What Role for Intermediaries in Challenge-Driven Innovation Policy?

Reflections on a UK - Finland Policy Colloquium

This policy brief explores the role of intermediaries in challenge-driven innovation policy, through an analysis of discussions at a UK - Finland policy colloquium organised at University College London

The existing academic and practice debate has emphasised the policy capacity of the state in implementing novel innovation polices, whilst largely overlooking the role that a rich ecology of intermediaries can play in providing a socio-economic foundation for translating and spurring ambitious challenge-driven policies into practice (Tokumaru, 2022). The Business Finland funded (2021–24) project "Towards an Entrepreneurial Welfare State? The Practices of Challenge-Driven Innovation Policies" at Hanken School of Economics has investigated applications of challenge-driven innovation in Finland. Noting the need to further explore the role of intermediaries and acknowledging that the UK has long been a forerunner in fostering advanced ecosystems of intermediaries in different thematic areas, the project at Hanken School of Economics collaborated with UCL Department of Science, Technology, Engineering and Public Policy (STEaPP) in organising a policy colloquium "Maximising the Potential of Intermediaries in Challenge-Driven Innovation Policy" at UCL in June 2024 that brought together Finnish and UK policy intermediaries to discuss their potential roles in supporting the practical application of challenge-driven innovation. This policy brief summarises the major themes of the discussions held at the event. Five key themes emerging from the analysis are highlighted: 1) Changing traditional conceptions of the role and function of public bureaucracy; 2) Bridging the gap between different administrative levels and sectors; 3) Promoting a shared language of missions; 4) Supporting decision-makers to use different kinds of evidence; and 5) Innovation intermediaries as convening spaces. The brief concludes by summarising key points for future research and practice.

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Introduction

Challenge-driven innovation policies are increasingly turned to in addressing urgent societal challenges

A growing concern about urgent societal challenges has led governments across the world to embrace "challenge-driven", "mission-oriented", or "transformative" innovation policies. Yet practical implementation has proved difficult. The existing academic and practice debate has emphasised the policy capacity of the state in implementing novel innovation polices, whilst largely overlooking the role that a rich ecology of intermediary institutions, such as innovation agencies, foundations, funds and research and development focussed bodies, can play in providing a socio-economic foundation for translating and spurring ambitious challenge-driven policies into practice (Tokumaru, 2022).

Studying implementation has been at the heart of the Business Finland funded project "Towards an Entrepreneurial Welfare State? The Practices of Challenge-Driven Innovation Policies", which over the past three years has investigated applications of challenge-driven innovation in Finland. The Finnish experience demonstrates that intermediaries adopt a variety of roles and functions in their attempts to transform policy practice and conventional sector-based logics. Crucially, intermediaries must operate at different scales and administrative levels to achieve meaningful impact in highly path-dependent policy contexts.

We need to better understand the key role that innovation intermediaries can play in the success of challenge-driven approaches

Noting the need to further explore the role of intermediaries in these contexts and acknowledging that the UK has long been a forerunner in fostering advanced ecosystems of intermediaries in different thematic areas, Hanken School of Economics and UCL Department of Science, Technology, Engineering and Public Policy (STEaPP) collaborated in organising a policy colloquium "Maximising the Potential of Intermediaries in Challenge-Driven Innovation Policy" at UCL that brought together Finnish and UK policy intermediaries to discuss the implementation of challenge-driven policies. The event was held on the 4th of June 2024 and attended by experts from Sitra; Business Finland; Itla Children's Foundation; VTT Technical Research Centre; ETLA Economic Research; NHS Horizon; CivTech Scotland; Social Finance; The Young Foundation; Bedfordshire, Cambridgeshire and Hertfordshire Federation for Small Businesses; The Children's Foundation; Climate Solutions Catalyst at Grantham Institute; and UCL Innovation and Enterprise.

Materials and methods

The event featured presentations from leading innovation scholars Professor Rainer Kattel (UCL IIPP), Professor Jo Chataway (UCL STEaPP), and Dr Ville Takala (Hanken School of Economics), and a facilitated discussion with the aim to broaden our understanding of the pre-conditions of successful intermediation. The discussion centred on the following three key questions for intermediaries, informed by priorities and gaps emerging from the Business Finland project cited above:

- How should strategic goals be set, and what tools are available to achieve them?

