University Library



A gateway to Melbourne's research publications

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
McGann, M;Wells, T;Blomkamp, E

Title:
Innovation labs and co-production in public problem solving

Date:
2021-01-01

Citation:
McGann, M., Wells, T. & Blomkamp, E. (2021). Innovation labs and co-production in public problem solving. Public Management Review, 23 (2), pp.297-316. https://doi.org/10.1080/14719037.2019.1699946.

Persistent Link:
https://hdl.handle.net/11343/297243

License:
CC BY-NC-ND



Public Management Review

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rpxm20

Innovation labs and co-production in public problem solving

Michael McGann, Tamas Wells & Emma Blomkamp

To cite this article: Michael McGann, Tamas Wells & Emma Blomkamp (2021) Innovation labs and co-production in public problem solving, Public Management Review, 23:2, 297-316, DOI: 10.1080/14719037.2019.1699946

To link to this article: https://doi.org/10.1080/14719037.2019.1699946

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 10 Dec 2019.

Submit your article to this journal

Article views: 6133

View related articles

View Crossmark data

Citing articles: 18 View citing articles

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=rpxm20

PUBLIC MANAGEMENT REVIEW
2021, VOL. 23, NO. 2, 297–316
https://doi.org/10.1080/14719037.2019.1699946

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Innovation labs and co-production in public problem solving

Michael McGann, Tamas Wells and Emma Blomkamp

School of Social and Political Sciences, University of Melbourne, Melbourne, Australia

ABSTRACT

Governments are increasingly establishing innovation labs to enhance public problem solving. Despite the speed at which these new units are being established, they have only recently begun to receive attention from public management scholars. This study assesses the extent to which labs are enhancing strategic policy capacity through pursuing more collaborative and citizen-centred approaches to policy design. Drawing on original case study research of five labs in Australia and New Zealand, it examines the structure of lab's relationships to government partners, and the extent and nature of their activities in promoting citizen-participation in public problem solving.

KEYWORDS Public innovation; public sector innovation labs; policy advisory systems; co-production; co-creation

1. Introduction

Over recent years, governments in various countries have increasingly established innovation labs to enhance their capacity for public problem solving. These innovation labs can be understood as 'new organizational arrangement[s]' (Timeus and Gascó 2018, 993) for enabling more experimental and user-focused approaches to public policy and service design. By 2016, more than 60 policy innovation labs had already been established within EU member states (Fuller and Lochard 2016) while some estimates suggested that, worldwide, new labs were being created at 'a rate of at least one a month' (Price 2015). Moreover, this phenomenon was not confined to European and North American countries. Several Latin American and Caribbean countries had also established innovation labs as part of a wider 'focus on issues of open government' and digital transformation (Acevedo and Dassen 2016, 3).

Despite the speed at which these new units are being established, innovation labs have only recently begun to receive attention from scholars in public administration (see, for example, Lewis, McGann, and Blomkamp 2019; McGann, Blomkamp, and Lewis 2018; Nesti 2018; Tõnurist, Kattel, and Lember 2017; Williamson 2014, 2015b). Much of this scholarship has focussed on their role in applying so-called 'design thinking' approaches to public problem solving, broadly understood in terms of 'human-centred' approaches that draw on the creative processes used by industrial and product designers to generate, test, and iterate solutions with potential policy 'users' (Bason and Schneider 2014; Clarke and Craft 2018; Kimbell and Bailey 2017;

CONTACT Michael McGann mmcgann@unimelb.edu.au

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Lewis, McGann, and Blomkamp 2019; McGann, Blomkamp, and Lewis 2018; Mintrom and Luetjens 2016). To this extent, the rise of innovation labs is said to reflect a turn towards new forms policymaking characterized by a greater emphasis on the values of empathy and creativity, and the use of abductive forms of reasoning (Lewis, McGann, and Blomkamp 2019; Bailey and Lloyd 2016). However, critical commentators caution that the 'labbing' of policy problems may be symptomatic of longer-term trends in public management and administration. They point specifically to the shift from Public Administration to New Public Management and the tendency of the 'reluctant state' to displace responsibilities onto 'a messy patchwork' of outsourced providers and non-state actors (Williamson 2015b, 253).

This outsourcing has manifested in governments contracting policy advice from the market and relying on think tanks and interest organizations as sources of policy ideas rather than resourcing strategic policy capacity within the public sector. As a result, policies are said to be no longer made by professional bureaucracies but through markets and state-society networks (Capano, Howlett, and Ramesh 2015). The result is a 'deinstitutionalization dynamic' (Craft and Wilder 2017, 219) or 'pluralist turn' (Pautz 2011, 430) in policymaking, wherein control over policymaking is no longer monopolized by traditional advisory units but shared between 'multiple actors of influence' (Craft and Wilder 2017, 219).

This study attempts to systematically differentiate innovation labs' role in policy systems from both traditional advisory units within government and the influential non-government actors that are the focus of the literature on deinstitutionalization in policy advisory systems. While the distinctiveness of innovation labs as organizational units within the public sector has received considerable attention (e.g. McGann, Blomkamp, and Lewis 2018; Puttick, Baeck, and Colligan 2014; Schuurman and Tõnurist 2017; Tõnurist, Kattel, and Lember 2017), their relationship to, and distinctiveness from, non-government policy actors such as think tanks and consultancy firms has received far less attention. This latter characterization can help us to understand what is distinctive about the emergence of innovation labs in comparison to other forms of pluralism in policymaking, and the extent to which the turn towards labs is indicative of qualitatively different governance dynamics.

Drawing on case studies of five innovation labs in Australia and New Zealand, it proposes that labs' can be differentiated from other strategic policy actors by their focus on incorporating user-driven perspectives in public problem solving and that their proliferation indicates a shift towards co-productive governance models. In developing this argument, we differentiate empirical and descriptive claims about the deinstitutionalization of policy advisory systems and growing influence of market and civil society actors from alternative models of pluralism in policymaking grounded in concepts of 'co-production' and 'co-creation'. Reviewing the literature on innovation labs, it is hypothesized that the activities, methods and approaches of innovation labs are emblematic of co-productive models of public problem solving. This is further demonstrated through an empirical analysis of lab practitioners' descriptions of their unique contribution to policy systems, the different activities undertaken by labs for government, and the modes through which they incorporate citizens' perspectives into policy design. This analysis also sheds light on the substantial difficulties organizations face in re-orientating policymaking towards co-production with citizens, which are reflected on in the conclusion.

2. From deinstitutionalization to co-production

The 'deinstitutionalization' of policy advisory systems describes the displacement of a hierarchical mode of coordinating policymaking by a more distributed approach involving an ever-increasing *plurality* of non-government actors (Craft and Wilder 2017, 219) – at least within the family of 'Westminster' systems. In contrast to the statist (Weberian) model of public administration, the professional public service is now only one actor among many in policy arenas that have become 'dotted by a constellation of advisory supplies and practices' (Craft and Wilder 2017, 218), and which t'Hart and Vromen (2008, 145) liken 'to the operation of a market.' Summarizing this shift, Craft and Howlett (2013, 85) argue that 'government decision-makers now increasingly sit at the centre of a complex "horizontal" web of policy advisors' from inside and outside government. As studies on the externalization of policy advice show, this includes a growing 'hidden public service' (Craft and Howlett 2013, 194) of policy consultants (Craft and Howlett 2013; Veselỳ 2013; Saint-Martin 2000). Although think tanks are also an increasingly 'important component of the political landscape' (Fraussen and Halpin 2017, 109), with Stone (2007) documenting a 'global think tank boom' since the 1980s as policymaking has opened up to the influence of non-government actors.

