OECD Digital Government Studies

Enabling Digital Innovation in Government

THE OECD GOVTECH POLICY FRAMEWORK

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Please cite this publication as:
OECD (2024), *Enabling Digital Innovation in Government: The OECD GovTech Policy Framework*, OECD Digital Government Studies, OECD Publishing, Paris, https://doi.org/10.1787/a51eb9b2-en.

ISBN 978-92-64-89137-1 (print)
ISBN 978-92-64-45397-5 (PDF)
ISBN 978-92-64-43979-5 (HTML)
ISBN 978-92-64-96038-1 (epub)

OECD Digital Government Studies
ISSN 2413-1954 (print)
ISSN 2413-1962 (online)

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Foreword

GovTech is a key enabler of digital government. As governments increasingly focus on how best to experiment with and adopt digital technologies such as artificial intelligence, GovTech offers a mechanism to do so in a way that is agile, innovative, and cost-effective. Not only does this help improve the effectiveness and efficiency of the public sector, but it can also foster the participation of start-ups and newer providers in the government market.

Despite the value it can provide, GovTech is still a relatively new practice. There is not yet consensus around its definition and, perhaps as a result, many countries are still grappling with how best to approach GovTech within their own digital government strategies.

As such, this publication presents the OECD's definition of GovTech and sets out its GovTech Policy Framework – guiding countries on how to create the ideal conditions for GovTech collaborations and determine the right scenarios in which to use GovTech for maximum impact.

By using the OECD GovTech Policy Framework as a guide, governments can more confidently use GovTech partnerships to enable a more effective and innovative digital transformation. However, not all these components need to be in place immediately. Governments can focus their efforts on addressing specific components of the framework in the short term, while building a scalable approach to secure sustainable outcomes in the medium and longer term.

Acknowledgements

This paper was prepared by the Directorate for Public Governance (GOV), under the leadership of Director Elsa Pilichowski.

This paper was produced by GOV's Innovative, Digital and Open Government Division, under the guidance of Carlos Santiso, Head of Division, and the supervision of Barbara-Chiara Ubaldi, Head of the Digital Government Unit.

The paper was developed by Arune Matelyte, on loan to the OECD from the GovTech Lab Lithuania (part of Innovation Agency Lithuania), Felipe González-Zapata and Julian Olsen, Policy Analysts in the Innovative, Digital and Open Government Division. The project was co-ordinated by Felipe González-Zapata.

The OECD wishes to acknowledge the ongoing guidance and support of the OECD Working Party of Senior Digital Government Officials (E-Leaders) and the OECD Thematic Group on GovTech.

We also would like to give special thanks to Innovation Agency Lithuania for their support and the loan of staff to undertake this project.

The authors are thankful to OECD colleagues for their feedback and comments, including Alex Seeman, Cecilia Emilsson, Mauricio Mejia, Paulina Boéchat, Bruno Monteiro, Miguel Amaral, Giuseppa Ottimofiore, Margarita Escobar, Franceso Calisi, Hamsini Shankar, Gavin Ugale, Paulo Magina, Erika Bozzay, Kenza Khachani, Simon Cox, Andras Hlacs, Matthieu Cahen, Andrea Uhrhammer, Glenda Quintini, Clarisse Girot, Gallia Daor, Louis Holt, Nikolas Schmidt, and Clara Thiemann.

The paper also benefitted from feedback from many external reviewers, including Kjersti K. Berg, Sissel Kristin Hoel and Marit Holter-Sorensen from the Norwegian Agency for Public and Financial Management (DFØ); Vera Soares, Dominque Riefstahl and Christine Zoller from Luxembourg's Ministry of Digitalisation; Kamila Gasinska from Innovation Agency Lithuania; Wessel van Twist from the Netherlands' Ministry of the Interior and Kingdom Relations; Andrea Halmos, Marina Manzoni, Stefanos Kotoglou, and Sven Schade from the European Commission; Guilherme D. F. Dominguez from BrazilLAB; Luciano Crisafulli from Argentina's Corlab; Daniel Ortega Nieto from the World Bank; and Idoia Ortiz de Artiñano from Gobe.

