



INNOVATION
FACETS



Public Sector Innovation Facets

ADAPTIVE INNOVATION

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OPSI



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The Observatory of Public Sector Innovation collects and analyses examples and shared experiences of public sector innovation to provide practical advice to countries on how to make innovation work.

This report contains a summary of research and insights from practice on adaptive innovation. A more extensive version of this brief including detailed discussion and case studies appears as a chapter in a forthcoming OECD report.

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SUMMARY

- Adaptive innovation is about testing and trying new approaches in response to a changing operating environment.
 - Three dimensions of adaptive innovation are relevant for governments: a readiness to respond to change, the ability to innovate at a fast pace, and a governance framework that allows adaptation and innovation to take place.
 - Environmental, organisational and individual drivers lead to the adoption of adaptive innovation in government. These often include external crises, the opportunity to experiment and the ability to make fast decisions.
 - To sustain adaptive innovation in the public sector over the long term, there is a need for adaptive organisational structures, decentralised governance structures, enabling infrastructure, networks and partnerships, space for experimentation, and evaluation and feedback mechanisms.
 - In hierarchical organisational structures such as those often found in government administrations, leadership plays a significant role in creating space for adaptive innovation. Individual skills and willingness to engage with adaptive innovation are also crucial.
 - In environments demanding both stability and the need to act quickly, such as during crises, adaptive innovation supports public administrations by simultaneously strengthening resilience and building adaptive capacity. In addition, adaptive innovation can help avoid fragmentation of experimental practices and systematise innovative action in government.
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INTRODUCTION

The social, economic and ecological challenges that confront societies today require novel public sector solutions. As governments explore how to change the very foundations of governance and democracy to meet the needs of the 21st century environment, innovation is becoming an imperative to stay ahead of the curve. Governments are increasingly aware of the need to mitigate and leverage the high rate of societal and technological change, but they are still ill-equipped to innovate on a consistent basis and to anticipate signals from the external environment before they become realities.

The Public Sector Innovation Facets model provides an easy way to consider what innovative approaches and instruments governments can use to respond to emerging challenges in a timely manner. It investigates questions such as: What types of public sector innovation exist? How are innovative ideas generated in the public sector? Which methods are used to support investment in innovative projects? What capacity and resources are required for public sector innovation?

The model identifies four innovation “facets” which can be used to explore the purpose and intent of innovation activities as well as how they work in practice. The four facets of the model are as follows:

- 1** **Enhancement-oriented innovation** upgrades practices, achieves efficiencies and better results, and builds on existing structures (e.g., through digitalising services and better process management). An example of this type of innovation is the use of behavioural insights to improve the compliance rate with one-time payments.
- 2** **Adaptive innovation** tests and tries new approaches in order to respond to a changing operating environment (e.g., co-designing new community responses to emerging challenges such as the COVID-19 pandemic). Governments adopting social media as a channel for citizen interaction is an instance of adaptive innovation.
- 3** **Mission-oriented innovation** establishes a clear outcome and an overarching objective for achieving a specific mission (e.g., setting clear goals and roadmaps towards carbon neutrality). As an example, setting an objective to dramatically reduce greenhouse emissions within a decade is a mission-oriented approach to innovation.
- 4** **Anticipatory innovation** explores and engages with emergent issues that might shape future priorities and future commitments (e.g., conducting experiments to explore the future of work). An example of anticipatory innovation is the use of a sandbox to explore the impact of Artificial Intelligence on service delivery in health.

This Public Sector Innovation Facets brief focuses on adaptive innovation in the public sector. In order to understand key trends in adaptive innovation, the Observatory of Public Sector Innovation (OPSI) conducted research and invited public servants to share their experiences and examples of adaptive innovation in the public sector. Insights are provided on the following key themes: approaches to adaptive innovation, main drivers and support structures in the public sector, tools and methods, and capacities needed. A more extensive version of this brief, including detailed discussion and case studies appears as a chapter (“Adaptive Innovation”) in a forthcoming OECD report. The present Public Sector Innovation Facets brief is intended as a summary for policy makers and practitioners.

WHAT IS ADAPTIVE INNOVATION?

Adaptive innovation is an attempt to innovate in response to changes in the environment. It starts with the question: “How might our evolving situation change how we do X?” Adaptive innovation involves a discovery process – for example, novel ways of doing X or delivering Y – driven by new knowledge or the changing environment. Adaptive innovation can occur in response to changes in the environment produced by the introduction of innovations such as a new technology, business model, new user demand or new practices. One such example is the use of social media by government organisations to interact with citizens.