This pluralization of policymaking is welcomed by many as a necessary response to the failure of 'command-and-control' models to develop strategic responses to policy problems of a complex nature. Reasons for this perceived lack of capacity include a shift in the emphasis of public administration staff from analytical to managerial (process-management) forms of expertise since the 1980s (Veselỳ 2013) and governments' focus on short-term issues 'high on the current agendas of political elites' at the expense of longer-term policy work (Fraussen and Halpin 2017, 106). Accordingly, it is argued that a vibrant landscape of non-governmental policy actors can provide 'a complement to the government's internal policy capacity' (Anderson 1996, 472). Fraussen and Halpin (2017) argue that interest organizations and think tanks can enrich substantive policy capacity through their ability to adopt 'proactive policy stances' and their willingness to invest in developing innovative policy ideas. Craft and Howlett (2012, 91) similarly position think tanks as 'evidence-based policymaking' actors due to their capacity to supply substantive and long-term policy advice. Although this association is questioned by more critical commentators who highlight how think tanks' seek to exercise 'discursive leverage' (Stone 2007, 265) over policy agendas via their public media presence and organization of events (t't'Hart and Vromen. 2008, 137–38).

Like the pluralist turn in advisory systems, the proliferation of innovation labs is said to reflect a response to a dearth of strategic policy capacity within the public sector. However, innovation labs straddle the divide between the public and private sectors and rarely fit straightforwardly within dominant conceptual models of policy advisory systems. Indeed, several of the most prominent international examples of innovation labs, such as La 27e Région in France and MaRS Solutions Lab in Canada, lie formally outside the public sector (McGann, Blomkamp, and Lewis 2018). What these non-government organizations share in common with their counterparts based within government is a commitment to public sector innovation 'as their main task and indeed their raison d'être' (Tõnurist, Kattel, and Lember 2017, 1456).

Bellefontaine (2012) characterizes innovation labs as a kind of 'do tank', while Williamson (2015a, 4) describes them as organization hybrids 'for solving the social and public problems that vex governments' that combine elements 'of the political

think tank … design and digital R&D lab.' International research suggests that many labs are relatively small organizational units that have been operating for only a few years. Fuller and Lochard (2016, 1) research on policy labs in Europe found that the majority were 'in and of themselves experimental initiatives' with a median age of just two years. In many cases they are also reliant on political patronage, which puts them at risk of being dissolved or having their funding reduced as 'political priorities change' (Timeus and Gascó 2018, 995).

Think tanks and innovation labs share several organizational features. Both are generally characterized by a high level of organizational autonomy and capacity to work across policy sectors. Studies suggest that innovation labs enjoy a large degree of organizational autonomy from the ministerial departments and agencies that fund them (Timeus and Gascó 2018), and that most also 'work across government departments or agencies' (Tõnurist, Kattel, and Lember 2017, 1467). This 'inter-sectoral' (Fuller and Lochard 2016, 14) focus is a characteristic shared with many think tanks (Fraussen and Halpin 2017, 120). However, a key point of difference between think tanks and innovation labs is the latter's collaborative focus on 'crafting new solutions *with* people, not just *for* them' (Carstensen and Bason 2012, 6). This is especially true of labs underpinned by a co-design methodological framework, which aligns normatively with theories of participatory policymaking in emphasizing the need for 'people affected by a policy issue to actively contribute to developing a solution for it' (Blomkamp 2018, 4). At a more pragmatic level, this 'cross-disciplinary and citizen-driven' focus (Tõnurist, Kattel, and Lember 2017, 1466) is argued to enhance implementation outcomes by promoting greater administrative awareness of how citizens 'experience and interact with social problems, services, and programmes' (Clarke and Craft 2018, 8).

In contrast to think tanks and interest organizations, who prepare readymade options for when policy makers 'reach into the policy stream' for solutions (Halpin and Fraussen 2017, 9), innovation labs purportedly follow 'an approach based on open innovation, experimentation and citizen participation' (Nesti 2018, 311). Drawing on a variety of 'design thinking' methods (e.g. human-centred design, ethnographic research) they aim to bring 'into view the experiences and worlds of people affected' by the policy or programme issue at hand (Kimbell 2016, 316) as a corrective to traditional models of public administration where responsibility for policy design is 'monopolized by public officials and users are passive consumers' (Nesti 2018, 311). Viewed this way, the rise of innovation labs is emblematic of a shift towards co-production and the co-creation of policy solutions (Nesti 2018) rather than the competitive pluralism of deinstitutionalized advisory systems where: state, market and civil society actors vie for influence within 'a competitive "field-like space"' (Pautz 2011, 420) and the public itself is rarely 'treated as a source of ideas and knowledge' (Stone 2007, 268). This is in contrast to the concept of 'co-production' – or 'co-creation' as used synonymously in much of the public administration literature (Voorberg, Bekkers, and Tummers 2015; Torfing, Sørensen, and Røiseland 2019) – which treats citizens and service users as integral policy actors. This is not least because citizens unavoidably participate in implementing policy outcomes (Osborne, Radnor, and Strokosch 2016), and are 'essential to making a service actually work by going along with its requirements' (Bovaird and Loeffler 2012, 1122). A basic example is municipal waste recycling schemes, which depend on citizens 'co-producing' the service through separating different types of garbage for collection (Voorberg, Bekkers, and Tummers 2015, 206).

As a model for public sector reform, the embrace of co-production denotes the '*active involvement* of end-users' (Voorberg, Bekkers, and Tummers 2015, 1335) as partners in various stages of the design, management, and delivery of public sector activities. Osborne, Radnor, and Strokosch (2016) differentiate co-design and co-innovation, on the one hand, from co-production and co-construction, on the other, where the former denotes the voluntary and active participation of end users in co-creating public services and systems, and the latter refers to involuntary or passive modes of user-involvement. Co-production for others is 'an umbrella concept' (Nabatchi, Sancino, and Sicilia 2017, 770) that captures a wide variety of activities from co-planning, to co-design, to co-delivery and co-evaluation. It is animated by the idea that citizens and other affected users should be treated not 'as passive . . . subjects' (Torfing, Sørensen, and Røiseland 2019, 796) on the receiving end of services but as 'huge untapped resources' (Nabatchi, Sancino, and Sicilia 2017, 770) whose knowledge and experience can be mobilized to drive innovation. Nabatchi, Sancino, and Sicilia (2017, 769) argue that co-production fundamentally requires the involvement of members of the public (or '*lay actors*'), as citizens, clients or consumers, in co-creating public value with professional 'state actors' such as policy designers, bureaucrats, or frontline service workers.

While co-production has predominantly been applied to promote user participation in *public services* (for example Bovaird and Loeffler 2012), especially service *delivery* (Fledderus, Brandsen, and Honingh 2014), it is increasingly being extended to activities such as regulatory formulation and the co-creation of policy solutions to complex problems (Torfing, Sørensen, and Røiseland 2019). Co-production in policy design is fundamentally different to conventional policy design, explain Durose and Richardson (2016, 35), in that it is 'a means of transforming public services, by challenging traditional relationships or power, control and expertise'. As a model for public problem solving, it requires collaboration between state and lay actors 'to find new and better solutions to shared problems and challenges' (Torfing, Sørensen, and Røiseland 2019, 802) through negotiating different understandings of collective problems and jointly testing policy blueprints. In stressing multi-actor collaboration, co-production approximates the model of collaborative governance, which Ansell and Gash (2008, 543) conceptualize as 'as a 'mode of governance [that] brings multiple stakeholders together in common forums with public agencies to engage in consensus-oriented decision making.' But what differentiates co-production from collaborative governance is the former's involvement of 'lay actors' (Nabatchi, Sancino, and Sicilia 2017, 770) and valuing of citizen-participation as 'a lever of public innovation' (Torfing, Sørensen, and Røiseland 2019, 802).