- How should these goals be communicated in times of increasing societal polarisation?

- How can better coordination between actors be achieved at a system level?

Event discussions were recorded and transcribed with permission from the participants. Transcripts were read back, and key emerging themes were recorded and summarised. The NVivo software was used to support the analysis.

Discussion and key topics

Five key themes were identified as increasingly falling within the remit of intermediaries as actors within innovation ecosystems

Participants noted that recent years had witnessed growing traction for challenge-driven innovation from the very highest levels of politics and policymaking to smaller-scale and grassroots settings and that their institutions are all actively engaged in navigating this space. Five key topics of relevance to the intermediaries are discussed in the following sections: Changing traditional conceptions of the role and function of public bureaucracy; Bridging the gap between different administrative levels and sectors; Promoting a shared language of missions; Supporting decision-makers to use different kinds of evidence; and Innovation intermediaries as convening spaces.

Theme 1: Changing traditional conceptions of the role and function of public bureaucracy

1: Changing our thinking about the evolving role of government

Participants suggested that our thinking about the role of government had not evolved alongside a rapidly changing social and physical environment and that our comprehension and articulation of the value of intermediaries in supporting this evolution is still in a nascent state.

> *"We are still thinking in a very 19th century way about civil service as something that's politically neutral, managerialist, and applies universalist tools, drawing on averages."*

> *"It's not about the rules and regulations but also about how you can in an intuitive way describe the role or even the identity of those kind of [intermediary] organisations."*

There was a broad consensus that despite shifts in aspiration and changes towards "challenge-driven" language, governmental practices have remained largely stuck in a traditional way of understanding the role and function of public bureaucracy, one that focuses on managerialism, political neutrality, and governing through the identification and management of national averages. Governmental conventions have been slow to change, and much of decision-making is presently based on fear of failure and loss of professional stature of civil servants. Participants suggested that although the rigidity of rules and processes was what often stood in the way of innovation, much had also to do with established behaviours, routines, and cultures of minimising risk. Challenge-driven innovation called us thus to rethink not just formal government rules, but also the behaviours, routines, and practices that policies ultimately were the outcome of.

With respect to the theoretical capacity of challenge-driven approaches to create new "targets" for bureaucratic support, many participants reflected on the practical challenges of developing social goals that could strengthen the "directionality" of policymaking. Participants emphasised that innovation intermediaries provided in principle effective and impactful spaces to both test the processes for developing and setting challenges and to enact new practices and professional cultures, more broadly. Many participants underscored the centrality of developing systems leadership and choreographing capabilities which meant the ability to bring together key stakeholders as well as new ways of relating to data and evidence (see also theme 4). Participants identified a tendency for novel practice to remain concealed in

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the government units established to promote it and emphasised thus the crucial importance of professionalising and standardising new skills and capabilities into career paths and other formal government structures.

Intermediaries' positions in existing ecosystems and their potential role in changemaking and change management need to be well-thought out and communicated, with many participants noting that at present, intermediaries face a major discursive challenge in communicating their role and significance in an intuitive way.

Theme 2: Bridging the gap between different administrative levels and sectors

2: Connecting high-level visions and bottom-up experimentation

Participants noted that they have seen a growing traction in challenge-driven innovation across governance levels and sectors. Innovation intermediaries are in principle well placed to adopt the role of connecting high level government visions and bottom-up experimentation.

> "*There is this paradox that you are going to have high-end missions that the minister agrees on […] and then you can have lots of bottom-up projects, but in the middle it's difficult to connect the two*"

> "*[…] having done engagement with a broad range of organisations, we have a very good potential environment in which to be mission-oriented, but […] getting the coordination between different actors on priorities is a big issue.*"

A common issue for the administration of challenge-driven approaches comes in connecting high level political visions and commitment and bottom-up activities and experimentation at the local, city, and regional levels. Participants identified the major disconnect that exists between different administrative levels as a significant current barrier to effective challenge-driven innovation policy, with national and local levels of policymaking too often operating "in their own universes". A central difficulty for challenge-driven innovation, also alluded to in the previous section, is that it requires not just statements of intent, but significant changes in organisational routines and structures, as well as the establishment of actors that can build new processes and connections.

