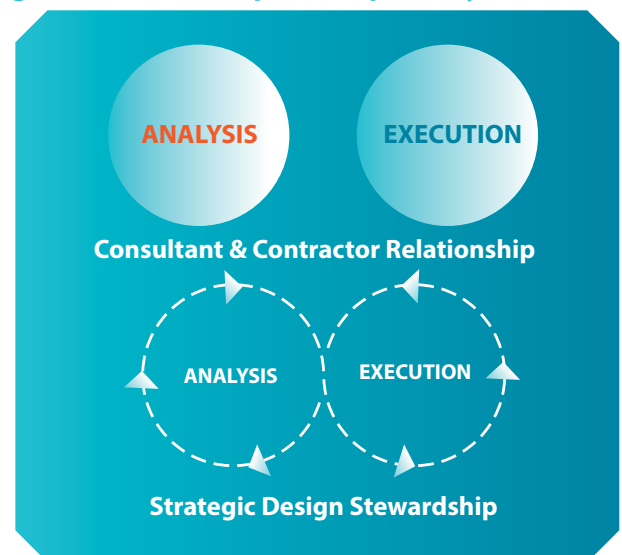
A good idea is relevant only if it is converted into a concrete public policy decision. In turn, good decisions are useless if they are not enforceable, and not enforced. Design thinking is not only about creative thinking. It stretches over adoption into the implementation and review phases of the policy cycle. To ensure continuity in the efforts made upstream, designers should be involved throughout the change processes, providing constant expertise and feedback to identify, test and deliver durable solutions.

Design thinking is intimately linked with the notion of 'stewardship' – defined here as the core ability of agents of change to successfully translate ideas into practice to achieve

the desired outcomes.¹⁰ The choice of the term connotes well the underlying rationale sought by design thinking:

- ▶ Stewardship is preferred to the notions of 'implementation' or 'execution'. Making designed ideas operational is not a neat, linear and unidirectional process. Complex environments impose re-calibration, adjustments and revisions that can be achieved only through iterative, collective exchanges.
- ▶ Stewardship is conceptually more than mere 'facilitation'. Stewardship indicates that innovation is shaped through an intentional, direct and controlled action. Facilitation suggests the concomitant action of equally important factors in making a policy intervention more concrete.

Figure 3: Stewardship for adaptability



Source: Boyer et al. (2011:40)

Stewardship thus demands agility over adherence to a pre-determined plan. It requires the capacity by government to nimbly and smoothly react to unexpected developments while sticking to set priorities and objectives.

In this respect, design thinking requires public managers to drive innovation by taking responsibility for designing organizational responses to the challenges and opportunities they face. Managers must bridge the gap traditionally existing between analysis, formulation and execution by conceptually and physically riding the feedback loop between problems and solutions. This gives the policy strategy a self-learning mechanism that grants intelligent flexibility and effective adaptability (figure 3).

The practice of prototyping combined with the process of stewardship closely recalls the notion of *kaizen* (改善), Japanese

¹⁰ Boyer et al. (2013:7) define stewardship as "the art of getting things done amidst a complex and dynamic context." The notions of commitment and leadership are intrinsically linked to stewardship. However, leadership is understood to describe a mission-driven approach while stewardship is understood as being driven by sustainability and responsibility for something entrusted in one's care.

⁹ See <http://www.positivedeviance.org>

for 'change for the better' through continuous improvement of processes in diverse organizational systems (Imai, 1986).

3. PUTTING DESIGN THINKING TO WORK IN ORGANIZATIONS

This chapter looks at ways to make design thinking happen within an organization. Converting public managers into policy innovators is a stimulating and promising endeavour. It has the potential to unleash a wide series of positive spiral effects with regard both to the unfolding of the internal organization (human resources management; leadership and career patterns; procedural and thematic coordination) and the external interface with stakeholders and end-users.

Decision-making must seek integration and collaboration from the outset. Likewise, innovation rarely starts with a single idea but by thinking in a different way about a problem or a new opportunity. The elements of the design thinking process mentioned above do not necessarily follow a neat, sequential order. On the contrary, they retain the openness to return to previous stages, to discard and to revisit.

If design thinking is to deliver innovative solutions, an ad-hoc decision-making process needs to be orchestrated around it. This often constitutes a direct challenge to traditional and well-established administrative structures, procedures and bureaucratic cultures. Annex 3 provides a checklist of the most important issues to be retained when applying design thinking.

The blessing of catastrophes?

This provocative sub-heading introduces a case study. In response to a tsunami in Chile, design thinking approaches significantly re-engineered the delivery of public services under conditions of urgency and emergency. By definition a natural catastrophe has disruptive effects on the whole local or even regional system. In post-disaster reconstruction, adverse factors spiral into a combination of grief, despair and frustration among the affected population. There is a sense of overwhelming, enormous pressure and a lack of resources and readily available expertise on the side of the public authorities (Rodriguez et al. 2007).

Under these conditions, experimenting and iteratively testing is not an option: funds and time are a luxury, and problems are colossal and pressing. Yet, catastrophes often offer also the opportunity to fundamentally re-design the horizontal governance architecture of local communities. Such re-design often builds on more-or-less latent pre-existing structural advantages or introduces ground-breaking innovative systems (box 8).

Box 8: Recovery through re-shaping: The case of Constitución in Chile

A massive tsunami triggered by an earthquake devastated over half the port city of Constitución, Chile, in February 2010. To minimize the suffering of the population and make an efficient and coordinated use of public and private resources, the Chilean Government and Arauco (the main forest company in Chile and a key stakeholder of the local economy) asked an architectural firm to submit a master plan for the sustainable reconstruction of the city within 100 days.

The resulting reconstruction master plan produced not only a new, but also an enhanced urban space, revolutionizing the local economic and social system. The aim was the long-term preservation of the city at its historical position next to the estuary mouth – a strategic location for the local economy. To that end, the plan worked on several dimensions:

- ▶ A forest was planted along the river banks to dissipate through friction – instead of resisting – the energy of any future tsunami.
- ▶ Located behind this first line of defence are facilities with use and layout restrictions of ground floor areas. Public recreational open spaces along the banks of the city river create a buffer zone between the water and the built environment. This is also expected to help dissipate rainwater run-off and avoid consequent flooding.
- ▶ The road infrastructure is also re-considered for an enhanced mobility plan, allowing for various access and exit points into and from the city.
- ▶ This 'new anti-tsunami urban DNA' is complemented by an evacuation plan as a further protection element.
- ▶ The plan incorporates energy saving solutions in public buildings by using heat produced in an adjacent industrial plant; by managing waste through reclassification plants; by recovering biogas; and by building passive solar homes.

This encompassing approach was possible thanks to the synergistic contributions within the leading consortium, which regrouped experts in engineering, strategic communications and strategic planning for tourism; the regional university; and the national innovation institution.

In the case of Constitución, 'putting a house back in place' became a process that became embedded in the local social relations, not just a product superimposed upon the community. Through design thinking lenses, the master plan shows at least three success factors:

- ▶ **Create upside** – By developing a plan that would meet immediate needs and also produce gains for citizens, the team was able to enter into a broader political discourse about social equity, rather than a more localised debate

Continued on next page

about how best to rebuild. The people were both owners and advocate of the encompassing re-construction endeavour.