From an administrative perspective, bringing together 'actors with different experiences and perspectives' (Hartley, Sørensen, and Torfing 2013, 826; see also Mintrom and Luetjens 2016) purportedly benefits policymaking by increasing the likelihood that the nature and underlying causes of problems will be understood. Involving affected citizens in public problem solving can help to reframe problems in more acute and nuanced ways 'than professionals acting alone' (Fung 2015, 5); for instance, through overcoming information asymmetries between public administrations and policy users. The involvement of a wider array of actors also offers more diverse insights. This can in turn promote 'more adaptive' (Booher 2004, 35) and context-sensitive responses while mitigating the risk of public agencies 'wasting money, time and energy on solving the "wrong" problem' (Sørensen and Torfing 2015, 152). Co-creation can

also build joint ownership of potentially risky solutions, thereby increasing their likelihood of implementation and avoiding some of the execution problems that can derive from top-down governance models (Sørensen and Waldorff 2014).

Several of the purported benefits of co-production are more normative in quality. These include building trust in institutions (Fledderus, Brandsen, and Honingh 2014) and enhancing democratic accountability in policymaking (Nabatchi, Sancino, and Sicilia 2017; Durose and Richardson 2016). Some also argue that co-creation in public problem solving can help 'to strengthen social cohesion and build more resilient communities' (Torfing, Sørensen, and Røiseland 2019, 810) through empowering local actors and marginalized groups. In other words, co-production is considered intrinsically valuable *as a process* regardless of the quality or effectiveness of the outputs produced. Indeed, one of the key outstanding empirical questions concerning co-production is quality of the results, and whether co-production approaches to public problem solving actually deliver solutions that 'address the needs of citizens in a robust way' (Voorberg, Bekkers, and Tummers 2015, 1348). In particular, a key question is whether co-production processes can be readily extended from the relatively stable domain of service provision – where stakeholders can be easily differentiated into providers and service-users – to the less institutionalized context of public problem solving in which a broader range of actors 'can claim to be relevant and affected, although in varying degrees' (Torfing, Sørensen, and Røiseland 2019, 807). This question especially applies to the activities of innovation labs, with studies indicating that the majority of labs' projects are 'service-centred' and focused on the re-design of discrete public services rather than the co-creation of policy solutions to more systematic challenges (McGann, Blomkamp, and Lewis 2018, McGann, Lewis and Blomkamp 2018; Clarke and Craft 2018; Lewis, McGann, and Blomkamp 2019; Tõnurist, Kattel, and Lember 2017). Clarke and Craft (2018, 10) perceive this as unsurprising, arguing that innovation labs' favoured lens of user-centrism is not especially applicable to, or appropriate for, the politically contentious nature of *policy* design choices.

3. Study and method

To further analyse the role of innovation labs in relation to governance shifts in policy systems and the co-production of public problem solving, we report on case studies of five innovation labs in Australia and New Zealand. The context of Australia and New Zealand was chosen as the region has been significantly underrepresented in policy innovation literature, despite both countries' governments making significant commitments to a 'public sector innovation' agenda. The study was funded by the Australia and New Zealand School of Government as part of a project to map the locations and characteristics of innovation labs in the region, as these had not yet been systematically researched. Following an initial survey of more than 50 innovation units in Australia and New Zealand, in which each case study lab also participated, five cases were chosen. Selected to capture the diversity of labs identified in the survey, they represent the different sectors and jurisdictions labs work within as well as the different methods and approaches they utilize. Principal component analysis on the types of public sector innovation activities reported by labs suggests that they cluster around three different domains of public sector innovation: *policy development and reform, user and customer experience design*, and, to a far lesser extent, *evaluation and systems improvement* (for details of this

analysis see McGann, Lewis, and Blomkamp 2018). The tools and approaches used by labs also cluster around three different methodological frameworks, although the majority of labs drew from across these methods: *human-centred design* (e.g. interviews, ethnographic fieldwork, user testing), *agile methods* (design sprints, lean project management techniques), and *evidence-based approaches* (randomized control trials, survey research, [big] data analysis).

The sampled labs capture a mix of units at different levels of government (local, state, and federal/national), in different sectors (public, private and not-for-profit), a range of sizes, and employing varied methodological approaches (see Table 1). This includes three innovation labs based within different levels of government, ranging from the central coordinating agency of an Australian state government (GovLab1), to a partnership between a municipal government and eight national government agencies (GovLab2), to a national ministerial department (GovLab3). Two non-government innovation labs were also included in the research: a not-for-profit innovation agency that was initially established by a state government almost a decade before, and which reported 'very frequently' working on projects for state governments in Australia (Lab4); and a large commercial design agency established over 10 years ago, and which reported 'frequently' working on projects for both state and federal government departments (Lab5). Both non-government labs depend heavily on public funding, with the for-profit design agency deriving 85 per cent of its income from government clients and the non-profit organization receiving half of its annual funding from government clients.

The initial survey data is complemented in this article by semi-structured interviews undertaken in mid-2018 with lab directors, key project staff (e.g. design leads, technical analysts) and commissioning organizations, as well as analysis of labs' websites and documentary material provided. The study included both lab 'insiders' (staff and directors of labs) and 'outsiders' (commissioning agencies and other bureaucrats and partners). In total, 35 interviews were conducted across the five labs, including seven interviews with officials from government organizations at various levels that had partnered with or commissioned the innovation labs in the study. Interviews with lab employees were predominantly on-site, with one co-author spending several days at each organization attending meetings, observing operations, and interviewing staff members. The interviews explored why and by whom the labs were established, the nature of their current activities, the diversity of stakeholders they regularly worked with, and the form that this collaboration took. With one exception, the interviews with key informants from partner and commissioning government organizations were conducted by phone following the initial fieldwork, with questions addressing their organization's motivations for engaging the respective lab, their experience of working with the lab, and their perspective on the contributions and policy impacts provided by the lab's work.

4. Findings

4.1. Labs as conduits to citizens

The lab staff who participated in the present study, both within and outside of government, viewed the organizations they worked for as a distinct kind of policy actor compared to either traditional public sector agencies or the range of consultancy firms contracted by governments. In interviews, key informants tended to position their own labs against both 'traditional' public sector units and other external policy

Table 1. Profile and characteristics of labs.