Adaptive innovation includes efforts to build adaptive capacity aimed at lowering risk, reducing vulnerability, and strengthening the resilience of organisations and societies to specific challenges (e.g., climate change). For example, the UK government’s LearnAdapt initiative builds capacity to deliver change in diverse and complex development contexts (see Box 1). Adaptive innovation also includes adaptive governance, which is characterised by “decentralised decision-making, efforts to mobilise internal and external capabilities, bottom-up (and top-down) decision making, wider participation to spot and internalise developments, and continuous adjustment to deal with uncertainty”.¹ Both adaptive capacity and adaptive governance create beneficial conditions for adaptive innovation.“

Box 1. LearnAdapt – adaptive innovation for global development in the United Kingdom

LearnAdapt is a collaboration between the Foreign, Commonwealth and Development Office (formerly the Department for International Development) of the Government of the United Kingdom, the Overseas Development Institute (ODI) and Brink, to explore how to improve adaptive development programmes. The initiative builds on experiences in global development and encourages experimentation, continuous learning and adjustment to meet needs on the ground. It applies adaptive management and innovative methodologies such as agile, lean and human-centred design. Based on collaboration with public servants, LearnAdapt builds flexible tools to manage knowledge and engage stakeholders to surface innovations and deliver change in diverse and complex contexts. Among other things, it seeks to develop publicly available tools and opportunities for shared learning on adaptive management for the wider development sector.

Note: For more information, see: Toolkit for collaborating, learning, adapting (CLA): www.usaidlearninglab.org/cla-toolkit

Source: ODI (2020).

¹ Janssen and Van der Voort (2016). The concept is also used in systems theory, complex systems science and in institutional theory among others connected to sustainability and climate adaptation research. See Chaffin, B.C., H. Gosnell and B.A. Cosens (2014). A decade of adaptive governance scholarship: Synthesis and future directions. *Ecology and Society*, Vol. 19.

MAIN DRIVERS AND SUPPORT STRUCTURES OF ADAPTIVE INNOVATION

Main drivers

What drives adaptive innovation in government? A variety of environmental, organisational and individual drivers can push governments to explore adaptive innovation, all of which operate at different levels (see Table 1). Environmental drivers lie outside the public sector as such and describe the context in which public agencies operate. Organisational drivers are inherent to the capacities and features of the public sector. The individual level represents the specific characteristics of individuals within public agencies that drive adaptive innovation.

Table 1. Main drivers of adaptive innovation in the public sector

CLUSTER	DRIVERS	EXAMPLES
Environmental drivers	<ul style="list-style-type: none"> • Demands (political/from citizens) • Threat • Collaboration 	<ul style="list-style-type: none"> • Political support from higher levels for local climate change adaptation, a policy that supports the adoption of new approaches • Environmental threats, COVID-19 • Intergovernmental networks, collaboration with stakeholders
Organisational drivers	<ul style="list-style-type: none"> • Resources • Organisational culture • Leadership 	<ul style="list-style-type: none"> • Availability of funds to adopt new approaches • Time to experiment with new approaches • Culture of continuous improvement • Iteration and learning, teamwork • Opportunity to experiment, support bottom-up initiatives, provide overall vision
Individual drivers	<ul style="list-style-type: none"> • Openness • Knowledge/skills 	<ul style="list-style-type: none"> • Willingness to apply new methods/work practices • Ability to make fast decisions • Agile project management skills

Source: Authors' summary

Enabling conditions

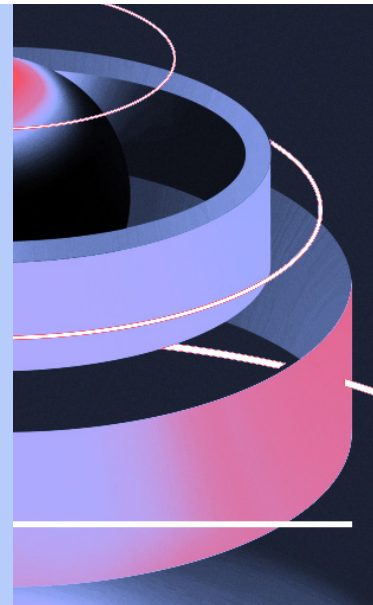
In addition to the main drivers, a number of vital structures and programmes sustain adaptive innovation in the public sector over the long term.