- ▶ **Lead with a proposal** – The team began sketching solutions after only two weeks of information collection. They never completed a full analysis of the mechanism of destruction, although they included a rough understanding of what happened into the proposal. Importantly, the team progressively considered broader ‘deficits’ related to poor planning and little ongoing infrastructure investment, not only tsunami-related damages. In so doing, the team avoided the ‘eternal diagnosis’ and the ‘paralysis through analysis’ conundrum.
- ▶ **Hybrid forums** – These enable public debate designed to balance the motives, capabilities and authority of experts, politicians, business leaders and citizens. While being open, individual invitations were sent to selected stakeholders particularly affected by the specific topic discussed at a given forum. For instance, if the future of the river was being discussed, citizens that owned land along the river and river-oriented organizations would be specifically invited along with a cohort of experts and politicians. Forums were prepared meticulously and facilitated with care.

Source: Boyer et al. (2013).

The approach deployed in Constitución was based on inclusive public deliberation yet inspired by visionary leadership and political commitment – a privileged positive mix that transforms crises into a catalyst for ideas. In this case, total disruption allowed for overcoming inhibitions and resistance to risk. Components of that mix have proved their merits on other instances of post-disaster re-construction across the globe.¹¹

Design thinking approaches may be deployed in forward-looking policy exercises, for instance in the effort to foster resilience and long-term development or to elaborate management and surveillance systems associated with so-called ‘systemic risks’ (Alemanno, 2011). The resilience of a regional system certainly depends on the capacity of private agents – households, business firms and social organization in general – to conceive and implement appropriate adjustment strategies. Yet the role of public actors, and in particular their capacity to re-allocate the available resources and introduce appropriate institutional settings, is also of utmost importance. No single pillar alone will produce the desired outcomes, but rather their integrated action offers the best possibilities for development. Design thinking may contribute to shaping those territorial integrated ‘policy platforms’ that can be orchestrated around policy variety and diversification, technological change and knowledge base (Cooke, 2007).

¹¹ Olshansky et al. (2006) explore for instance the contribution to local involvement and self-determination referring to the earthquakes in Los Angeles and Kobe in the mid-1990s. On the same subject but in relation to the Hurricane Katrina in 2005, see for instance Wilson (2009), while Liu (2011) stresses the role played by improvised grass-root activism in taking over lacking official leadership in New Orleans. The leadership variable in disaster response is also analysed by Kapucu/Van Wart (2008) and Beckett et al. (2010). General institutional arrangements are addressed by UNDP (2005).

However, *tabula rasa* situations do not always lead to as effective solutions as those offered by the Constitución case study. Managing post-disaster reconstruction is an extremely complex and fragile governance, and efforts may be jeopardized by over-bureaucratisation, mismanagement, capture, parochialism and free-riding (OECD, 2013a).

Advancing through projects

While crises pose particular challenges, deploying design thinking under ‘normal’ conditions is not straightforward either. Consider for instance the rationale of empathizing – one of the preliminary steps of a design manager. As mentioned above, empathy often means getting out of the office and seeing things with your own eyes to understand the difference between the way things are supposed to work and how they actually work. It also implies identifying yourself with the actors and users, experiencing that given context, and understanding causal factors and logics of behaviour through their perspective (box 9). Upon the processes of ‘analysing’ and ‘synthesizing’, designers then develop and test prototypes with a view to continuously refine ideas and turn them into effective solutions.

Box 9: How to empathize and prototype

To empathize, you:

- ▶ **Observe** – View users and their behaviour in the context of their lives. As much as possible do observations in relevant contexts in addition to interviews. Some of the most powerful realizations come from noticing a disconnect between what someone says and what he does. Others come from a work-around someone has created which may be very surprising to you as the designer, but she may not even think to mention in conversation.
- ▶ **Engage** – This technique is similar to ‘interviewing’ but it should really feel more like a conversation. Prepare some questions you would like to ask, but expect to let the conversation deviate from them. Keep the conversation only loosely bounded. Elicit stories from the people you talk to, and always ask “Why?” to uncover deeper meaning. Engagement can come through both short ‘intercept’ encounters and longer scheduled conversations.
- ▶ **Watch and listen** – Certainly you can, and should, combine observation and engagement. Ask someone to show you how they complete a task. Have them physically go through the steps, and talk you through why they are doing what they do. Ask them to vocalize what is going through their mind as they perform a task or interact with an object. Have a conversation in the context of someone’s home or workplace; many stories are embodied in artefacts. Use the environment to prompt deeper questions.

When prototyping, you should:

- ▶ **Start building** – Even if you are not sure what you are doing, the act of picking up some materials (sticky notes, tape and found objects are a good way to start) will be enough to get you going.

Continued on next page

- ▶ **Do not spend too long on one prototype** – Let go before you find yourself getting too emotionally attached to any one prototype.
- ▶ **ID a variable** – Identify what is being tested with each prototype. A prototype should answer a particular question when tested. That said, do not be blind to the tangential understanding you can gain as someone responds to a prototype.
- ▶ **Build with the user in mind** – What do you hope to test with the user? What sorts of behaviour do you expect? Answering these questions will help focus your prototyping and help you receive meaningful feedback in the testing phase.

Source: HPID (2010).

Design thinkers deny that the approach must lead to revolutionary change. The opposite is true: it cannot. Unlike in the industrial domain, where single technological innovations can be radically divergent from existing technologies, public sector innovators cannot develop new, parallel realities in isolation given the complexity and interdependencies of public service issues. Switching off healthcare or the financial system, while redesigning a new order from the outside-in, is not an option. Public service innovation must ultimately be built amidst and within the old.

‘Projects’ are the channel to drive existing organizations to act differently. Boyer et al. (2011:8) provide a definition of projects: “[Projects are] initiatives that are specific and concrete in their stated goals, even if their overarching purpose is larger. They are the battle, not the war. Projects are limited in terms of scope, time, and budget, and all of these are typically defined up front. If fixing healthcare is a purposeful change, working with a specific community to redesign care for a specific disease or condition is a project. If addressing climate change is a worthy call to action, building a low carbon community in a particular place is a clearly defined project.” (box 10)

As such, projects allow the necessary iterative approach to progressively create framework conditions for institutionalized design thinking. They are small enough to be grasped, organized, launched and implemented. They are big enough to deliver meaningful impacts, prove effectiveness and, possibly, create momentum. Over time, a series of successful design thinking-driven projects will profile itself as a credible and legitimate alternative arising from within the system. Start-ups provide an analogous example.

Box 10: How to identify and organize a project

Helsinki Design Lab (HDL) at Sitra has elaborated a ‘Studio Model’ to deliver strategic input and shape decision-making such that it might be converted into a ‘project’. The Studio is designed to rapidly generate the sketch of systemic redesign by bringing together the right people to focus on a carefully defined problem, using a flexible process in a physical place that is conducive to collaboration.¹²

The selection of the initial topic or challenge is probably the hardest to determine but also the most important for the success of a Studio. The following question may guide in this respect:

- ▶ **Importance** – “Is the topic important to your organization?” HDL’s mandate is to improve Finland’s competitiveness, so their Studio looked for a topic that mattered for the future of that country.
- ▶ **Relevance** – “Is the topic relevant outside your immediate sphere?” To be able to attract world-class talent, the challenge should interest talented people all over the world. There also should be sufficient diversified expertise to draw from.
- ▶ **Network** – “Can you build a network around the issue?” This requires a quick reality check of how much effort would be required to discover and engage stakeholders for research, lectures, Studio membership, etc.
- ▶ **Scale** – “Is it a focused topic with big picture implications?” The Studio should avoid problems that are either too specific or too broad. An excessively wide topic decreases the effectiveness of a Studio as the participants spend too much time grappling with the boundaries of the challenge.

Once the topic is defined, a ‘challenge brief’ should be drafted. This should describe the current reality and identify a number of dimensions relevant to the challenge at hand, notably the local context. Framing the ‘opportunity space’ is crucial: “What do we have to lose as the result of inaction and what do we have to gain through strategic redesign?” Since from the brief flows the entire Studio and hence the chances for its success, adequate time and resources should be dedicated to this stage (in the order of months).