	GovLab1	GovLab2	GovLab3	Lab4	Lab5
Size (no. of employees)	18	5	15	40	80
Year established	2015	2015	2016	2009	2005
Ownership structure	Unit within a state government coordinating agency	Partnership between municipal government and eight New Zealand government agencies	Nested within an Australian Government ministerial department	Not-for-profit organization	For-profit agency
Key methods	Human-centred design Agile methods Evidence-based approaches	Human-centred design	Agile methods Evidence-based approaches	Human-centred design Agile methods	Human centred design
Main domain of innovation	Policy development and reform User and customer experience design	User and customer experience design Policy development and reform	Policy development and reform	User and customer experience design	User and customer experience design
Policy areas worked on	Social Health Justice system Governance and administration Indigenous affairs	Employment Education Social Governance and administration	Economic Education Social Health Governance and administration	Economic Employment Education Social Indigenous affairs	Environment Energy Education Social Health

Note: Staff numbers are estimates only as they varied significantly over time as projects changed.

actors. Those who worked for government-based labs repeatedly distanced themselves from career public servants and sought to demarcate their lab from the broader public service. They saw themselves as 'changemakers' in policy systems, positioned in a kind of 'outsider role' (GovLab2, INT7) with responsibility for growing capability for 'doing it [public problem solving] differently' (GovLab1, INT4). As one lab director explained: 'We're not business-as-usual … our job is to find those levers for change within the [government], and to work well with social entrepreneurs in the community' (GovLab2, INT8). Those who worked for the lab based within the Australian state government described it as 'performing a very non-traditional function' (GovLab1, INT5) in terms of its relationship to other agencies. Instead of the traditional top-down way of working by a central agency telling line agencies 'what to do', they described a more horizontal and 'very non-central way of working' (GovLab1, INT5). Although not always articulated as a 'design thinking' approach, this team equated doing things differently with 'deeper engagement with those that will be most affected' by a policy or service (GovLab1, INT2).

Those working for non-government labs similarly saw their contribution as 'a voice that can disrupt their [government's] system' (Lab4, INT17). They were also careful to disassociate themselves from the consultancy firms typically contracted by government, which were perceived as 'geared towards meeting its shareholders and its partners' [financial interests]' (Lab4, INT15) rather than 'some kind of purpose and impact' (Lab5, INT24). Another critical point of difference for interviewees was how labs approached public problem solving in comparison to large consultancy firms, which they saw as approaching problems with already pre-determined solutions and 'squeezing every drop' (Lab5, INT23) out of 'their vast collection of previous work' (Lab5, INT22). By contrast, innovation labs reportedly offer something 'very unique' (Lab5, INT22) based on a deep understanding of policy users' lived experiences and each problem situation:

> We're never saying, "Here's your answers" … Our point of difference is that we come in solving intractable human problems … in step and with the client and with the people they interact (Lab5, INT26).

Interviewees equated labs' changemaking role with providing a 'conduit' between government and the public so that 'people who are living in these systems feel meaningfully involved in the policy process' (Lab4, INT18). A government agency manager described working with one lab as, 'I feel so much more like the voice of the client is influencing inside government' (GovLab2, INT14). This had pragmatic value as a means of bridging the divide in public administration between the goals of policymakers and citizens' experiences of interacting with services and programmes (Clarke and Craft 2018; Mintrom and Luetjens 2016). For example, a design lead identified how their lab's engagement with communities and local service delivery agencies positioned it 'to be deep and close to the implementation' (GovLab2, INT9) and to 'face back up to central government' the challenges that communities encountered using and accessing services. Interviewees drew attention to the pitfalls of public managers designing services without sufficient citizen input; 'making decisions about new tools and methodologies, and then it just lands. It's like, "and now you'll use this!" (GovLab1, INT3). But others articulated this emphasis on "bringing the voice of the citizen into the solution development process" (GovLab1, INT3) in normative terms, pointing to how their lab empowered marginalized groups. This was especially true of interviewees who worked for labs that espoused a co-design approach (GovLab2, Lab4)

because of its potential for "shared power and a different relationship to people" (GovLab2, INT9). Labs' use of co-design could be transformational for both government and clients, not only by effectively addressing social issues and policy challenges, but also as 'a way of involving people in the decisions that shape their lives, which in and of itself produces outcomes for them' (Lab4, INT17). This reflects the normative agenda of co-production, which aims to address the failure of conventional policy design to share responsibility and trust with citizens and consequently to adequately address complex public problems (Durose and Richardson 2016).

4.2. Reframing problems rather than collaborative problem solving

Interviewees positioned labs as contributing to new forms of public problem solving, specifically through providing a conduit between government and users as part of a more participatory approach to policy development. This commitment to widening citizen participation, especially through engaging with some of the 'most in-need' and 'most marginalized' communities (GovLab2, INT12), was underscored by the projects that lab members described working on. When asked to provide examples of impactful work they had undertaken, interviewees from both government and non-government labs frequently cited projects with disadvantaged social groups – including indigenous communities, people with disabilities, and victims of domestic violence – to understand their experiences of interacting with public services and to gain their perspectives in reframing problems that government agencies were seeking to address. However, the study found that a significant proportion – if not the lion's share – of labs' activities were concentrated at the discovery stage of problem solving. They engaged citizens to understand their experiences of existing programmes with a view to capturing and reframing the central nature of the problem (Dorst 2011) that commissioning agencies were seeking to address. This synthesized data was then fed back to public administrators in the form of 'insights' that could then inform the future redesign of government services and programmes. Far less evidence was captured of projects progressing to the introduction of policy changes or involving citizens in co-producing reforms of existing policy settings.

When asked about their impact on policymaking, informants often pointed to labs' role in demonstrating new ways of working with citizens rather than tangible policy changes or reforms resulting from projects. For example, while the director of one lab felt that it would be 'a stretch' to say that their lab was impacting the policy system, they pointed to the lab's role in exposing groups of public service professionals to 'a different way of doing things' (GovLab2, INT7). One way it did this was through seconding staff from partner agencies and embedding them in the fieldwork teams leading discovery work. An interviewee seconded from a government agency to work on an early childhood education project described this 'different way of doing things': 'we were going into homes, we were actually going in and talking to parents . . . to those that weren't engaged' (GovLab2, INT13). A project undertaken for an education department by the not-for-profit lab similarly involved 'doing lots of interviews with families' and having 'really broad conversations around their experiences' of government programmes and distilling those into 'personas' and key insights that they took back 'to the department' (Lab4, INT18).

This focus on gaining access to the (marginalized) user experience resonates with Williamson's (2015b, 260) reflections on the role innovation labs perform in generating the data that makes the social world visible 'and thus amenable to intervention'.

One lab actively involved community members in co-generating insights from the ethnographic data on a project to enhance outcomes for parents and families with young children in disadvantaged local areas. Families worked with lab members over 'about 100 hours' to develop insights from 23 fieldwork interviews, which they then prioritized into 'two insights that we have continued to focus on for the work' (GovLab2, INT10). Another approach, used on a project to enhance the labour market mobility of people from minority ethnic communities, was to validate insights with both community members and government via 'open homes' and 'ideation workshops'. Project teams would walk through a display of insights from the fieldwork with stakeholders including employers, workers, and policy officials to ensure they were 'pulling out the right ideas' (GovLab2, INT12), which would then be used to filter and identify prototypes of concepts for further development and testing.

As in the above examples, ethnographic and interview research were the key approaches used by the labs in this study to bring citizens' experiences into policymaking. In many of the projects described, this work culminated in a report with recommendations on directions for future change that was handed back to the commissioning government agency. The work of innovation labs in these examples functioned as a way of 'adding in' citizens' experiences to the process of service planning and policy design without challenging the primacy of public officials' roles as the key agents responsible for policy and service design (see Osborne, Radnor, and Strokosch 2016; Durose and Richardson 2016). This lack of progression beyond the discovery and insights-generation stages was a source of frustration to many interviewees, who expressed disappointment that labs' work often appeared to culminate in 'great pieces of work with amazing insights … but they do seem a bit like a research report' (GovLab2, INT8). As one design lead explained, 'there can be a real sticking point at that front research-y end of the process' and 'it can be difficult to move past that to making and doing and prototyping and iterating' (GovLab2, INT11). Incorporating at least 'some kind of prototyping' (Lab4, INT21) in projects was therefore seen as increasingly critical, with one director arguing that 'if we're not getting to the point where it's getting beyond another report with some reframing and some insights, we're missing the trick' (GovLab2, INT7).