These enabling conditions can take the following different forms: **1) organisational structures, 2) decentralised governance structures, 3) infrastructure, 4) relationships and partnerships, 5) space for experimentation, and 6) evaluation and learning.**

Box 2. Intergovernmental collaboration of Tallinn and Helsinki for smart mobility

The FinEst Smart Mobility project improved traffic flow between Helsinki and Tallinn with the help of smart mobility solutions. Instead of directly implementing a number of pilot projects, FinEst Smart Mobility created a unique framework and procurement model. With innovation labs as partners, they established specifications and preparations before procuring actual pilot projects. Planners, mobility users and technology stakeholders engaged in co-designing use cases to ensure the quality of the pilot projects from a user perspective and to capitalise on emerging technologies. A central part of the preparatory work was setting up agile trials (i.e. mini-pilot projects in a shared testing environment) to probe new mobility-related innovations over a three-month period. User groups provided essential information about the mobility choices of ferry users during this phase.

Source: Soe and Drechsler (2018), FinEst Smart Mobility (2021).



1. ORGANISATIONAL STRUCTURE

There is a tension between the need to act adaptively and to maintain stability. Many studies mention organisational factors as barriers to adopting adaptive approaches. Some argue that hierarchy and a command-and-control structure hinder adaptive innovation.² Public procurement, processes, organisational responsibilities and project orientations need to be aligned with and allow for adaptive approaches. For example, the FinEst Smart Mobility project to improve traffic flow between Finland's and Estonia's capital cities required new structures for intergovernmental collaboration to explore smart mobility solutions (see Box 2). In contrast, organisational structures provide the stability decision makers need to carry out adaptive approaches. The Delta Programme in the Netherlands is an example of combining the ability to respond to short-and long-term challenges (see Box 3).



2. GOVERNANCE APPROACH

Adaptive governance is a governance framework that allows adaptive innovation to happen. Adaptive governance can be supported by decentralised governance structures and processes, which put an emphasis on public servants' autonomy in their day-to-day work. Research has identified several adaptive governance strategies that public administrations can apply (see Table 2). An example of an agile governance approach is the Society 5.0 model adopted in Japan (see Box 4).

² Berger, H. (2007). Agile development in a bureaucratic arena – a case study experience. *International Journal of Information Management*, Vol 27, pp. 386-396.

Box 3. Collaboration for building adaptive capacity – the Delta Programme in the Netherlands

In the Netherlands, the “Delta Programme” links short-term decisions to long-term climate change and aims at keeping strategies flexible and ready to switch if the future scenario changes beyond defined parameters. Moreover, it has embraced a collaborative approach to strengthen resilience and build adaptive capacity in the areas of flood risk management, freshwater supply and spatial adaptation in the face of climate change. For example, Amsterdam Rainproof is a platform that raises awareness about rainwater management and seeks practical solutions for rainwater storage in smart urban spaces. It includes efforts by central government working in collaboration with provinces, municipalities, district water boards, the Rijkswaterstaat and several NGOs. The programme creates a common basis for regional work and national integration by adopting a regional approach. It assigns specific responsibilities for all branches of government concerned, involves stakeholders and builds acceptance among them and interest groups, undertakes joint fact finding, and collects creative and innovative ideas.

Source: The Delta Programme (2020)