Assembling the right mix of participants in the Studio is fundamental for the overall success. A good team is balanced along the axes of age, gender, geographical origin and domains of expertise, as this helps fill intergenerational and intercultural gaps. Experience suggests that 8-10 people is the best size group for this kind of work.

The policy designer might consider not ‘owning the process’ or guiding it. Rather, his or her role should be to support the Studio, working behind the scenes to ensure that the momentum is not broken. This may imply relatively trivial tasks such as airing the room for the participants’ ease and managing

Continued on next page

¹² See <http://www.helsinkidesignlab.org/instudio/>.

breaks but also keeping track of the overall aim and goals of the Studio, ensuring progressive filtering and synthesis. Most importantly, however, the main function of the designer is to bring synthesis out of the discussion.

The issue of incentives is likely to come up when organizing a Studio. HDL paid the participants in their 2010 Studios, recognizing the time they dedicated and the added value they inputted to the endeavour. This may vary depending on context and recruited experts.

Source: Boyer et al. (2011).

“By nature [start-ups] start small and are intended for aggressive growth; they thrive or perish. As organizations that are judged by their output, most start-ups are synonymous with their flagship product. And while the things that start-ups produce are often classified as purely technological innovation, (...) [they chew up] old business models and social configurations in the process.”

Boyer et al. (2013:9)

A number of examples of design thinking projects can be reported, including from experiences in developing countries. UNICEF has launched several initiatives to stimulate innovation and apply design thinking to concrete situations in fragile contexts.¹³

Relying on design labs

Implanting innovation units within governmental structures has been a relatively constant pursuit by executives. One of the pioneering attempts and possibly the widest approach at national scale took place in the framework of the National Performance Review initiative led by the then United States Vice-President Al Gore in the early 1990s. The Review was renamed National Partnership for Reinventing Government in 1998.

At the forefront of the initiative were the national ‘Reinvention Laboratories’ – federal government organizations and activities across the United States that volunteered and were recognized to lead the transformation of government into the 21st century (Thompson, 2000). Reinvention Labs were once defined as a place that cuts through ‘red tape’, exceeds customer expectations, and unleashes innovations for improvements from its employees.¹⁴

The role and place of labs

Design labs try to disentangle the dominant bureaucratic culture informing public sector and create free spaces where new behaviour can emerge. They facilitate the acquisition of innovation patterns by governments (the latter being too

big to re-think themselves fundamentally). Design labs seek to accelerate the cycle of collecting evidence, diagnosing, brainstorming, designing and experimenting policies.

The establishment of dedicated, cross-cutting organizational structures has the potential to neutralize vested interests, power plays, and organizational infighting. Labs do so by being permanent structures with a mission to temporarily unfreeze organizational embedded practices (Carstensen/Bason, 2012). A growing number of Government Innovation Labs¹⁵ have been set up as government initiatives – to date mostly in the advanced economies but increasingly also in developing countries.

Where design labs should be placed organizationally depends very much on the general institutional context of the executive. Some governments tend to operate on a rather centralised basis, with most political weight and procedural oversight concentrated in the Prime Minister Office or equivalent. Others are characterized by relatively autonomous ministries and departments, with or without recourse to external agencies.

Some of the most visible labs are located close to the centre of government or at strategic crossroads of the government’s organization:

- ▶ The Danish *MindLab* is part of three ministries and one municipality: the Ministry of Business and Growth, Ministry of Education, Ministry of Employment and Odense Municipality. It has formal collaboration with the Ministry for Economic Affairs and the Ministry of Interior. *MindLab* may be considered a pioneering institute, being first established by the (then) Ministry of Business in 2002 as a part of its efforts to reduce administrative burdens (‘red tape’) imposed on Danish businesses.
- ▶ The *Centre for Excellence in Public Sector Design* in Australia was inspired by *MindLab*. It resulted from a pilot programme (*DesignGov*) launched in 2009 and started operations in Summer 2012. The project was discontinued at the end of 2013.
- ▶ In Singapore, the *Human Experience Lab* is a part of the Public Services Division of the Prime Minister’s Office.
- ▶ *Thailand Creative & Design Center* (TCDC) was established in 2004 under the government by Prime Minister Thaksin Shinawatra to connect and promote interaction among creativity, skill, cultural assets and business conducive to creating quality products and services that meet the global market demand.
- ▶ A similar mission guides the *Efficiency Unit* in the Government of the Hong Kong Special Administrative Region. The Unit reports directly to the Chief Secretary for Administration and is tasked with pursuing the Government’s commitment to transforming the management and delivery of public services so that the

¹³ See <http://unicefstories.org/>, and in particular on DT <http://unicefstories.org/?s=design+thinking&submit=Search>.

¹⁴ Quoted from *What is a Reinvention Lab?*, at <http://govinfo.library.unt.edu/npr/library/papers/bkgd/whatis.html>.

¹⁵ See Parsons DESIS Lab (2013) Map of Government Innovation Labs at “Constellation 1.0” at http://nyc.pubcollab.org/files/Gov_Innovation_Labs-Constellation_1.0.pdf

community's needs are met in the most effective and efficient manner. It works in partnership with governmental bureaux and departments.

- ▶ The United Kingdom recently launched a *Cabinet Office Policy Lab* to work with government departments to address their lack of design skills.¹⁶

Other labs share links with government without being formally included in the executive's organizational charts. Such was *The Innovation Unit* in what is now the UK Department for Education, before becoming an independent social enterprise in 2006. The *Australian Centre for Social Innovation* started with seed funding from the South Australian Government. The *Helsinki Design Lab*, now closed, was an initiative by Sitra, the Finnish Innovation Fund.

Labs for public service innovation may also be promoted by broader innovation platforms, as is the case for the *National Innovation Council* of the Government of India, which has facilitated the set-up of sub-national equivalents across India.¹⁷

Labs need not to be established at the national level or be affiliated to the central governments (Parker/Leadbeater, 2013). The Surrey County Council in the UK, for instance, established *The Shift Surrey Project* with its local partners. Regular events and the lab's online space encourage innovators to come to the fore, creating a sustainable legacy of locally-owned change. There are advantages to including the local dimension in design thinking approaches, such as working with smaller and hence potentially less rigid administrative machineries, and acting at a much closer and more porous interface with stakeholders, citizens and users.

Private organizations such as *GovLab* in the United States (housed by New York University and two large foundations) work within networks. Some others are for-profit consultancy companies that have a significant portfolio of contracts with Government, such as the American company *IDEO* or *CKS* in India. An example for a design lab in a developing country is the *Bihar Innovation Lab*¹⁸, which is facilitated by *CKS* with funding from the *Bill & Melinda Gates Foundation* and works on public health challenges at the grassroots in rural areas of the Indian State of Bihar.

The formal affiliation and the proximity of labs to the centre of government are less relevant than them reflecting a number of good practices. Labs tend to be most effective when certain conditions apply:

- ▶ they are granted free operational and decisional discretion;
- ▶ they enjoy full financial autonomy;
- ▶ their mandate stretches over election cycles.

These good practices ensure independence from political capture, to deliver innovative thinking as well as neutrality with respect to administrative cultures. At the same time, close affiliation to the centre of power allows design thinkers to be considered as colleagues and hence be more legitimized and trusted. 'Speaking the same language' as ministerial officials does play an important role. It also allows labs to access relevant data and information.