Ultimately, the national level of policymaking still largely controls many processes through tendering. Since innovation intermediary organisations, amongst others, are usually dependent on the grants provided by central government, challenging or refusing existing conventions by not applying for tenders constitutes a near impossible task, or becomes self-defeating: "*[…] the only way that government will listen, is everyone not tendering on what is proposed, but there is no way a council is going to say we are not going to bid on that, the preference is, we will bid, and then we will circumvent the outcomes to what we need, and send government back the paper and say we achieved what we wanted, and that's the system.*"

Participants reflected on the centrality of questions of scale for any attempts to define strategic goals such as challenges or missions. Challenge-driven innovation offers, in principle, a framework for addressing global problems through local solutions. National priorities need to be situated in the context of global agendas for sustainable development e.g. Agenda 2023 which can "*provide a frame for missions to be understood in the context of development.*". Participants pointed out that although priorities might well be successfully established based on local need, conventional funding structures place significant conditionalities on who could

participate in building solutions based on fit to themes, size of organisation and so on. This dynamic set rigid boundaries for development actors both home and abroad and participants called for serious reflection about who established structures were working in the interest of.

In principle, challenge-driven innovation offers a framework for well-funded and coordinated long-term development that can bridge administrative levels and sectors with intermediaries providing a key supporting role. Many participants described having had success with implementing individual challenge-driven initiatives and programs. Moving beyond a project focus towards the coordination of systemic long-term missions had, however, proved very difficult. Coordination capabilities and mechanisms, across administrative levels and sectors, were identified as a central area in need of further development.

Theme 3: Promoting a shared language of missions

3: Actively supporting the creation of a shared language of missions

While an increased interest in and engagement with challenge or mission-driven approaches was apparent, participants reflected on significant challenges in shaping missions, disparities visible in the way that these are developed, communicated and operationalised and the actors involved in doing so.

> "*re-framing of the mission-based approach from central government […to] come up with the language that people can commit to for twenty years*"

> "*How might we find the appropriate level of concreteness to bring the different actors and layers together where there is something actionable and so on?*"

> "*the challenge is always the same, it's overwhelming, like it's so big and complex […] how do you break that down so that as humans we don't feel so helpless?*"

Participants underscored the importance and reflected on the practical difficulties of defining strategic policy goals with the right level of concreteness, with a tendency to stay at a higher level of abstraction: "*[…] it's safe to stay at this level, we know it's not very operational, but given the dynamics you'd rather stay there so there is no conflict, then you leave it to the agencies underneath to sort this out, and leave it to the policymaker to deal with the compromise.*"

Participants warned against disaggregating significant policy areas in the setting of effective challenges, such as climate and social policy. Instead, the two should be understood as inter-linked: "*There is an artificial disaggregation between social and climate because they are intrinsically linked […] you can't really think about social policy without thinking about the structures that then enable that policy to be set.*" Participants also noted that when working with technology professionals in particular, conventional and emerging policy rationales overlapped in the design of policies.

A central topic of debate concerned the appropriate language for communicating strategic goals in times of increasing polarisation around the language of politics. For example, politically polarising words like "green", have been seen to hamper the ability to structure long-term development, since no grand challenge could be solved in one government term alone and programmes run the risk of being cancelled as a result of political shifts. Participants thus emphasised the urgency and importance of trying to establish a more neutral, shared language that could bring parties together around long-term societal goals: "*Part of how we depoliticise things as well is how to speak tangibly about benefits of investment for public funders.*"

Participants noted a tendency for incoming governments to repurpose challenge-driven/mission-oriented instruments, such as state development funds, for their own purposes. They reflected on the recent closure of a Finnish state development fund, whose role had gone through constant iterations in recent government terms: *"it came out [originated] like a state development fund, and it was more focused on digitalisation originally, then climate and green transition. Every government repurposes it for their own uses. Now comes the third government, a right-wing government that doesn't like the word green at all, green transition is named clean transition, so of course [it] didn't fit this."*