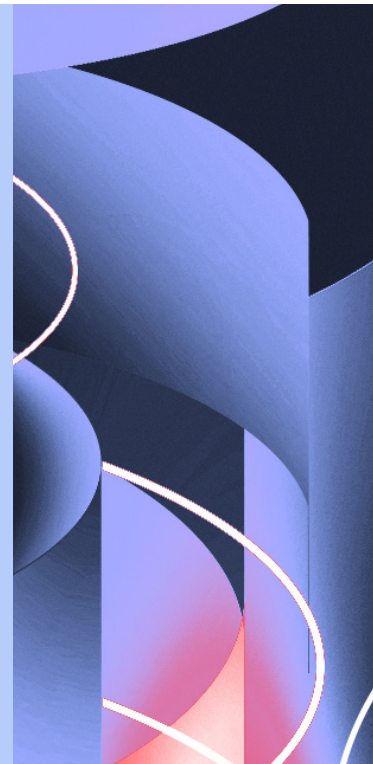


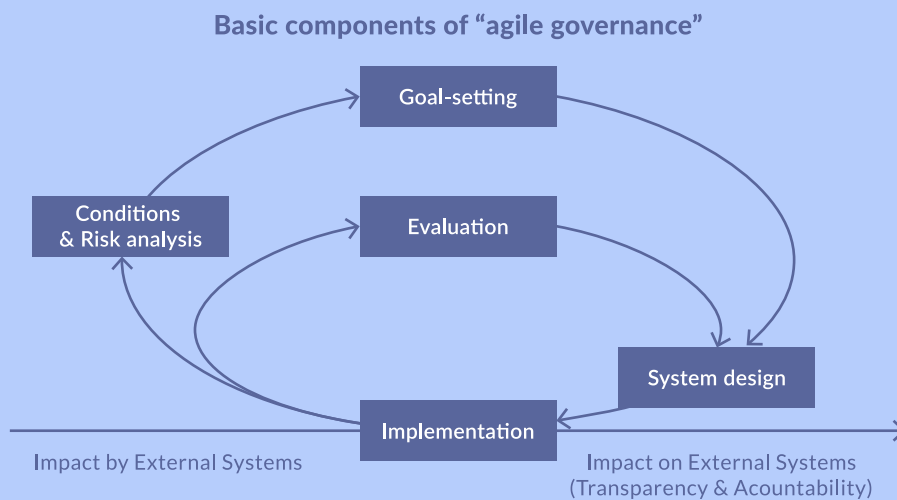
Table 2. Examples of adaptive governance strategies

NAME	EXPLANATION
Know the stakeholders and their capabilities	Identify patterns of participants, their interests and goals, and look at how their capabilities can be used (De Bruijn and Ten Heuvelhof, 2008). Both internal and external organisational stakeholders and capabilities need to be identified.
Self-organisation	The strategy involves self-organisation with teams and actor groups that draw on various knowledge systems and experiences for the development of a common understanding and policies (Folke et al., 2005).
Decompose complexity	Decompose a complex challenge into smaller, tangible problems that can be solved (Sutherland et al., 2011). In agile software developments, sprints result in outputs and decisions about the next steps.
Keep options open	Make decisions that cannot be easily alternated as late as possible to keep the options open and if needed choose another direction (Dym and Little, 2009).
Shortening decision-making times	Inform higher-level decisions from the bottom-up and ensure short decision times. Once innovations are spotted, there is a need for decision-making within a short time. Procedures allowing this should be in place, including decentralised decisionmaking.
Confrontation strategy	Confront the stakeholders with not reacting to required disruptive changes and maintaining the status quo.

Source: Adapted from Janssen and Van der Voort (2016)

Box 4. Designing and implementing agile governance in Japan

The Study Group on New Governance Models in Society 5.0, which was established under the Japanese Ministry of Economy, Trade and Industry (METI) in 2019, established a new governance model designed to achieve three goals: (1) Governance for Innovation, (2) Governance of Innovation, and (3) Governance by Innovation. The purpose is to govern constantly changing societies and social systems through an “agile governance” organised around six cycles: ‘goal setting’, ‘system design’, ‘operations’, ‘explanation’, ‘evaluation’ and ‘improvements’ in a continuous and rapid way.



Source: Ministry of Economy, Trade and Industry (2021).

Box 5. APEX – connecting everything

In today’s fast-paced and digitalised world, government agencies need to evolve quickly to stay relevant to citizens. Old methods of data acquisition and transfer are too slow to satisfy citizen’s needs. Instead, there is a desire for innovative and integrated government services through which data is shared seamlessly between public agencies. Equally appealing are the potentially more targeted and citizen-centric products that businesses can offer if given access to selected agency data. Application programming interfaces or APIs are one such means of achieving these goals. The Singapore government envisioned a centralised whole-of-government platform that would allow all government agencies to share data amongst themselves and with private enterprises through APIs. It developed APEX to address this issue: APEX provides a secure data sharing environment in order to increase the adoption of API technology within government by simplifying secure data-sharing, making API management user-friendly, and increasing visibility of available APIs. The goal is to promote data sharing, not silos, which may spark ideas for collaboration.

Source: OECD (2017).

3. INFRASTRUCTURE

Prior research has examined the technical and organisational infrastructure needed to support adaptive innovation in the public sector. Technical infrastructure can enable the organisation to sense demands quickly and provide authorities with the necessary information to act (see Box 5 on the example of APEX).