Labs should also be appropriately staffed. It is difficult to report on the typical number of staff employed by labs (they range from five to seven to more than 25) and indicating the optimal size of a lab would be misleading. What appears to be critically important is to recruit people with the right skills, and labs tend to spend a proportionally long time doing so. Widely sought design thinking skills are communication sciences, ethnography, anthropology, sociology, architecture and design. Investment in finding the right people is rewarded by a generally low turnover: labs officials tend to stay and the development of such 'institutional and operational memory' is a valuable asset for the overall diffusion of design thinking across decision-making.

Overall, the power of labs probably lies with their capacity to adapt their configurations on a project basis. To achieve design thinking, labs typically involve key stakeholders, including end-users such as citizens and businesses, to foster co-creation. Design thinkers emphasize the importance of connecting to the most enthusiastic, energetic, committed and capable pockets both within and outside the administration to leverage the labs' impact.

Using spatial forms to explore new policy frontiers

Physical and logistical aspects do matter. Part of the labs' enabling function is simply to provide a place where people can meet. What is special about the lab's space is that it is not constructed simply to look cool — designers deliberately incorporated features that would increase collaboration. In contrast with traditional office workplace, in the labs employees can have a plenary session in the middle of the room and then quickly break up into groups, easily rearranging the wheeled tables, chairs and the whiteboards.

The labs often instil spill-over emulation in the 'periphery' of the administration. Officials participating in labs meeting experience the space, the methodology and discussions and then tend to repeat them in their home organizations. In this respect, 'how' the labs do things is more important than 'what' and 'how much' they do. Labs swing between being organizational units and policy activities.

The legitimacy of labs is not granted a priori. It ultimately depends to a large extent on several factors: the ideational and 'visionary' understanding by governments of what society they want to achieve; anchoring the lab within top management; and crafting the right team committed to gradual but effective change. Being able to measure and prove added value is also fundamental (Lykketoft, 2014).

¹⁶ See http://www.theguardian.com/public-leaders-network/2013/nov/26/cabinet-office-policy-lab-designer-services?CMP=tw_t_gu.

¹⁷ See http://www.innovationcouncil.gov.in/index.php?option=com_content&view=article&id=24&Itemid=17

¹⁸ For details, see <http://cks.in/portfolio-item/the-bihar-innovation-lab/>

4. INSTITUTIONALIZATION FOR SYSTEMATIC DESIGN THINKING

In an era of austerity with significant pressure on public sector budgets, governments are searching for ways to deliver more value at less cost. With the promise of reducing implementation costs thanks to holistic vision and co-creation, design thinking bears the potential to provide overall efficient solutions.

Institutionalization is the turning point for most governance (administrative/regulatory) reform to yield lasting and sustainable change in the way public sector is organized, functions and delivers (OECD, 2013b). This section discusses the potential for design thinking (or some of its constitutive elements) to be systemically engrained in daily decision-making – or, alternatively, how design thinking can systemically enhance the effectiveness of traditional decision-making.

Challenges indeed exist to institutionalize design thinking. Critics highlight the relatively high barriers to entry preventing design thinking from becoming mainstreamed as standard bureaucratic practices (box 11).

Box 11: Addressing design thinking's institutionalization

In order for design thinking to be made systematic within decision-making, governments need to tackle the following issues:

- ▶ The right skills need to be identified and brought into decision-making as well as further nurtured within public administration.
- ▶ Government needs to be able to afford the institutionalization of prototyping and creative experimentation. The space for creative thinking needs to be provided and managers need to be able to manage the (possibly diverging) simultaneous political agendas and various (possibly resisting) bureaucratic cultures.
- ▶ Design thinking needs to be institutionalized in such a way that it meets other compelling imperatives for government action like the principles of legitimate expectations and legal certainty – especially if one moves from design thinking for public service delivery to design thinking at the service of policy formulation.
- ▶ Design thinking needs to fit with existing procedural requirements such as public consultation, or regulatory impact analysis.
- ▶ Innovative solutions will face the challenge of overcoming sometimes irrational or unconscious public perceptions and beliefs.

The importance of values to anchor innovation

Innovation is not only novelty. It is also about catalysing and creating practitioners' values in their every-day work (Høyrup, 2010; Høyrup et al., 2012). When introducing the innovation concept to public policy domains, the value to which innovation should contribute cannot be measured directly through sheer economic productivity, like in the private business. Public service innovation bears the potential of prevention of marginalisation, increased social security and the development of health care or education systems, besides combining effectiveness and public service quality.

Current public service provision often pivots around the logics of the provider rather than those of the 'user', a group that might include citizens, businesses or other end-recipients of policies and services. Policy designers seek to reverse the approach and focus on the demands from the public 'user' for greater personalisation of services.

What if users are not so active or aware of their needs and preferences? In many contexts, citizens are guided and taken care of by 'the state'. In many transition countries, individual entrepreneurship has been repressed for decades. In emerging economies, civil society and citizenship are not as mature as design thinking would envisage. Also where the framework conditions appear to be favourable there might be specific contexts in which innovative approaches are resisted. Factoring values in the innovation equation slightly changes the playing field. The innovation question is not only (exclusively) about how to inspire the individual policy manager to become creative, or to be more open-minded towards the innovation imperative. The value-informed perspective places innovation as an emerging, negotiated process of learning and participation, where personal values are involved as much as the overall social dynamics (box 12).

"There might be good reasons for rejections of innovation, one of them being that there are important values in the practice that practitioners want to retain."

Wagener (2012)

Box 12: Rejecting innovation to defend values

Successful design thinking approaches address the clashes between practitioners' values and the values associated with innovation and change. An ethnographic study suggested that practitioners in a Danish elder care institute rejected an innovation affecting their daily work because they directly associated it with 'New Public Management thinking' – and hence with indiscriminate and 'inhuman' savings and cuts in staff.

Continued on next page

They fit the innovation concept into a discourse that places innovative entrepreneurship as the driver of a determined economic rationale which brings unwanted values. Too rapid changes in the organization and staffing of the institute may be a reason for rejecting innovation imperatives.

Source: Wagener (2012)

Bureaucratic contexts and culture inform change and innovation patterns. Design thinking becomes sustainable if it embeds innovation in existing knowledge, routines and values. A practical perspective on innovation acknowledges that practitioners' values and visions provide guidelines for what may reasonably be changed and what may be preserved. It also acknowledges that practitioners' access to innovation discourses and intervention initiatives is vital for both desired social change and skills development.

A new social contract

One of the main pre-conditions for successful institutionalized design thinking is being comfortable with uncertainty. This implies that one has to be able to suspend disbelief and maintain a trajectory through situations involving doubt and, inevitably, risk. Projects, as defined above, help contain change and make it imminently knowable. This potentially lowers the perceived risk of doing something new and undergoing change at the next, larger scale. This optimism tends to be contradicted by inherited individual instinct and social wisdom. Societies are increasingly risk-averse – arguably the more so the more affluent and knowledgeable they are. They often call upon governments to categorically eradicate hazards, not just manage risks (Lofstedt, 2011; Alemanno, 2011). The precautionary principle informs public policy decisions, sometimes irrespective of the proportionality or scientific justification of the measures adopted. Within same societies, risks are perceived differently across policy areas and over time (Wiener et al., 2011).

To avoid colliding with prevailing wisdom and perceptions, a different sort of social contract can be agreed within the society. Presenting the case for innovation and rewarding risk-taking requires clear political leadership and support.¹⁹ Public communication, if not ground education, is the direct corollary. It requires also a system of adequate incentives for bureaucrats to engage in this experimental mode, for which failures are to be considered and valued as much as progress in the quest for effective solutions. At present, most bureaucratic paradigms hamper civil servants' entrepreneurship. A public manager taking risks for innovative solutions tends to gain little individual reward (benefits are diffused and indirect at best) in case of positive outcomes, and considerable individual blame (for not following administrative procedures and rules) in case of failure.