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Executive summary

GovTech is the collaboration between the public sector and start-ups, innovators, government "intrapreneurs", and academia on innovative digital government solutions. It complements existing public sector capability for agile, user-centric, responsive, and cost-effective processes and services. It aims to contribute to an agile public sector and enhance digital government maturity.

The results of the 2023 OECD Digital Government Index (DGI) show that GovTech is becoming a widespread practice as an enabler of digital transformation and a valuable practice to help solve policy challenges. Of the 33 OECD Members that participated in the DGI:

- 70% have already implemented digital strategies for collaboration with the GovTech ecosystem.
- 55% are using GovTech to foster innovation, a culture of experimentation, and collaboration.
- 42% are using GovTech to facilitate the testing and adoption of technologies, such as artificial intelligence (AI).

GovTech reflects the need for collaborative governance in digital government. It creates space for strategic partnerships between the public and other sectors to co-create innovative digital solutions. By fostering the participation of start-ups and small-to-medium enterprises, it also helps address the issue of embedded legacy ICT vendors across government.

GovTech collaborations enable digital government by allowing public sectors to explore, experiment, and develop digital solutions that address key challenges that the sector faces. It is used to:

- ensure that digital government investments are cost-effective and deliver their intended outcomes.
- offer scalable and replicable solutions, expanding options for public sectors with limited resources.
- explore digital technologies, especially for the development and deployment of AI-based solutions.
- develop solutions that better meet user needs for more people-centred public services.
- enhance capability and capacity to address key policy challenges, like the green transition.

However, despite the value that countries see in GovTech, there are varying levels of maturity in its implementation**,** with fewer countries having dedicated GovTech strategies or programmes, teams to manage projects, or the resources to support them. The average level of GovTech maturity across OECD Members is at 50%, dropping to 14% amongst OECD accession candidate countries.

Many countries do not make sufficient resources available to ensure that their use of GovTech is effective and impactful**.** As outlined in the DGI, only 40% have dedicated funding for GovTech collaborations, 27% have training programmes, and only 24% have dedicated procurement mechanisms to facilitate GovTech partnerships. More broadly, most countries are also lacking some of the key underlying digital public infrastructure to enable the development and scaling of GovTech solutions, including digital service standards (24%), common framework for interoperability (27%), common infrastructure for API management (24%), or shared cloud infrastructure (18%).

These data show that countries require further support in identifying the key enabling conditions to implement GovTech effectively and leverage its full potential.

To this end, this paper presents the OECD's definition of GovTech (Chapter 2) and sets out the GovTech Policy Framework (Chapter 3). The framework is designed to guide governments on how to establish the conditions for successful, sustainable, and effective GovTech.

The framework consists of two parts: the *GovTech Building Blocks* and the *GovTech Enabler*s. The building blocks (Chapter 3) represent the foundations at the micro-level needed to establish impactful GovTech practices within public sectors by introducing more agile practices, mitigating risks, and building meaningful collaboration with the GovTech ecosystem. These building blocks include:

- **Mature digital government infrastructure:** including the necessary technology, infrastructure, tools, and data governance to enable both GovTech collaborations and the digital solutions they develop.
- **Capacities for collaboration and experimentation:** within the public sector, including the digital skills and multidisciplinary teams; agile processes, tools, and methodologies; and a culture that encourages experimentation and accepts failure.
- **Resources and implementation support:** considering how to make funding available, how to evolve procurement approaches, and how to scale successful pilots across organisations and internationally.
- **Availability and maturity of GovTech partners:** including acceleration programmes to support start-ups growth by facilitating access to capital, the scaling up of solutions, and minimising barriers to access procurement opportunities.

At the macro-level, the enablers (Chapter 4) instead create an environment that fosters the development of GovTech and facilitates good practices. This is done at the:

- **Strategic layer:** where governments could use GovTech strategies and champions in senior leadership positions to mobilise support and set a clear direction for GovTech.
- **Institutional layer:** where governments could seek collaboration and knowledge-sharing across institutions at the national, regional, or policy levels.
- **Network layer:** where both governments and GovTech actors should seek to mobilise the network collectively to strengthen the GovTech practice and garner broader support from communities.