With some notable exceptions, the study data suggested that this 'prototyping' principally took the form of testing early conceptual models of an imagined solution with affected citizens *on paper* rather than materially testing prototypes 'out in the world' (GovLab2, INT9). As a service designer explained: 'For us, they sit a lot at conceptual prototypes, more desktop paper-based type stuff' (Lab4, INT16). This focus on prototyping low-fidelity mock-ups at an ideational level, and getting users 'to participate with paper prototypes' (GovLab1, INT3), raises questions about how the '"physical making" aspect of design' relates to policy innovation and the limits to which prototyping can genuinely 'enable a policy to be viewed and experienced as material reality' (Buchanan 2018). Exploring the role of prototyping in public policymaking, Kimbell and Bailey (2017, 222) have hypothesized that design-based 'modes of generating and communicating ideas using visual, performative and material means, while opening up participation, may struggle for legitimacy' against conventional modes of communicating policy through formal written texts. The limitations of ideational prototyping were acknowledged by one lab director, who wanted to progress beyond that 'very conceptual' level of 'here's a prototype made up of pipe cleaners or conceptually drawn out on a poster' (GovLab2, INT7). This was beginning to occur in

some labs. In one example of a project to enhance participation in early years education among disadvantaged social groups, funding from a national government agency had been secured to test several service re-designs with implementation partners, including establishing an early childhood education centre as 'a community hub' (GovLab2, INT13) with co-located medical and financial counselling services which, if successful, would be rolled out more widely.

This was one of the few examples from the case studies of projects that had progressed to prototypes or innovations that were now being implemented. In the case of the latter, these examples predominantly involved discrete operational innovations such as the introduction of information sharing systems or new office layouts–albeit in the context of services targeted at addressing complex social problems. For example, one lab had worked with victims' advisory groups and community support organizations to develop online information sharing systems that were now being implemented by organizations responding to family violence. This included building a new digital information sharing platform with a government department and a provider of counselling and referral services. The tool, which provided real time information on the availability of crisis accommodation in women's refuges, was developed following ethnographic research with frontline service workers, and was cited as 'probably the best example' of policy related work that the lab had done (GovLab1, INT5). However, the more general perception was that labs were producing 'more practice or operations influence … than policy change' (GovLab2, INT8). This was exemplified by a ministerial department that gave the example of conducting co-design sessions with 13 welfare recipients to redesign local welfare offices so that 'clients feel a lot more welcomed and respected when they walk in through our doors' (GovLab2, INT35). This included 'different seating options, different colours on the wall, making it accessible for people with health conditions' (INT35). This provides an example of what Fung (2015) describes as the 'park bench problem', where the reach of participatory innovations is limited, even trivial, as when municipalities grant residents the power to decide on the colour of park benches, which increases citizen participation 'but not in a meaningful way' (Fung 2015, 9).

4.3. The durability of public administration traditions

The present study has sought to distinguish innovation labs in relation to the plurality of alternative organizations now supplying policy advice such as think tanks, interest groups, and consultancies. While the increasing influence of such organizations denotes a shift in power and authority in policymaking 'towards non-government actors' (Capano, Howlett, and Ramesh 2015, 313), this does not necessarily correlate with widening citizen participation. The narrative accounts and practices of labs, by contrast, suggest that widening citizen involvement in co-producing solutions to public problems is critical to their self-perception as change agents in policy systems. Table 2 provides a synthesis of the key ways in which the labs identified contributing to public problem solving and the policy process. However, as also shown, the labs reported frequently encountering challenges and barriers from within the public sector to pursuing more co-productive and citizen-oriented approaches to policy design. These barriers were partly related to the wider environment of working with, and in, the public service, but there were also specific barriers to gaining government commitment to co-design approaches.

Table 2. Synthesis of key themes.

How innovation labs perceive their role within policy systems
• As change agents within the public sector tasked with disrupting prevailing ways of policymaking (GovLab1; GovLab2; GovLab3; Lab4) • As brokers for facilitating collaboration between government agencies and relevant external stakeholders (GovLab1; GovLab2; GovLab3; Lab4) • As conduits for bringing citizens' voices and user experiences into policy design (GovLab1; GovLab2; Lab4; Lab5)
Innovation projects and activities pursued by labs
• Reframing problems through interviews and ethnographic research with users (GovLab1; GovLab2; Lab4; Lab5) • Designing and prototyping innovations with users (GovLab1, GovLab2; Lab4; Lab5) • Operational and service delivery reforms (GovLab1; GovLab2; Lab5) • Developing policy, legislative or regulatory reforms (GovLab1; Lab4)
Challenges to co-production and collaborative innovation
• Loss of political support due to ministerial changes and turnover of departmental managers (GovLab1; GovLab2; GovLab3; Lab4) • Resistance to new ways of working among public managers (GovLab1; GovLab2; GovLab3; Lab4; Lab5) • Tension between time and cost of co-designing solutions and political pressures to achieve quick deliverables (GovLab2; GovLab3; Lab4; Lab5)

Lab members often emphasized the participatory and democratic goals of their work. Yet some suggested that one significant barrier to labs having more impact was representative democracy itself. Echoing Timeus and Gascó (2018) observations on the precarity of innovation labs, several participants suggested that the three- or four-year election cycle meant that labs experienced considerable uncertainty in both funding and political support. At the time of the research, none of the three government labs in the study were assured of their organizational survival beyond the next 12 months. 'Front of mind', explained one lab member, was 'uncertainty about who the rulers of the day are going to be' (GovLab1, INT2). Elections and changes of government present insecurity for many areas of the public service. Lab staff expressed that they were 'a little bit more vulnerable than other areas in the department, in terms of post-election change' (GovLab3, INT28) due to the danger of being perceived as a 'bright, shiny, inconsequential thing' (GovLab3, INT29) that only lasts as long as the current government or Minister is in power. Underlying this concern is a recognition that despite the emergence of deinstitutionalized governance arrangements, governments in the sense of traditional public administrations still matter as (usually) the most important components in policy systems with the latent power to bring 'hierarchy back into the equation' (Capano, Howlett, and Ramesh 2015, 314).

The persistence of hierarchy in public administration was repeatedly reflected upon by interviewees, who described how the Australian and New Zealand public sectors had a powerful 'immune system' (GovLab1, INT5) that stifled the realization of more collaborative approaches. When the public service 'detects something different, it shuts it down pretty fast,' explained one interviewee (INT5). This resistance to change was grounded in an attitude of 'knowing the answers', high staff turnover, and leadership management incentives that promoted short term and siloed actions. Government leaders were considered by several interviewees to be enthusiastic about 'innovation' yet also impatient for change, which manifested in a mistaken perception that 'innovation equals speed' (Lab5, INT31) and a push for 'ministerial or announcement driven design.'

Where lab staff saw the incentives for government leaders to be geared towards speed in innovation, incentives for senior management were seen to be different. 'We lovingly call middle senior management "permafrost",' one interviewee explained: 'You've got [Ministers] saying these wonderful things in keynote speeches and then you've got to get it through that permafrost who are [in] between' (GovLab1, INT2). A colleague elaborated: departments 'might have good support coming down and you might have some ideas coming up, [but] something gets stuck in the middle' (INT5). In other words, where innovation may require facilitation of collaboration, this was not incentivized in senior manager performance frameworks. In this sense, lab staff often reflected that the incentives for both government leaders and senior managers restricted movement towards more participatory approaches. At the ministerial level, the need for speed and 'announceables' undercut the longer-term work of collaboration. Meanwhile, middle and senior managers were perceived to act as a permafrost that limited new collaboration and innovation. Interviewees also described a perceived attitude within the public service of 'knowing the answers' (Lab4, INT17). Whereas the design approaches practiced by the labs required the ability for empathetic listening and could therefore be 'quite a humbling and quite a vulnerable thing' (INT17), this was challenging for some people within government departments who had the mindset of 'continuing to see government and professionals as the people who need to have the answers for things' (INT17).