4. RELATIONSHIPS AND PARTNERSHIPS

Network arrangements support adaptive innovation by helping to protect certain actors with existing vulnerabilities from external change. While network members can actively collaborate to improve their collective adaptive capacity, they also benefit from the knowledge and best practices of other members. For example, in a study of the sea level rise adaptation efforts of US governments, it was shown that institutions of higher learning are in a better position to help plan local action, while city-to-city collaboration can be beneficial in later stages, such as during the implementation process.³ Another example that uses network arrangements to bring together diverse actors are the city of Helsingborg's hypothesis labs (see Box 6).

Box 6. Hypothesis Laboratories in Helsingborg, Sweden

Hypothesis labs form part of the project "Research City" which aims to integrate research at a structural level and test new ways of working on cross-sectoral challenges. All labs are based on research in a number of so-called "quality-of-life" areas. They require cross-sectoral participants, from researchers, managers and external companies to employees from different municipal departments. Each of the five successive labs tests new ways of working and includes co-production with citizens, structured differently each time. The purpose of the labs is transformative learning. Hypotheses are used to research and systematically frame Helsingborg's willingness to "test" new ways of working to meet the challenges of the present and the future.

For example, the Citizen's lab tests methods of citizen inclusion to increase residents' participation in the planning and development of city districts. The lab fosters conversation between resource-weak and resource-strong citizens to improve relationships within the community.

The Designed living environment is a lab set up following a national policy objective from 2018 which demanded better integration between culture, art and urban planning. It brings together two administrative bodies that rarely collaborate: Helsingborg's culture and urban planning departments. An important element of the lab is to imagine how these two organisations could be re-organised to enable ongoing collaboration.

Source: City of Helsingborg (2021).

³ Kalesnikaitė, V. (2019). Keeping cities afloat: Climate change adaptation and collaborative governance at the local level, *Public Performance & Management Review*, Vol. 42, pp. 864-888.

5. SPACE FOR EXPERIMENTATION

Adaptive innovation requires space and permission for experimentation in public sector organisations. Governments around the world have adopted laboratories (“labs”) as a new approach to policy and service design. Public sector innovation labs are publicly funded units that reside outside the formal institutional boundaries of government and can act as rooms for experimentation.⁴ Following a successful experimentation phase, approaches can then be transferred to core practices of government. In the literature on adaptation, innovation labs are mostly discussed in the context of digital government⁵ as well as in other areas, for example eco-districts in urban planning (see Box 7).⁶

Box 7. Experimentation in urban planning: Eco-districts in Malmö, Sweden

In the late 1980s and early 1990s, Malmö’s industrial centre lost one-third of its jobs; today, the city is a vibrant and sustainable urban area. The heart of this transformation is Western Harbour, an eco-district and regeneration zone. The area was developed as a testbed in the city’s ambitious plans to become climate-neutral by 2020 and to run entirely on renewable energy by 2030. The mayor envisioned using the eco-district concept as a model for future sustainable urban development throughout the city. Experimentation, supported by cross-departmental collaboration and dialogue with developers, has been key to promoting innovation in planning. For example, project managers from the environment and planning departments meet on a regular basis to discuss the delivery of more integrated projects.

Source: EBRD (2020)

6. EVALUATION AND LEARNING

The results of research conducted by OPSI show that governments learn from past experiences and build on the former to develop adaptive capacity. For example, fast learning from previous experience helped the US government’s response to the Hurricane Sandy emergency in 2012.⁷ The government was able to act more quickly and co-ordinate more efficiently with stakeholders, such as volunteer groups, compared to previous similar emergencies. Another example is South Korea’s response to the COVID-19 pandemic, which made use of lessons learned from a prior respiratory disease outbreak (see Box 8).



4 OECD (2017). *Fostering Innovation in the Public Sector*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270879-en>.

5 Soe and Drechsler (2018). Wang, C., R. Medaglia and L. Zheng (2018), Towards a typology of adaptive governance in the digital government context: The role of decision-making and accountability. *Government Information Quarterly*, Vol. 35, pp. 306-322.

6 Fitzgerald, J. and J. Lenhart (2016). Eco-districts: Can they accelerate urban climate planning? *Environment and Planning C: Government and Policy*, Vol. 34, pp. 364-380.

Box 8. South Korea's response to the COVID-19 pandemic

The challenge of responding to the Middle East respiratory syndrome (MERS) in 2015 has been described as an learning experience for the South Korean government. When the COVID-19 outbreak emerged in the international arena, South Korea already had institutions in place that allowed the government to act adaptively. The Korean Centre for Disease Control and Prevention (KCDC) in particular was equipped with capacities that enabled South Korea to carry out preventive testing rapidly and in large numbers. Previous challenges were incorporated as a learning opportunity to be able to better adapt in the future.