¹⁹ Nesta's case study of Seoul (2014) describes the emergence of a public service innovation ecosystem through political leadership: <http://www.scribd.com/doc/191841429/Seoul-City%E2%80%99s-social-innovation-strategy-A-model-of-multi-channel-communication-to-strengthen-governance-and-citizen-engagement>

On the positive side, the direct engagement with 'citizen experts' and 'users' can potentially reward public officials with higher levels of motivation as well as greater levels of trust and sense of purpose, contributing to a reinvigoration of the public service. Successful applications would gradually convince the political leadership to expand the space for innovative approaches and sensible risk-taking.

Gearing up existing tools?

Many countries, rich and poor, are not yet ready to embrace design thinking as part of their governmental systems. Some are, however, building on existing tools and taking more systematic approaches. The European Commission acknowledged in a recent action plan that the European public sector lacks, to a large extent, the skills and the capacity to apply design when addressing the need for renewal (EC, 2012; 2013). In its 2013 Action Plan,²⁰ the Commission recommends in relation to enhancing public service innovation in Europe:

- ▶ **Building the capacity of public sector administrators to use design methods and to procure design effectively** – There could be more use of design and designers in the public sector, for instance, by developing support material and toolkits and by providing training to public sector administrators. Public procurement practices should be revisited.
- ▶ **Enhancing research and development of design-driven innovation for efficient and user-friendly public services** – Support for multidisciplinary research on citizen-centric public service configuration and innovation driven by users is envisaged, notably in the context of the Horizon 2020 objectives.²¹
- ▶ **Promoting peer learning and cooperation among public-sector actors looking for design-driven solutions** – In times of budget constraints, governments are searching for ways to deliver more value at lower cost. There are already a number of examples of successful design-driven solutions and a growing appetite in the public sector to learn more.

In addition to these overarching recommendations, concrete added value is provided in more operational ideas (EC, 2012). Further action points for decision-making in Europe include:

- ▶ establishing a design lab within the Commission and the national governments to run small-scale demonstration projects;
- ▶ exploiting the potential of the European Structural Funds, in particular the European Regional Development Fund, on design innovation for social change across policy areas; and

²⁰ The European Design Innovation Platform supports peer learning; sharing experiences; cooperation and open innovation among interested actors through a number of initiatives and projects. See http://ec.europa.eu/enterprise/policies/innovation/policy/design-creativity/index_en.htm.

²¹ See http://ec.europa.eu/research/horizon2020/index_en.cfm. Horizon 2020 is a new financial instrument for European research and innovation funding that seeks to simplify the rules for gaining funding, improve the commercialisation of research results and increase the participation of industry, SMEs and the scientific community.

- ▶ developing a design curriculum for public administrators' education and professional development, with attendant Master Classes in design for effective policy-making and procurement.

While many bureaucracies are not yet ready to embrace design thinking systemically, existing practices in modern decision-making can constitute promising avenues for leveraging (if not mainstreaming) design thinking, if well-exploited and further enhanced. Two such promising avenues are presented here: regulatory impact analysis (RIA) and public-private partnership (PPP).

Regulatory impact analysis

One of the existing practices in modern decision-making is 'evidence-based design'. This capitalizes on experience-based and negotiation-based approaches, adding criteria, standards and methods to build and evaluate situated theories. In this case, 'design' complements 'assessments' of past and present situations as well as positive and adverse impacts. It does so by creating informed solutions that are specific to the situation at hand, with a clear forward-looking approach building the case for successful action in the future. However, there is no such thing as an all-purpose tool: "Neither the Assessment Approach nor the Design Approach is an inherently better way of using evidence for programming than the other, any more than a hammer is inherently better than a saw for building a house. Rather, each effectively addresses certain kinds of challenges, situations and goals, and not others." (Miller/Rudnick, 2012:17).

With regard to regulatory interventions, the ideas of evidence-based design and assessment shape an approach known as regulatory impact analysis (RIA). The OECD (2009:12) defines RIA as "[aiming] to be both a tool and a decision process for informing political decision makers on whether and how to regulate to achieve public policy goals". The mechanism is explained further:

"As a tool supporting decision making, RIA systematically examines the potential impacts of government actions by asking questions about the costs and benefits; how effective will the action be in achieving its policy goals and; whether there are superior alternative approaches available to governments. As a decision process, RIA is integrated with systems for consultation, policy development and rule making within government in order to communicate information ex ante about the expected effects of regulatory proposals at a time and in a form that can be used by decision makers, and also ex post to assist governments to evaluate existing regulations."

RIA is to be conducted at the very outset of the policy planning and formulation process, not as an ex post justification of a decision already taken. Assessments should be comprehensive and consider all dimensions and types of impacts – economic, social and environmental. When conceived as a 'process', RIA analytical steps bear the potential to significantly inform all stages of decision-making. They closely resemble the comprehensive design thinking method (box 13).

Box 13. Typical analytical steps of regulatory impact analysis

Typically, fully-fledged RIA analyses should unfold as follows:

- ▶ identification and definition of the problem;
- ▶ spelling out of the desired objective(s);
- ▶ elaboration of the different regulatory and non-regulatory options (including the 'no action' option);
- ▶ open and public consultation with external stakeholders and experts;
- ▶ assessment of the likely costs, benefits and distributional effects (wherever possible in quantitative terms);
- ▶ recommendation of the preferred option; and
- ▶ indications on the monitoring, evaluation and reporting requirements.

Source: EC (2009a)

RIA has the tendency to embrace deterministic rationale. An example is in the quest for impact quantification and monetisation through cost-benefit or cost-effectiveness analyses (Ackerman/Heinzerling, 2004; Hahn/Tetlock, 2007). It also has the limitation of seeking to appraise the marginal utility of the additional policy intervention as taken in isolation. This may well contradict intuitive and holistic approaches typical to design thinking.

Nonetheless, conceptual elements introduced through RIA prompt regulators to consider problems more systemically, and to embrace a wide perspective in impact analysis. This may occur for instance by diversifying the sub-categories of subjects potentially affected by policy interventions; integrating the type of impacts through notions like 'risk-risk trade-offs'²² and unintended consequences (Graham/Wiener, 1997); utilizing the insight of behavioural sciences (Vandenbergh et al, 2011); and increasingly drawing attention to the relevance of cumulative impacts.

²² Risk-risk trade-offs may arise when measures addressing the target risk create ancillary or countervailing risks.

International good practices with RIA suggest that the very functioning of the RIA system, if well designed, consistently contributes to reducing organizational, procedural and conceptual barriers within governments:

- ▶ **RIA and strategic planning** – Strategic planning enables governments to allocate resources more efficiently and plan individual decisions in a more timely way. Governments are induced to do better job of programming their initiatives and prioritizing which ones should undergo enhanced analysis.
- ▶ **RIA and public consultation** – The publication of (draft) RIA reports for public comment strengthens the government's efforts to reach out to users and experts (participation rationale) and to respect their right to know (transparency and accountability rationale).
- ▶ **RIA and inter-service cooperation** – As a part of both evidence collection and quality oversight, draft RIA analyses are circulated across the administration for inputs and comments. This enriches the relevance of analysis by facilitating the emergence of possible policy synergies and trade-offs.
- ▶ **RIA and the policy loop** – Good RIAs bear embryonic thinking for future post-implementation reviews, highlighting strategies for monitoring and evaluation of the proposed decisions based on performance indicators and users' feedback collection methods.