Additional challenges awaited labs pursuing more collaborative, user-centred approaches to public problem solving. Convincing government decision-makers to commit to working differently was likened to selling a house 'off the plans' (GovLab2, INT8). Design methods were often described as a new approach that many officials did not yet fully understand, and labs needed to convince government leaders to support these new approaches. This challenge was heightened by the time and resource intensive nature of co-production. Interviewees perceived working in a more participative way as dependent on taking time, sometimes months or years, 'to earn people's trust and confidence' (GovLab2, INT8) and as requiring 'a lot more time and organizing and money' (Lab4, INT20). 'I worry about never having the time to do proper co-design', one lab member said, 'as some people are expecting a turnaround of a piece they would describe as being "co-designed" within weeks or days' (GovLab2, INT14). Ultimately this resulted in a tension between labs' commitment to co-design, perceived to bring greater impact, and the pragmatic issue of what government clients were willing to commission: 'What does it take to drive impact versus what will the market pay for? And we live in this tension' (Lab4, INT21).

The barriers presented by bureaucratic and political culture and concerns about cost efficiency were aggravated by the high turnover of staff within commissioning agencies. 'Every person and desk changes every year … and thematic areas are probably on a two to three year cycle,' (GovLab3, INT28), making sustained collaboration on projects difficult in government. A non-government lab manager similarly expressed frustration with public service turnover at a senior level, 'the leadership group we were working with turned over multiple times during the period of that work … As quickly as you can have a champion to really drive something they disappear' (Lab4, INT21).

5. Research implications and conclusion

The concern of this study has been to clarify the relationship between the growing phenomenon of innovation labs and wider deinstitutionalization dynamics contributing

to the emergence of more pluralized advisory practices. While these wider governance shifts have been a focus of public administration researchers for several decades, it is only recently that the emergence of innovation labs and their role within policy advisory systems has begun to receive scholarly attention. In seeking to situate the spread of innovation labs within the context of these governance dynamics, important conceptual distinctions have been made between different forms of pluralism in policymaking. Specifically, empirical claims about the pluralization of policymaking through the increasing influence of consultancies, think tanks and other non-government actors within advisory systems have been considered alongside, and differentiated from, more normative models of co-production in public problem solving.

These two 'faces' of 'the new governance' (Bingham, Nabatchi, and O'Leary 2005, 547) contribute to strategic policymaking capacity in different ways. In the 'deinstitutionalization dynamic', policymaking purportedly benefits from a wider and more competitive market for policy ideas. Citizens, however, are largely passive figures in this governance shift and policy advisors exist in largely a competitive relationship. Models of co-production, on the other hand, presume a more participative form of public problem solving based on mobilizing citizens 'experiences, resources, and ideas' (Torfing, Sørensen, and Røiseland 2019, 798) as key levers for innovation, transformation and change. This citizen-focus provides additional benefits to policymaking; by potentially enhancing the democratic legitimacy of outcomes and by bridging the divide between public administrators and the people impacted by the services and policies under design. This benefits policymaking by promoting stakeholder buy-in and by reducing the risk of implementation failures from policymakers solving the 'wrong' or poorly understood problem.

Drawing on this important analytical distinction between deinstitutionalization and co-production, this study finds that innovation labs constitute a distinct form of policy actor in comparison to both prominent external advisory organizations, such as think tanks and consultancies, as well as 'traditional' advisory units within public administrations. The five cases examined, representing labs from different sectors and levels of government, indicate a shared focus on incorporating (marginalized) citizens' perspectives in public problem solving in a way that public administrations and consultancy firms rarely do. While this may not always be the explicit mission of innovation labs, it largely characterizes how they are being employed by commissioning agencies and government partners at present.

5.1. Extending co-productive approaches beyond the 'front end' of policy design

The study suggests that a key feature of labs is ethnographic research with citizens who are most affected by policy challenges and are the primary targets of government interventions. This supports richer reframing of problem definitions that in turn points towards the development of more nuanced solutions, which labs seek to prototype – at least conceptually – with policy and service users. To this extent, the growth of innovation labs can be viewed as emblematic of more co-productive models of policymaking. Although, the forms of co-production in which innovation labs are engaging are at the level of what might be described as the co-formulation of problem understandings and the co-planning of responses, rather than the production or delivery stage. That is, while some are drawing in citizens as knowledgeable partners

for reframing public problems and generating possible solutions, commissioning agencies are retaining responsibility for the final production and delivery of the services and programmes under question. These forms of co-creation could fail to qualify as modes of co-production because they do not involve citizens and public officials contributing 'a mix of activities *at the point of delivery* of public services' (Fledderus, Brandsen, and Honingh 2014, 427). Nonetheless, they involve substantial resource contributions from citizens in the form of time and knowledge and entail citizens and public officials actively working together to address public problems.

The study also illustrates the multiple limitations that labs experience in operationalizing this citizen-oriented approach to public problem solving. The first is the largely 'front-end' or discovery focus of much of their work: reframing how problems are understood, distilling ethnographic research with users and citizens into key insights, and, to a lesser extent, developing these insights into early conceptual (paper) prototypes of imagined solutions that would require not only further testing but more fine-grained development. This orientation towards the discovery phase of problem solving partly reflects the 'design thinking' lens that labs bring to collaborative problem solving. From a 'design thinking' perspective, a focus on the problem-as-presented first needs to be deconstructed (Hekkert and Van Dijk 2011) and its core paradox (re)understood before it can be solved (Dorst 2011). One of the dilemmas of the popularization of design thinking, as Bason (2017, 43) suggests, is that the emphasis on 'thinking' has been at the expense of understanding design as a 'practice' or 'craft'. With their predilection for producing insights reports, labs could be seen to fit comfortably within the pluralized network of policy advisory units competing for influence through conventional approaches to policy design. Yet their focus on marginalized citizens as 'end users' and their application of visual and material design-based methods distinguishes labs from other policy actors and could position them well to contribute more to the production or delivery stage of public problem solving.

5.2. Practice issues and challenges for public managers

Analysis of interviewees' accounts of lab activities reveals implications for public administration practice as well as research. Firstly, concerns expressed by lab members about the requisite time and cost of co-productive policy approaches should be taken into account when managers decide which policy issues warrant a more participative approach. Secondly, the struggle to pierce through the 'permafrost' of middle management raises questions about the hierarchical structure and perverse performance measures of the public sector, which may be preventing more innovative and collaborative approaches from gaining traction. Public sector leaders who are considering launching or supporting an innovation lab may wish to consider concomitant or alternative changes to the broader structure and incentives of the system within which they are seeking innovative results. Thirdly, the limited evidence of labs' policy impacts warrants further research, as there is significant risk of undermining public trust by inviting citizens and stakeholders to take part in policy co-production processes if their contribution is unlikely to lead to different or better outcomes.