Source: Moon (2020)⁸



TOOLS AND METHODS

The research on tools and methods that support adaptive innovation in the public sector is based largely on work focusing on public services (especially digital services). The main methods include Human-Centred Design, the Agile methodology and design thinking. However, more work needs to be done to capture the novel tools and methodologies being experimented with by governments.

User-centricity as a guiding principle

User-centricity lies at the core of agile and design thinking approaches. It aims to develop services and products that serve their users and actively take the needs into account through user research (see Box 9 on user-centricity in the Portuguese government). The Agile methodology involves constant user feedback on the end result, aiming for “radical collaboration with the client in each phase”.⁹ Both human-centred design and Agile approaches in the public sector focus strongly on service users, whether in broad policy context or at the service delivery level.

Agile as a methodology

The Agile methodology is a software development approach whose principles imply strong collaboration, iteration, and user-centricity. With their roots in software development in the private sector, agile practices and their underlying principles have provoked considerable interest in research and practice outside of these settings. In government, Agile as a methodology challenges the traditional waterfall approach to public projects. A waterfall mode of planning, where one project



⁷ Earle, C.R. (2018). C2 agility for emergency management: Examining the Katrina and Sandy responses. *Journal of Homeland Security and Emergency Management*, Vol. 15, pp. 1-17.

⁸ Moon, M. J. (2020). Fighting COVID-19 with agility, transparency, and participation: wicked policy problems and new governance challenges. *Public administration review*, Vol. 80, pp. 651-656.

⁹ Mergel, I. (2016). Agile innovation management in government: A research agenda. *Government Information Quarterly*, Vol. 33, pp. 516-523.

phase is executed after another and project outcomes are predefined, is not suitable to governments operating in a dynamic environment, such as digital government. Agile practices are expected to promise higher levels of adaptive innovation.¹⁰ One example is the use of Scrum in the German government (see Box 10).

Box 9. User-centricity in the Portuguese government – Lab X

LabX, the Laboratory for Experimentation in Public Administration, is a team at the Administrative Modernisation Agency in the Portuguese government. Created in 2017, LabX puts service design centred on citizens at the core of its work. The different phases of this methodology are: investigate, co-create and experiment. User-centred design has since been the hallmark of LabX and has highlighted the importance of citizen participation across the Portuguese government. One of the proposals that came out of co-creation was the development of a single point of access that could facilitate the onboarding of young people and access to digital public services, with more appropriate language and the development of mechanisms to support performance.

Source: LabX (2021).

Box 10. Scrum in the Federal Office for Migration and Refugees (BAMF) in Germany

The Federal Office for Migration and Refugees in Germany has set up an IT lab as a way to deal with the high numbers of asylum applications received from 2015 onwards. The Office is one of the first German public authorities to implement the Scrum methodology in a structured manner in software development.

The Scrum process involves the development of software in recurring cycles also known as sprints. This means that development periods with a fixed duration of typically two weeks are planned together by the team at the outset. The result of each sprint is a product or product increment that functions according to minimum criteria and performs the indispensable basic functions. The Scrum method is notable for the fact that subject specialists work closely with the development team, and that the project can quickly adapt to changes.

Source: Federal Office for Migration and Refugees (2020).

¹⁰ Wang, C., R. Medaglia and L. Zheng (2018). Towards a typology of adaptive governance in the digital government context: The role of decision-making and accountability. *Government Information Quarterly*, Vol. 35, pp. 306-322.

Design thinking

Design thinking is an innovation approach frequently observed in the public sector on which many specialised methodologies are built. Whereas user-centricity puts the user first, design thinking takes a broader view, challenging the existing approaches of public service delivery and public governance. Bason and Austin (2021) identify three dimensions along which public administrators apply design thinking: exploring the problem space, generating alternative scenarios and enacting new practices.¹¹

SKILLS AND CAPACITIES NEEDED FOR ADAPTIVE INNOVATION

Leadership

Proactive and participatory leadership plays a significant role in creating space for adaptive innovation. As adaptive innovation is not directional, leadership needs to create room for innovation without over-defining the purpose behind the action. This can be quite difficult in the standard command-and-control settings of government. Commitment from leaders is needed to adopt new approaches, provide support for teams that apply adaptive approaches such as Agile and enable innovation rather than control it. Furthermore, leaders need to be willing to create room for risk-taking, open up policy-making processes, and allow for space for street-level bureaucrats to listen to stakeholders, understand user preferences and so on. Evidence shows that leaders who communicate a clear vision of what is ahead, and how new approaches are going to influence the practices of the organisation, without controlling those practices too directly, find themselves in a better position to build commitment.¹² For instance, in the face of extreme events such as disasters, research highlights the need for a relational leadership model that incorporates compassion and empathy.¹³

11 Bason, C. and Austin, R. D. (2021). Design in the public sector: Toward a human centred model of public governance. *Public Management Review*, pp. 1-31.