Public-private partnerships

The Constitución case study presented above highlighted one of the possible challenges posed by co-creation and end-users involvement. The reconstruction team opted for a public-private partnership with the largest local business in a move that was met with scepticism and unease by citizens. It was then the support team's responsibility to navigate the competing priorities of those rival interests and, through vigorous public participation, ensure that the public interest was being protected.

If well managed, public-private partnerships combine the best of both worlds: the private sector with its resources, management skills and technology; and the public sector with its regulatory actions and protection of the public interest (UNECE, 2008; OECD, 2008;2012).

Dedicated PPP Units include any organization set up with full or partial aid of the government, i.e. they can be independent bodies or sit within line ministries (most commonly, the Ministry of Finance). Their role is to ensure that necessary capacity to create, support and evaluate multiple public-private partnership agreements is made available and resides in government. PPP Units are likely to enhance the capacity of government to successfully manage the risks associated with a growing number and value of such agreements.

More than half of the OECD countries surveyed in 2009 featured a dedicated PPP Unit at the national level. It is not a given, but it is significant (table 2).

Table 2: Is there a dedicated public-private partnership unit at the national level?

	Number of countries	Countries
Yes	17	Australia, Belgium, Canada, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Netherlands, Poland, Portugal, United Kingdom
No	12	Austria, Finland, Iceland, Luxembourg, Mexico, New Zealand, Norway, Slovak Republic, Spain, Sweden, Switzerland, United States

Note: No data for Turkey.

Source: OECD (2010:11)

A PPP Unit typically perform one or more of the following functions:

- ▶ technical support and policy guidance;
- ▶ capacity-building (e.g. for public procurement practices);
- ▶ public-private partnership promotion; and
- ▶ public-private partnership agreement approval.

PPP Units rarely participate in the policy formulation and decision-making process, not least because of the rather technical tasks entrusted to them. However, they often serve as an important interface between the public administration and private stakeholders. The existence of a PPP Unit bears a powerful symbolic character, especially if it sits within the organization. It demonstrates the commitment of government to public-private partnership and signals to the potential private partners that government has the requisite skills to manage such relationships. The lack of a PPP Unit may raise concerns about the public sector's project management strengths especially in presence of administrative structures that are fragmented or in silos (Ahadzi/Bowles, 2004).

Relying on and gearing up the role of PPP Units might be a further channel for policy designers to leverage existing practices and procedures along the public-private interface, capitalizing on reciprocal experiences and bridging decisional cultures.

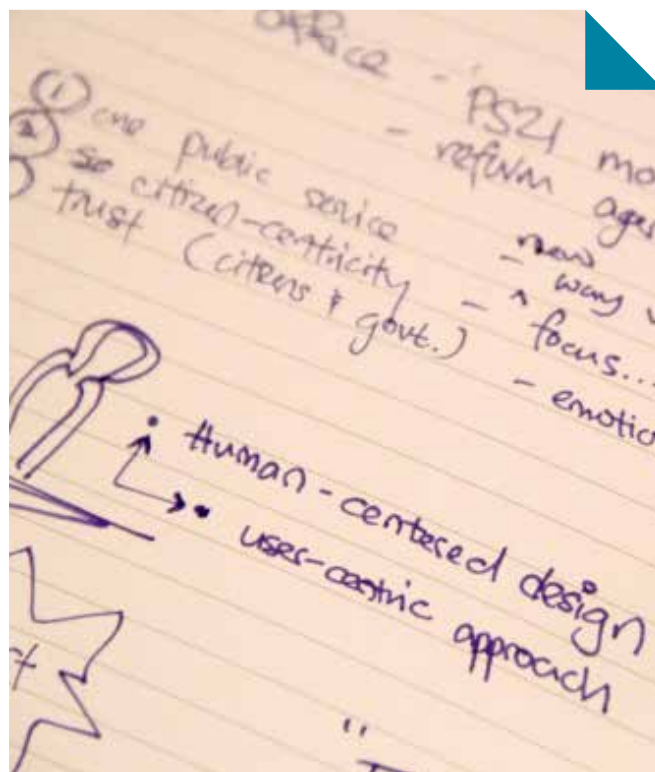
5. CONCLUDING REMARKS

Design thinking has benefitted from the networks of inspired individuals who seek to integrate design approaches. Modern world challenges are severely testing the current organization and functioning of government, and recognition of this situation is encouraging public managers to seek solutions through the design thinking approach to public service innovation. While its components are per se not new, application of design thinking differs today from past approaches, perhaps due to enhanced awareness of the need to push the boundaries of traditional decision-making. Notably thorough professional empathy and co-creation, design thinking seeks to bring the 'outside-in' perspective to decision-making that enables making common sense into common practice.

Managing expectations in what and at what pace design thinking can deliver is important. Design thinkers seem to agree that developing small-scale and local yet very illustrative projects is the best way at present to popularize the approach. A critical juncture in mainstreaming the practice of design thinking appears to be the distinction between applying design thinking to public service delivery as opposed to policy formulation. Especially in the latter dimension, where uniformity and legal certainty are arguably more required, the institutionalization of design thinking in traditional decision-making appears to date more as a goal to aspire to than a lesson to learn from. What appears to be an indispensable condition for design thinking to keep momentum is its sustained anchoring in high-level political support, leadership and commitment. Top managers must explicitly buy-in to design thinking ideas and allow for its specifically iterative approach.

Design thinking approaches require specific skills that are difficult to find and make available to the public service. They are also difficult to exploit as an asset within the public administration organization and culture. Also, in those jurisdictions where it has reached the most advanced forms, design thinking is considered to still be at the experimental stage. The 'trial-and-error' and 'learning-by-doing' nature of design thinking enables it to grow and progressively take more formalized shapes.

There is a general trust in the system, in what it consists of and what added value it can bring. Design thinking needs educated communication strategies to explain the nature and role of design in decision-making to citizens, stakeholders, policymakers and agents of bureaucracy. Training and concrete involvement in projects are key – literally bringing public administrators outside their office; confronting them with real-life situations; and making them directly grasp users' challenges and expectations.



© Joyce Paul / UNDP

Design thinking requires skills that developing country governments might find challenging to deploy within the public decision-making process. Context might also affect the propensity of emerging societies to appreciate the nature and benefits of design thinking, because of factors such as political and social resistances; degree of maturity and self-awareness of individuals and civil society as a whole; deference to authority; and the power distance between the state and citizens.

Design thinking is not, however, a prerogative of developed governance systems. Design thinking does not seem to necessitate specific preliminary governance capacities which, if lacking, prevent developing countries from embracing it. The opposite might by contrast apply: emerging jurisdictions might well encounter less organizational and cultural rigidity because their public administrations are possibly less formalized and more flexible and suffer less from path dependencies and inherited bureaucratic imprints. Such general potential is arguably the most promising feature of design thinking for its diffusion across the globe. Observation and research into its global spread and application will be able to generate more evidence in this regard.