An important question raised in the colloquium concerned the extent to which policy intermediaries should themselves define strategic focus areas, such as challenges or missions, or whether they should more closely adopt the position of being actors who support the delivery of priorities set by, for example, an elected government. Participants reflected on the conflicting demands intermediaries often faced. A central tension identified by the participants was the need to achieve significant societal impact whilst at the same time maintaining a position of neutrality towards politics: *"[…] one tension is between co-creating results and future-oriented work, and politicians want impact and co-creation, but they want intermediaries not to be involved in political, everyday politics."*

Theme 4: Supporting decision-makers to use different kinds of evidence

4: Acting as diverse knowledge creators and integrators

Participants reflected generally on how we can best draw on diverse sources of evidence to shape projects and programmes and demonstrate impact. They also reflected on the need to act in the face of limited or absent evidence.

> *"What is good data? […] our governments are still quite dismissive of qualitative data."*

> *"[…] when we are in the data we need to be very careful with what we want out of it, and if there [are] things that we cannot measure, we should be able to articulate."*

There was a shared sense of a lack of agreement in theory and practice on what makes "good" data and a strong feeling that qualitative data is still often seen as secondary to quantitative data. This can lead to an approach in which we: *"measure what's measurable, not what matters to people."* Participants noted this and increasingly seek opportunities to work differently, with new methods and approaches on the horizon including "Rapid Insight" – an approach developed by NHS Horizons which turns data from highly interactive large-scale events, into knowledge that can be acted upon to positively affect change. *"Since all good learning has a social base and large-scale change requires us to learn our way to a new future, how we make sense of data in as close to real time as possible with and alongside people - in ways that are open and transparent - becomes increasingly important. We need to be able to bring in structures that allow the right answers to emerge using participatory approaches, only then can we iterate and layer our understanding, and move together as a community or system, towards shared purpose."*

Reflecting on how to better utilise public sector data in policymaking, participants noted that in principle the public sector has access to a wealth of data, from health care records, legal systems etc. and on economic transactions through VAT records, which is likely not being fully exploited in setting or evaluating challenge-driven approaches: *"once you think of this universe of data and then think of those additional data points you need to evaluate the impact of whatever you are doing*

and you don't need very much extra." One diagnosis explained a key issue as: "*the divide we put between policy for science and science for policy, and that actually the challenge is to integrate much more the policy instruments we use to stimulate innovation and science*".

Participants underscored that the increasing pace of societal change called us to rethink our understanding and conception of value and the metrics by with we measure impact or success. Much of governmental decision-making, even with a challenge-focus, is still based on a narrow understanding of value solely as economic value. One participant reflected that [proposers]: "*come forward with really good challenges, they are really clear about outcomes and qualitative things they'd like to look at, but then we get to a certain point in our process we do have to take out the green book, we say okay right, how do we justify this, and what are the expected benefits.*" They offered cases where economic value had fallen short of explaining the impact of a challenge-driven approach including conflicting perspectives on biotech in Finland: "*my colleagues went and tracked the funders and employees, now in this specific case the return of public investment is somewhere between ten to hundred times [x] of initial investment, so that was a stunning success, but everybody in Finland who is in innovation policy 'knows' that that was a government failure.*" due to the eventual failure of many of the businesses that spun out of it.

Intermediaries can play a crucial role in enabling engagements that bring together a diversity of voices and insights in shaping, making and evaluating policy: "*in terms of big policy debates there is a shift toward system learning type of approach, more experimental, feedback loops, kind of action learning […] having intentional conversations about what people are willing to give up, or let go of […] in order to create space for something new […] creating environments where we can be more intentional [we] need intermediaries to create those environments.*"

Theme 5: Innovation intermediaries as convening spaces

5: Proactively convening spaces for conversing, meeting and sense-making

Intermediaries acting as convening spaces for conversing, meeting and sense-making was an overarching theme throughout the colloquium. Participants discussed the appropriate balance between supporting public, private and other interests and their current approaches for doing so as well as reflections on personal skills and capacities.