12 See the following: Chatfield, A.T. and C.G. Reddick (2018). Customer agility and responsiveness through big data analytics for public value creation: A case study of Houston 311 on-demand services. *Government Information Quarterly*, Vol. 35, pp. 336-347. Dittrich, Y., J. Pries-Heje and K. Hjort-Madsen (2005). *How to Make Government Agile to Cope with Organizational Change*. *IFIP International Working Conference on Business Agility and Information Technology Diffusion*. Springer, pp. 333-351. Janssen and Van der Voort (2020). Matthews, J., N. Ryan and T. Williams (2011). Adaptive and maladaptive responses of managers to changing environments: A study of Australian public sector senior executives. *Public Administration*, Vol. 89, pp. 345-360. Review, pp. 1-31.

13 Crossweller, M. and P. Tschakert (2021). Disaster management leadership and policy making: A critical examination of communitarian and individualistic understandings of resilience and vulnerability. *Climate Policy*, Vol. 21, pp. 203-221.

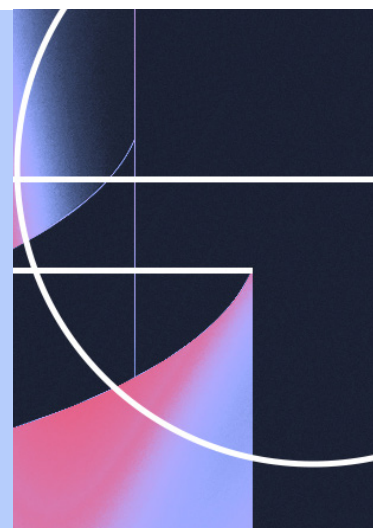
Employee level

On a personal competency level, individuals require a basic willingness to participate in adaptive innovation practices. In government, this means a mindset change to move from traditional to new approaches that favour adaptive innovation (see Box 11 for an example of adaptive practices at the French Central Bank). Moreover, adaptability can be connected to employee resilience, requiring a range of skills such as stress management and building trust with different networks. On a professional level, design thinking and agile approaches require short decision cycles where decisions are made by cross-functional teams. Research indicates that this poses a particular challenge to public servants as this means a shift from the hierarchical decision making in government.¹⁴

Box 11. Experimentation at the French Central Bank

The French Central Bank has transitioned from initial experimentation with agile practices to an organisation-wide adoption of agile ways of working. First, few teams autonomously introduced the Scrum methodology with no official management support. Following this initial experimentation phase, the organisation undertook an evaluation and found that projects that were applying agile methods were more successful, both time wise and in terms of user satisfaction. These results were then reviewed by leadership and led to an official decision to adopt agile practices. Following this management decision, the agile methods were adapted and modified to fit the needs of the organisation.