ANNEX 1: REFERENCES

- Ackerman, F. and L. Heinzerling (2004), *Priceless: On Knowing the Price of Everything and the Value of Nothing*, The New Press.
- Ahadzi, M. and G. Bowles (2004), "Public-Private Partnerships and contract negotiations: An Empirical Study", in *Construction Management and Economics*, Vol.22, pp. 967-978.
- Alemanno, A. (ed.) (2011), *Governing Disasters. The Challenges of Emergency Risk Regulation*, Edward Elgar Publishing.
- Alemanno, A. et al. (2011), "Comments: Symposium on Risk versus Hazard", in *European Journal of Risk Regulation*, Vol.2/2011, pp.169-208.
- Alemanno, A. and A. La Spina (2013), *Nudging Legally. On the Checks and Balances of Behavioural Regulation*, Jean Monnet Working Paper, Volume 6/13, NYU School of Law.
- Bason, C. (2010), *Leading Public Sector Innovation: Co-creating for a Better Society*. Policy Press.
- Beckett, J.V., S. Wilkinson and R. Potangaroa (2010), "Post-disaster recovery: Multi-agency leadership and co-ordination", Paper presented at the 2010 *Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors*, September 2010, Paris.
- Behavioural Design Lab (2012), *Changing Behaviour by Design. Combining Behavioural Science with Design-thinking to Help Organisations Tackle Big Social Issues*, The Design Council & Warwick Business School.
- Bessant, J. (2005), "Enabling continuous and discontinuous innovation: Learning from the private sector", in *Public Money and Management*, Vol.25/1, pp.35-42.
- Blind, P.K. (2007), "Building trust in government in the twenty-first century: Review of literature and emerging issues", in *7th Global Forum on Reinventing Government Building Trust in Government*, pp.26-29.
- Bouckaert, G. (2012), "Trust and Public Administration", in *Administration*, Vol. 60/, pp.91-115.
- Boyer, B., J.W. Cook and M. Steinberg (2011), *In Studio: Recipes for Systemic Change*, Helsinki Design Lab / Sitra.
- Boyer, B., J.W. Cook and M. Steinberg (2013), *Legible Practises. Six Stories About the Craft of Stewardship*, Helsinki Design Lab / Sitra.
- Boyle, D., J. Slay and L. Stephens (2010), *Public Services Inside-Out: Putting Co-production into Practice*, The Lab, Nesta.
- Bracken, M. (2013), *On Strategy: The strategy is delivery. Again*, at mikebracken.com/blog/the-strategy-is-delivery-again/.
- Brown, T. (2009), *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, HarperCollins.
- Brown, T. and J. Wyatt (2010), "Design Thinking for social innovation", in *Stanford Social Innovation Review*, Winter, pp.30-37.
- Carstensen, H.V. and C. Bason (2012), "Powering collaborative policy innovation: Can innovation labs help?", in *The Innovation Journal: The Public Sector Innovation Journal*, Vol.17/1, article 4.
- Clarkson, P.J., et al. (eds) (2003), *Inclusive Design. Design for the Whole Population*, Springer.
- Cooke, P. (2007), "To construct regional advantage from innovation systems first build policy platforms", in *European Planning Studies*, Vol.15/2, pp.124-146.
- Cox, G. (2005), *Cox Review of creativity in business: Building on the UK's strengths*, UK HM Treasury.
- Ellis, T. (2010), *The New Pioneers: Sustainable Business Success Through Social Innovation and Social Entrepreneurship*, Jossey-Bass.
- European Commission (2009a), *Impact Assessment Guidelines*, SEC(2009) 92 of 15 January 2009.
- European Commission (2009b), *Design as a Driver of User-centred Innovation*, Commission Staff working Document, SWD(2009) 501 final of 7 April 2009.
- European Commission (2012), *Design for Growth & Prosperity, Report and Recommendations of the European Design Leadership Board*, European Design Innovation Initiative.
- European Commission (2013), *Implementing an Action Plan for Design-Driven Innovation*, Commission Staff working Document, SWD(2013) 380 final of 23 September 2013.
- Fukuyama, F. (1995), *Trust: The Social Virtues and the Creation of Prosperity*, Free Press.
- Graham, J.D. and J.B. Wiener (eds.) (1997), *Risk vs. Risk: Tradeoffs in Protecting Health and the Environment*, Harvard University Press.
- Imai, M. (1986), *Kaizen: The Key to Japan's Competitive Success*, McGraw-Hill/Irwin.
- Hahn R.W. and P.C. Tetlock (2007), "Has Economic Analysis Improved Regulatory Decisions?", in *Journal of Economic Perspectives*, Vol.22/1, pp.67-84.
- Hasso Plattner Institute of Design (2010), *An Introduction to Design Thinking: Process Guide*, Stanford University Institute of Design.
- Homes, B. (2011), *Citizens' Engagement in Policymaking and the Design of Public Services*, Parliamentary Library Research Paper 01, Parliament of Australia.
- Høyrup, S. (2010). "Employee-driven innovation and workplace learning: Basic concepts, approaches and themes", in *Transfer: European Review of Labour and Research*, Vol.16/2, pp.143-154.
- Høyrup, S. et al. (eds.) (2012), *Employee-Driven Innovation: A New Approach*, Palgrave Macmillan.
- Kahnemann, D. (2011), *Thinking, Fast and Slow*, Farrar, Straus and Giroux.

- Kapucu, N. and M. Van Wart (2008), "Making matters worse: An anatomy of leadership failures in managing catastrophic events", in *Administration Society*, Vol.40/7, pp.711-740.
- Lawson, G. (1984), "The rise and rise of the administrative State", in *Harvard Law Review*, Vol.107/6, pp.1231-1254.
- Liu, A. (2011), *Rebirth on the Bayou –Lessons from New Orleans and the Gulf Coast*, The Brookings Institution.
- Lofstedt, R. (2005), *Risk Management in Post-Trust Societies*, Palgrave/MacMillan.
- Lofstedt, R. (2011), "Risk versus Hazard – How to regulate in the 21st Century", in *European Journal of Risk Regulation*, Vol.2/2011, pp.149-168.
- Lykketoft, K. (2014), "Designing legitimacy: The case of a government innovation unit", in C. Bason (ed.), *Design for policy*, Gower Publishing (forthcoming).
- Majone, G. (1996), *Regulating Europe*, Routledge.
- Miller D.B. and L. Rudnick (2012), *A Framework Document for Evidence-Based Programme Design on Reintegration*, United Nations Institute for Disarmament Research (UNIDIR).
- Murphy, K. (2004), "The role of trust in nurturing compliance: A study of accused tax avoiders", in *Law and Human Behavior*, Vol. 28/2, pp.187-209.
- Nesta (2011), *Prototyping Public Services. An Introduction to Using Prototyping in the Development of Public Services*, London.
- OECD (2008), *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money*, OECD Publishing.
- OECD (2010), *Dedicated Public-Private Partnership Units: A Survey of Institutional and Governance Structures*, OECD Publishing.
- OECD (2012), *Principles for Public Governance of Public Private Partnerships*, OECD Publishing.
- OECD (2013a), *Policy Making after Disasters: Helping Regions Become Resilient – The Case of Post-Earthquake Abruzzo*, OECD Publishing.
- OECD (2013b), *Government at a Glance 2013*, OECD Publishing (preliminary version).
- Olshansky R.B. et al. (2006), "Rebuilding communities following disasters: Lessons from Kobe and Los Angeles", in *Built Environment*, Vol. 32/4, pp.354-374.
- Parker, S. and C. Leadbeater (2013), *Call For Action. Ten Lessons for Local Authority Innovators*, Nesta and the LGA Creative Councils Programme, London.
- Power, M. (2004), *The Risk Management of Everything. Rethinking the politics of uncertainty*, Demos.
- Prahalad, C. K. and Venkat Ramaswamy (2004), *The Future of Competition: Co-creating Unique Value with Customers*, Harvard Business School Publishing.
- Ralph, P. and Y. Wand (2009), "A proposal for a formal definition of the Design concept", in Lyytinen, K. et al. (eds.), *Design Requirements Engineering: A Ten-Year Perspective*, Springer, pp.103-136.
- Rittel, H.W.J. (1988), *The Reasoning of Designers*, Institut für Grundlagen der Planung, Stuttgart.
- Rodriguez, H. E.L. Quarantelli and R. Dynes (eds.) (2007), *Handbook of Disaster Research*, Springer, Heidelberg.
- Sanders, E. And P.J. Stappers (2008), "Co-creation and the new landscape of Design", in *CoDesign: International Journal of CoCreation in Design and Arts*, Vol.4/1, pp.5-18.
- Shafir, E. (ed.) (2012), *The Behavioural Foundations of Public Policy*, Princeton University Press.
- Thaler, R.H. and C. R. Sunstein (2008), *Nudge: Improving Decisions about Health, Wealth and Happiness*, Yale University Press.
- Thompson, J.R. (2000), "The Reinvention Laboratories: Strategic change by indirection", in *The American Review of Public Administration*, Vol.30, pp.46-68.
- United Nations Economic Commission for Europe (2008), *Guidebook on Promoting Good Governance in Public-Private Partnerships*, United Nations.
- van Bavel, R. et al. (2013), *Applying Behavioural Sciences to EU Policy-making*, JRC Scientific and Policy Reports, Joint Research Centre.
- Vandenbergh, M.P., A.R. Carrico and L.S. Bressman (2011), "Regulation in the Behavioral Era", in *Minnesota Law Review*, Vol.95, pp.715-781.
- Wagener, C. (2012), "Public sector innovation: Value creation or value loss?", in *LLinE. Life-long Learning in Europe*, Issue 4.
- Wiener, J.B. et al. (eds.), *The Reality of Precaution: Comparing Risk Regulation in the United States and Europe*, RFF Press.
- Wilson, P. (2009), "Deliberative planning for disaster recovery: Re-membering New Orleans", in *Journal of Public Deliberation*, Vol.5/1, article 1.