"*[…] the role[s] that you take up as an intermediary […] is rooted in the practice of plurality management. It sort of says that your tensions aren't problems to solve they are pluralities to manage and I think that the role of an intermediary can do that really effectively […]*"

"*[…] to be the one who understands how the government can support businesses and innovation, what is the role of that and what is the role of social innovation and public sector innovation, and how do you connect these, and what kind of facilitator do you need there?*"

Participants discussed the appropriate balance between supporting businesses, and innovation in facilitating economic growth on the one hand, and social and public sector innovation, on the other and the need to be able to navigate within and between a variety of groups and perspectives. They explored questions of how we convene "*a range of different actors and stakeholders to address shared questions that help take forward shared purpose over time […] convening, collaborating […]*

how you distribute the decision-making to a group and creating conditions where they can determine how they want to move forward."

According to the participants, a central role for intermediaries is increasingly to provide the spaces for the difficult conversations to be had. While these conversations are not always solved in these spaces the process of having the conversation will have been of value, encouraging and supporting actors to have: "*the conversation that is useful - having the difficult conversations instead of having the easy ones."* Intermediaries can offer a mediating role and / or negotiating space, working to determine: *"[…] what are actors willing to give up to […] move things forward? One of the roles of the intermediary is to […] facilitate that discussion and […] and that's a skill and an attribute in its own right, and there is not an easy answer in terms of how we develop that bringing in your own institutions your cultures your behaviours your norms and stuff […] compromises need to take place."*

Inevitably, novel practice in challenge-driven approaches conflicts with established conventions of policy development. One of the proposed roles of intermediaries was, therefore, to facilitate the negotiation of the ensuing conflicts. Conflicts may arise in the methodologies adopted by challenge-driven approaches, requiring direct and active management of the situation by the intermediary through the actions and capacities of its staff: "*[…] a good example would be co-production and then directive action […] sometimes when my clients or partners or stakeholders get frustrated because co-production can take longer and be more expensive […] as the leader I will move to a more directive approach […] actively managing that plurality to make sure that you are […] in service of the mission as opposed to being in service of one of the values."* Participants agreed that assuming this role requires self-awareness, recognising that there are likely to be perspectives with which you more naturally personally align, and an ability to: "*work out very quickly at what side of that plurality you would naturally sit - but it challenges you to see the world through that other person's viewpoint."*

Challenges for innovation policy

Intermediaries can support new thinking and doing regarding the role of government, acting as experimental spaces or test beds for new approaches, practices and cultures

Key points for innovation policy, which intermediaries are well placed to action include:

- Enabling the evolution of our thinking about the role of government, experimenting with and enabling more nimble, responsive and inclusive processes of decision-making

- Acting as spaces, physical and philosophical, to experiment with approaches for developing and setting challenges by:

    o Providing coordination capabilities and mechanisms required in taking a challenge-driven approach

    o Connecting high level government visions and bottom-up experimentation

    o Empowering and engaging a range of stakeholders across public and private sector and civil society

    o Developing platforms for bringing together a diversity of voices and insights in shaping, making and evaluating policy

- Acting as test beds to develop and enact new practices and professional cultures, by:

  o Providing expertise and support for integrating a wide range of knowledge into decision-making

  o Facilitation, negotiation and conflict management across the challenge process

  o Enabling the consideration of a wider range of values as a measure of project success

Proposals for action

These roles can be further enabled by acknowledging the value case and contribution of intermediaries and improving access to resources and support

- Make evidence supported and well-communicated value cases for intermediaries, based on an understanding of their contributions to date including:

  o How they have contributed to the empowerment and engagement of a range of different stakeholders across public and private sector and civil society

  o Their effectiveness in defining strategic focus areas (challenges or missions) vs supporting those already set by other actors

- Provide access to resources / funding opportunities to support intermediaries beyond a project focus, towards the coordination of systemic long-term challenges / missions

- Unpack and explore ways to practically navigate the conflicting demands placed on intermediaries, in achieving societal impact while navigating polarising issues within a complex political landscape.

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