Source: Berkani (2019).¹⁵



POLICY RELEVANCE

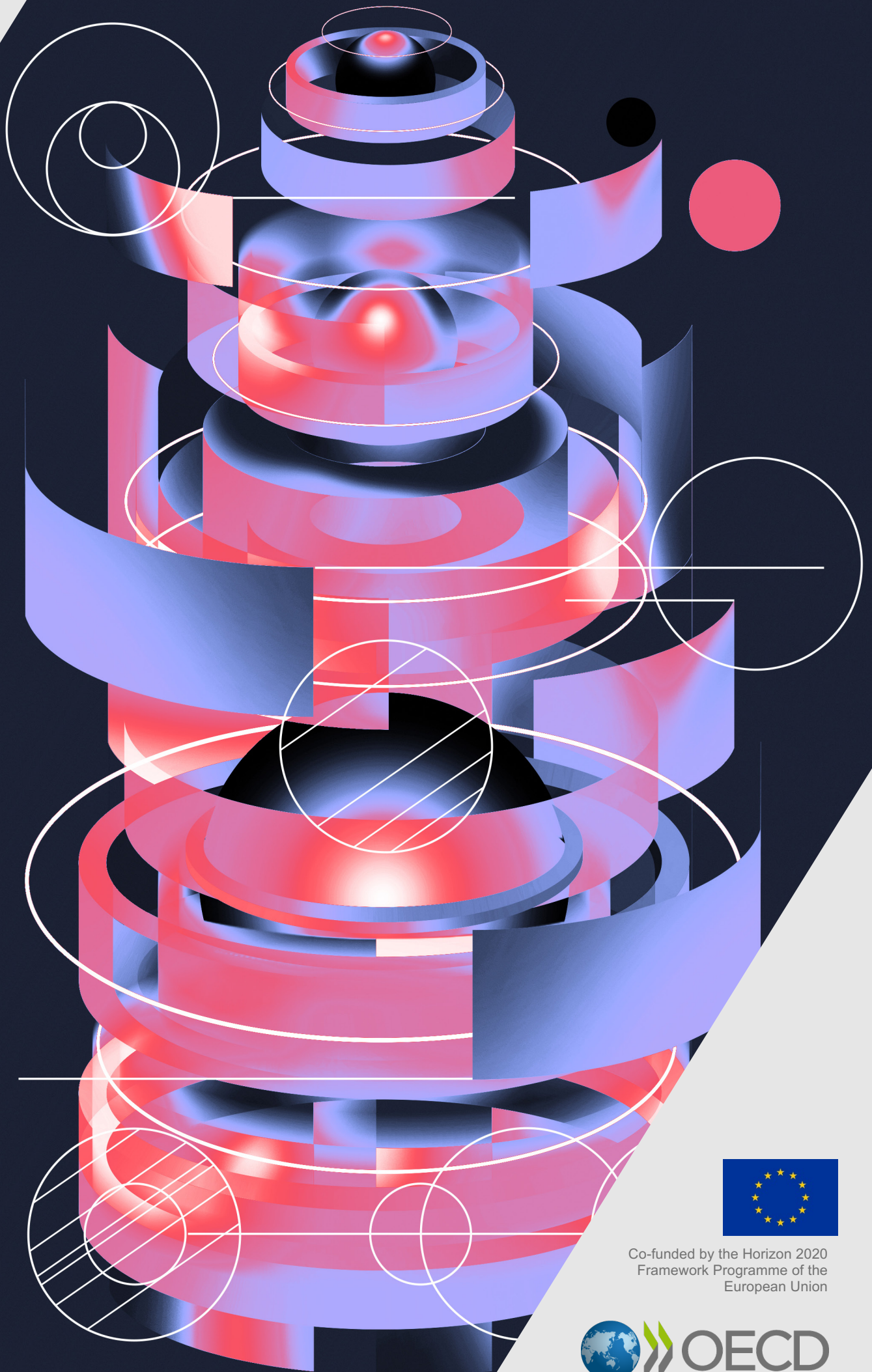
The main challenges for adaptive innovation in practice are connected to finding a balance between adaptation and resilience, and incorporating adaptive innovation into core, everyday government practices. This is especially evident in situations where government faces challenging contexts requiring urgent action, as has been the case in the context of COVID-19. During crises, adaptive innovation supports quick action, without overly challenging the overall structure of government (as is the role of anticipatory innovation). Adaptive innovation provides a promising path to apply interdisciplinary knowledge from other areas to new policy and public service challenges, and offers novel work practices and methods (e.g. agile, user-centricity and human-centred design) to enhance public service delivery. As adaptive innovation looks at the governance system from the perspective of users or environmental changes, it does not challenge

14 Berger, H. (2007). Agile development in a bureaucratic arena – A case study experience. *International Journal of Information Management*, Vol. 27, pp. 386-396.

15 Berkani, A., Causse, D. and Thomas, L. (2019). Triggers analysis of an agile transformation: the case of a central bank. *Procedia Computer Science*, Vol. 164, pp. 449-456.

core government functions (at least at first). Hence, it also allows time for stability and learning in government, even when countered with rapid changes.

At the same time, it can be challenging to incorporate successes and lessons learned from adaptive innovation back into organisational practice in government. Practice and research show that adaptive innovation is often contained within specific remits (e.g. digital units, innovation labs or one-off projects) and that adaptive practices less frequently form part of core practices in public sector organisations. Iterative, user-centric development can be very useful, but strategic processes, budgeting procedures and connected cost-benefit analyses tend to present barriers to this type of innovation.



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