ANNEX 2: DESIGN THINKING INSTITUTIONS

The following is a list of selected labs working in public service innovation and design thinking.

Americas

Brazil

- ▶ Brazilian Innovation Agency, www.finep.gov.br/

Canada

- ▶ MaRS Discovery District, www.marsdd.com/

Mexico

- ▶ Laboratorio para la Ciudad, <http://labplc.mx/el-laboratorio/>

Panama

- ▶ Autoridad Nacional para la Innovación Gubernamental (AIG), www.innovacion.gob.pa/

USA

- ▶ Code for America, <http://codeforamerica.org/>
- ▶ Launch, www.launch.org/
- ▶ Public Policy Lab, <http://publicpolicylab.org/>

Asia-Pacific

Australia

- ▶ Australian Government Public Sector Innovation, <https://innovation.govspace.gov.au/>
- ▶ DesignGov, <http://design.gov.au/> (discontinued)

Hong Kong, China

- ▶ Efficiency Unit, www.eu.gov.hk/eindex.html

India

- ▶ National Innovation Council, www.innovationcouncil.gov.in/

South Korea

- ▶ Korean Institute of Design Promotion, www.kidp.or.kr/kmain/

Thailand

- ▶ Future Innovative Thailand Institute, <http://fit.or.th/>
- ▶ National Innovation Agency, www.nia.or.th/en/
- ▶ Thailand Creative & Design Center, www.tcdc.or.th/about/

Singapore

- ▶ Human Experience Lab

Europe

Denmark

- ▶ MindLab Denmark, www.mind-lab.dk/en

France

- ▶ Region 27, <http://la27eregion.fr/>

Finland

- ▶ Helsinki Design Lab, <http://helsinkidesignlab.org/> (discontinued)
- ▶ Sitra, www.sitra.fi/en/
- ▶ Tekes, www.tekes.fi/

Norway

- ▶ Innovation Norway, www.innovasjon Norge.no/

Sweden

- ▶ VINNOVA, www.vinnova.se/en/

United Kingdom

- ▶ Design Council, www.designcouncil.org.uk/
- ▶ The Innovation Unit, www.innovationunit.org/
- ▶ Nesta, www.nesta.org.uk/
- ▶ Technology Strategy Board, www.innovateuk.org/
- ▶ Policy Lab, <https://twitter.com/PolicyLabUK>
- ▶ Northern Ireland Innovation Laboratory (announced)

ANNEX 3: 10 THINGS TO KEEP IN MIND WHEN APPLYING DESIGN THINKING

This checklist draws from a post by DesignGov giving advice on setting up a cross-agency design-led innovation capability.²³ DesignGov differentiate among three families of recommendations:

Operational

- ▶ The **accommodation and sense of place** for such an initiative does matter. It needs to provide for collaboration, flexibility, easy access for visitors and stimulation.
- ▶ Effective **communications capabilities** and skills are essential, as is the ability to tap into existing communications channels.
- ▶ **Events management and logistical management** are real skills – and much needed ones.
- ▶ **Secondments** are a good mechanism not only to tap into the expertise and skills of other agencies, but also to help ensure that the agencies which share in the problem or issue being looked at understand their roles in the process.

Systems

- ▶ The most appropriate **location** for a lab will depend heavily on the specific context. For DesignGov, it has been important to be clearly identified as part of the public service and with the clear backing of the Australian Public Service Secretaries Board.
- ▶ Traditional practices with **measurement and evaluation** may not suit design thinking approaches. It is important to recognize that metrics will not be easy to find. Stakeholders may not readily agree on how to measure progress.
- ▶ **Leadership** is important and takes different forms. It is important to understand what type of leadership will best serve the design lab.

Mindsets

- ▶ **Building networks and understanding complexity** is a pre-condition to nurture design thinking.
- ▶ **Novelty requires evolution.** Some things will take longer than you and other people think.
- ▶ Innovation is about change, about uncertainty and about exploration. In a cross-agency, cross-sectoral setting, innovation requires not only a tolerance of ambiguity and flexibility, but an **enthusiastic embrace**.
- ▶ DesignGov has been an experiment as a **new organizational form**. It is not an agency or a unit of an agency, it is an attempt at cross-agency infrastructure that brings together problem 'sharers' in the absence of a single problem 'owner'.
- ▶ **Don't forget to laugh.** A positive attitude and a sense of humour can help engage your diverse stakeholders.

²³ See <http://design.gov.au/2013/11/04/so-youre-thinking-of-setting-up-a-cross-agency-design-led-innovation-capability/>.

ACKNOWLEDGEMENTS

This note was prepared for the UNDP Global Centre for Public Service Excellence's Consultation on the Co-Design of Public Policy and Services, Singapore, 2-3 December 2013. The paper benefitted from feedback and discussions with participants at this event and is based on a rapid review of the literature relating to social innovation and a quick global scan for leading practice in the field. The paper also draws heavily on the author's own knowledge and field experience.

The author, Dr. Lorenzo Allio, is an international consultant specialised in regulatory reform, the organisation and functioning of public administration, and private sector development. He is a member of the Founding Team and a Senior Policy Analyst at the European Risk Forum, a think tank exclusively dedicated to risk regulation. Dr. Allio has served as an Administrator in the OECD Regulatory Policy Division till 2009, after coordinating the Better Regulation Programme of the European Policy Centre (Brussels), between 2002 and 2006. He was appointed Honorary Associate Research Fellow at the University of Exeter in 2010 and is a Research Associate at the IDHEAP Lausanne since 2013. Dr. Allio acts as a peer reviewer of a number of leading academic journals and teaches both undergraduate and post-graduate classes.

We are grateful to all those who made themselves available during the drafting of the discussion paper.



**UNDP Global Centre for
Public Service Excellence**

#08-01, Block A
29 Heng Mui Keng Terrace
Singapore 119620
T: +65 6908 1063
F: +65 6774 4571
E: registry.sg@undp.org
www.undp.org/publicservice
www.twitter.com/UNDPpublicserv
www.fb.com/GCPSE
www.unteamworks.org/node/421576