Further research is needed to extend the insights gained in this study. Most importantly, the present study focussed largely on the self-reported insights of lab practitioners. While the views of some partners and commissioning agencies were considered in the study, it would be valuable to further explore interpretations of the role of labs

from the perspectives of senior bureaucrats as well as citizens and stakeholders who participate in co-design and co-production processes with labs. Observational research could explore the methods and results of lab activities more fully than is possible in interviews. Large scale survey research could also be used to test the extent to which innovation labs, internationally, are pursuing citizen-oriented, co-productive, and 'design-thinking' led approaches to policymaking or whether other social scientific methods (e.g. Randomized Controlled Trials) and stakeholders (e.g. research organizations) are gaining more influence through their work. This kind of survey research has already been undertaken in Australian and New Zealand and underpinned the case selection for the present study. However, the majority of studies on innovation labs in other jurisdictions have been qualitative in nature (e.g. Nesti 2018; Timeus and Gascó 2018) or limited to small-scale surveys of no more than 35 innovation labs spread across multiple continents (e.g. Tõnurist, Kattel, and Lember 2017). International comparative survey research on the methods, activities, and outcomes produced by innovation labs would greatly add to our understanding of these emerging, and increasingly important, policy actors. In addition, as some labs are beginning to invest more in evaluation for strategic learning (see, e.g. Auckland Co-design Lab & The Southern Initiative 2019), and as evaluators refine their approaches to social innovation and co-production (see, e.g. Patton 2010; Cabaj 2018), in future evaluation reports may become fruitful sources of data on public sector innovation labs.

Finally, the obstacles reported by labs in the study highlight the continuing durability of 'traditional' public administration, notably the hierarchical organizational structures of public bureaucracies and continuing influence of senior bureaucrats over policymaking processes despite scholars' proclamations of a shift from government to governance. Collaborative and user-centred ways of policymaking depend on authorization and patronage from political leaders and public managers, who retain the power to quarantine citizen involvement to the discovery phase of reframing problems or to realizing minor operational reforms in programme or service delivery. Co-produced responses to public problems must still be diffused into the larger policymaking process and 'sold' to the 'permafrost' of senior public managers.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the The Australia and New Zealand School of Government [N/A].

Notes on contributors

Michael McGann is a Research Fellow in the School of Social and Political Sciences at the University of Melbourne. In addition to writing about the rise of design thinking and innovation labs in public policy, Michael's research addresses the intersection between employment and inequality specializing, in particular, on activation reforms in the areas of welfare-to-work and ageing and employment. Michael's research has appeared in international journals including *Policy Sciences, Administration and Society, Social Policy and Society, Work, Employment and Society*, and *Ageing & Society*.

Tamas Wells is a Research Fellow in the School of Social and Political Sciences. His research focuses on the role of advocacy and innovation agencies in Australia and Southeast Asia, and on contested meanings of democracy, governance and accountability. His doctoral research examined the Burmese opposition movement in the lead up to the historic 2015 elections in Myanmar. Before beginning his doctoral studies in 2012, he worked as an aid and development adviser and consultant with various NGOs, including seven years living and working in Myanmar.

Emma Blomkamp is an Honorary Fellow at The University of Melbourne. Emma has experience leading research, evaluation, human centred design and social innovation projects, and has also taught at universities in Australia, New Zealand, France and Cambodia. Emma's award-winning PhD explored evaluating community wellbeing outcomes in urban cultural policy in Australia and New Zealand. Her research on co-design, cultural policy, local governance and evidence-based policy has been published in international journals and in her co-edited book Making Culture Count: The Politics of Cultural Measurement.

ORCID

Michael McGann http://orcid.org/0000-0002-2262-8216
Tamas Wells http://orcid.org/0000-0002-5604-7081
Emma Blomkamp http://orcid.org/0000-0003-0978-2830

References

Acevedo, S., and N. Dassen. 2016. *Innovation for Better Management: The Contribution of Public innovation Labs*. Washington, DC: Inter-American Development Bank.

Anderson, G. 1996. "The New Focus on the Policy Capacity of the Federal Government." *Canadian Public Administration* 39 (4): 469–488. doi:10.1111/j.1754-7121.1996.tb00146.x.

Ansell, C., and A. Gash. 2008. "Collaborative Governance in Theory and Practice." *Journal of Public Administration Research and Theory* 18 (4): 543–571. doi:10.1093/jopart/mum032.

Auckland Co-design Lab and The Southern Initiative. 2019. "Learning in Complex Settings: A Case Study of Enabling Innovation in the Public Sector." *Innovation Brief* 001.

Bailey, J., and P. Lloyd. 2016. "The Introduction of Design to Policymaking: Policy Lab and the UK Government." In *Proceedings of DRS 2016: Design+Research+Society*, edited by P. Lloyd and E. Bohemia, 3619–3634. Brighton: Design Research Society.

Bason, C., and A. Schneider. 2014. "Public Design in Global Perspective: Empirical Trends." In *Design for Policy*, edited by C. Bason, 23–40. Farnham, Surrey, England: Routledge.

Bason, C. 2017. *Leading Public Design: Discovering Human-Centred Governance*. Bristol: Policy Press.

Bellefontaine, T. 2012. *Innovation Labs: Bridging Think Tanks and Do Tanks*. Ottawa: Policy Horizons Canada.

Bingham, L., T. Nabatchi, and R. O'Leary. 2005. "The New Governance: Practices and Processes for Stakeholder and Citizen Participation in the Work of Government." *Public Administration Review* 65 (5): 547–558. doi:10.1111/puar.2005.65.issue-5.

Blomkamp, E. 2018. "The Promise of Co-design for Public Policy." *Australian Journal of Public Administration* 4 (77): 729–743. doi:10.1111/1467-8500.12310.

Booher, D. E. 2004. "Collaborative Governance Practices and Democracy." *National Civic Review* 93 (4): 32–46. doi:10.1002/(ISSN)1542-7811.

Bovaird, T., and E. Loeffler. 2012. "From Engagement to Co-production: The Contribution of Users and Communities to Outcomes and Public Value." *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 23 (4): 1119–1138. doi:10.1007/s11266-012-9309-6.

Buchanan, C. 2018. "Prototyping for Policy." *Policy Lab Blog*. Accessed 30 August 2019. https://openpolicy.blog.gov.uk/2018/11/27/prototyping-for-policy/

Cabaj, M. 2018. *Evaluating Systems Change Results: An Inquiry Framework*. Canada: Tamarack Institute.

Capano, G., M. Howlett, and M. Ramesh. 2015. "Bringing Governments Back In: Governance and Governing in Comparative Policy Analysis." *Journal of Comparative Policy Analysis* 17 (4): 311–321. doi:10.1080/13876988.2015.1031977.

Carstensen, H., and C. Bason. 2012. "Powering Collaborative Policy Innovation: Can Innovation Labs Help?" *The Innovation Journal* 17 (1): 2–26.
Clarke, A., and J. Craft. 2018. "The Twin Faces of Public Sector Design." *Governance* 32 (1): 5–21. doi:10.1111/gove.12342.
Craft, J., and M. Howlett. 2012. "Policy Formulation, Governance Shifts and Policy Influence: Location and Content in Policy Advisory Systems." *Journal of Public Policy* 32 (2): 79–98. doi:10.1017/S0143814X12000049.
Craft, J., and M. Howlett. 2013. "The Dual Dynamics of Policy Advisory Systems: The Impact of Externalization and Politicization on Policy Advice." *Policy and Society* 32 (3): 187–197. doi:10.1016/j.polsoc.2013.07.001.
Craft, J., and M. Wilder. 2017. "Catching a Second Wave: Context and Compatibility in Advisory System Dynamics." *Policy Studies Journal* 45 (1): 215–239. doi:10.1111/psj.v45.1.
Dorst, K. 2011. "The Core of 'design Thinking' and Its Application." *Design Studies* 32 (6): 521–532. doi:10.1016/j.destud.2011.07.006.
Durose, C., and L. Richardson. 2016. *Designing Public Policy for Co-Production: Theory, Practice and Change*. Bristol: Policy Press.
Fledderus, J., T. Brandsen, and M. Honingh. 2014. "Restoring Trust through the Co-production of Public Services: A Theoretical Elaboration." *Public Management Review* 16 (3): 424–443. doi:10.1080/14719037.2013.848920.
Fraussen, B., and D. Halpin. 2017. "Think Tanks and Strategic Policy-Making: The Contribution of Think Tanks to Policy Advisory Systems." *Policy Sciences* 50 (1): 105–124. doi:10.1007/s11077-016-9246-0.
Fuller, M., and A. Lochard. 2016. *Public Policy Labs in European Union Member States*. Luxembourg: European Union.
Fung, A. 2015. "Putting the Public Back into Governance: The Challenges of Citizen Participation and Its Future." *Public Administration Review* 75 (4): 513–522. doi:10.1111/puar.12361.
Halpin, D., and B. Fraussen. 2017. "Laying the Groundwork: Linking the Internal Agenda-Setting Processes of Interest Groups to Their Role in Policy Making." *Administration & Society*. doi:10.1177/0095399717728094.
Hartley, J., E. Sørensen, and J. Torfing. 2013. "Collaborative Innovation: A Viable Alternative to Market Competition and Organizational Entrepreneurship." *Public Administration Review* 73 (6): 821–830. doi:10.1111/puar.2013.73.issue-6.
Hekkert, P., and M. Van Dijk. 2011. *Vision in Design: A Guidebook for Innovators*. Amsterdam: BIS Publishers.
Kimbell, L. 2016. "Design in the Time of Policy Problems." In *Proceedings of DRS 2016: Design +Research+Society*, edited by P. Lloyd and E. Bohemia, 3605–3618. Brighton: Design Research Society.
Kimbell, L., and J. Bailey. 2017. "Prototyping and the New Spirit of Policy-Making." *CoDesign* 13 (3): 214–226. doi:10.1080/15710882.2017.1355003.
Lewis, J. M., M. McGann, and E. Blomkamp. 2019. "When Design Meets Power: Design Thinking, Innovation, and the Politics of Policymaking." *Policy and Politics*. doi:10.1332/030557319X15579230420081.
McGann, M., E. Blomkamp, and J. M. Lewis. 2018. "The Rise Of Public Sector Innovation Labs: Experiments in Design Thinking for Policy." *Policy Sciences* 51 (3): 249–267. doi:10.1007/s11077-018-9315-7.
McGann, M., J. M. Lewis, and E. Blomkamp. 2018. Mapping Public Sector Innovation Units in Australia and New Zealand: 2018 Survey Report. Melbourne: Policy Lab, University of Melbourne.
Mintrom, M., and J. Luetjens. 2016. "Design Thinking in Policymaking Processes: Opportunities and Challenges." *Australian Journal of Public Administration* 75 (3): 391–402. doi:10.1111/aupa.2016.75.issue-3.
Nabatchi, T., A. Sancino, and M. Sicilia. 2017. "Varieties of Participation in Public Services: The Who, When, and What of Coproduction." *Public Administration Review* 77 (5): 766–776. doi:10.1111/puar.12765.
Nesti, G. 2018. "Co-Production for Innovation: The Urban Living Lab Experience." *Policy and Society* 37 (3): 310–325. doi:10.1080/14494035.2017.1374692.
Osborne, S., Z. Radnor, and K. Strokosch. 2016. "Co-production and the Co-creation of Value in Public Services: A Suitable Case for Treatment?" *Public Management Review* 18 (5): 639–653. doi:10.1080/14719037.2015.1111927.

Patton, M. Q. 2010. *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*. New York: Guilford Press.
Pautz, H. 2011. "Revisiting the Think-Tank Phenomenon." *Public Policy and Administration* 26 (4): 419–435. doi:10.1177/0952076710378328.
Price, A. 2015. "World of Labs." *World of Labs*. https://www.nesta.org.uk/blog/world-labs
Puttick, R., P. Baeck, and P. Colligan. 2014. *I-Teams: The teams and Funds Making Innovation Happen in Governments around the World*. London: Nesta and Bloomberg Philanthropies.
Saint-Martin, D. 2000. *Building the New Managerialist State: Consultants and the Politics of Public Sector Reform in Comparative Perspective*. Oxford: Oxford Scholarship Online.
Schuurman, D., and P. Tõnurist. 2017. "Innovation in the Public Sector: Exploring the Characteristics and Potential of Living Labs and innovation labs." *Technology Innovation Management Review* 7 (1): 7–14. doi:10.22215/timreview/1045.
Sørensen, E., and J. Torfing. 2015. "Enhancing Public Innovation through Collaboration. Leadership and New Public Governance." In *New Frontiers in Social Innovation Research*, edited by A. Nicholls, J. Simon, and M. Gabriel, 145–169. London: Palgrave Macmillan.
Sørensen, E., and S. B. Waldorff. 2014. "Collaborative Policy Innovation: Problems and Potential." *The Innovation Journal* 19 (3): 1.
Stone, D. 2007. "Recycling Bins, Garbage Cans or Think Tanks? Three Myths regarding Policy Analysis Institutes." *Public Administration* 85 (2): 259–278. doi:10.1111/padm.2007.85.issue-2.
t'Hart, P., and A. Vromen. 2008. "A New Era for Think Tanks in Public Policy? International Trends, Australian Realities." *Australian Journal of Public Administration* 67 (2): 135–148. doi:10.1111/j.1467-8500.2008.00577.x.
Timeus, K., and M. Gascó. 2018. "Increasing Innovation Capacity in City Governments: Do Innovation Labs Make a Difference?" *Journal of Urban Affairs* 40 (7): 992–1008. doi:10.1080/07352166.2018.1431049.
Tõnurist, P., R. Kattel, and V. Lember. 2017. "Innovation Labs in the Public Sector: What They are and What They Do?" *Public Management Review* 19 (10): 1455–1479. doi:10.1080/14719037.2017.1287939.
Torfing, J., E. Sørensen, and A. Røiseland. 2019. "Transforming the Public Sector into an Arena for Co-creation: Barriers, Drivers, Benefits, and Ways Forward." *Administration & Society* 51 (5): 795–825. doi:10.1177/0095399716680057.
Veselỳ, A. 2013. "Externalization of Policy Advice: Theory, Methodology and Evidence." *Policy and Society* 32 (3): 199–209. doi:10.1016/j.polsoc.2013.07.002.
Voorberg, W. H., V. J. Bekkers, and L. G. Tummers. 2015. "A Systematic Review of Co-creation and Co-production: Embarking on the Social Innovation Journey." *Public Management Review* 17 (9): 1333–1357. doi:10.1080/14719037.2014.930505.
Williamson, B. 2014. "Knowing Public Services: Cross-Sector Intermediaries and Algorithmic Governance in Public Sector Reform." *Public Policy and Administration* 29 (4): 292–312. doi:10.1177/0952076714529139.
Williamson, B. 2015a. *Testing Governance: The Laboratory Lives and Methods of Policy Innovation Labs*. Stirling: University of Stirling.
Williamson, B. 2015b. "Governing Methods: Policy Innovation Labs, Design and Data Science in the Digital Governance of Education." *Journal of Educational Administration and History* 47 (3): 251–271. doi:10.1080/00220620.2015.1038693.