However, countries still require guidance on when GovTech collaborations are most useful. The GovTech Decision Tree (Chapter 5) guides policymakers or practitioners on how to assess when GovTech is most effective and would have the greatest impact; that is, where both the problem and potential solutions are clearly defined, or where the problem is well-defined and the scenario is replicable, but the solutions are unknown.

By using the OECD GovTech Policy Framework as a guide, governments can more confidently use GovTech partnerships as part of their digital government strategies and maximise the impact of their collaborations. However, while not all these components need to be in place immediately, Governments can focus on specific components of the framework in the short term to introduce greater innovation and agility to the public sector, while building a scalable approach to secure sustainable outcomes and greater impact in the longer term.

1 Defining GovTech

The OECD defines GovTech as the collaboration between the public sector and start-ups, innovators, government “intrapreneurs”, and academia on digital government solutions. It complements existing public sector capability to explore what is possible, experiment with new approaches, and develop scalable solutions. While there is still some confusion with other GovTech definitions and with CivicTech, this is the concept of GovTech on which consensus is building.

GovTech brings the public sector together with other sectors to collaborate on innovative digital government solutions. GovTech enables and accelerates the digital transformation of the public sector via an operating model of actors, interactions, and outputs. The definition builds on an evolving dialogue that frames GovTech as the collaboration between the public sector and an innovation ecosystem to deliver better digital solutions for government rather than simply 'technology in government'. While there is not yet a unified, single definition of GovTech, consensus is building around the OECD's definition. Finally, while their use can overlap, this chapter will also clarify the distinctions between GovTech and CivicTech.

The OECD's definition of GovTech

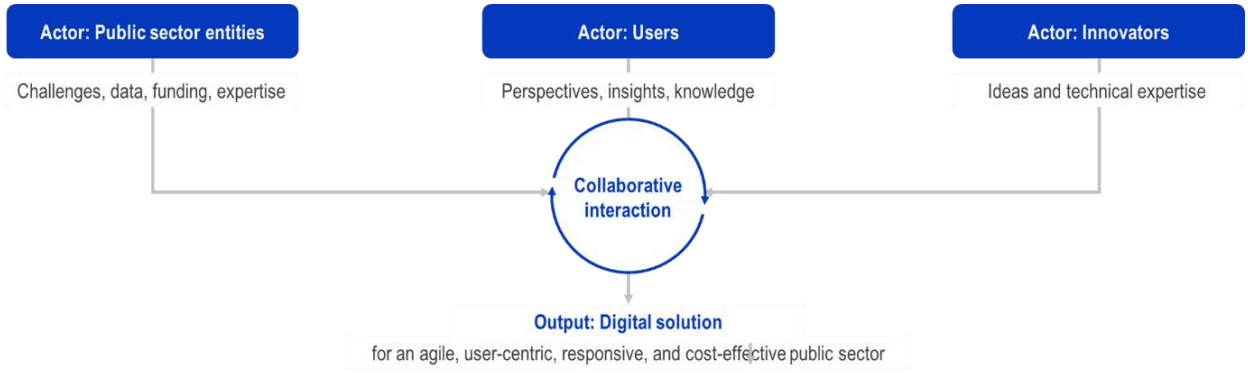
The OECD defines GovTech as the collaboration between the public sector and start-ups, innovators, government "intrapreneurs", and academia on digital government solutions. GovTech complements existing public sector capability for agile, user-centric, responsive, and cost-effective processes and services. As such, it can improve public sector agility, facilitate the uptake of digital innovations, and enhance digital government maturity.

The GovTech practice is growing in response to several recent trends, including the:

- **growth of digital start-ups and social entrepreneurs:** a growing number of actors using digital technology – especially with AI, data access and sharing, and open source solutions – to change traditional industries, solve environmental and social issues, and create public value (OECD, 2020[1]).
- **growing demand:** there is strong demand from citizens for more innovative, user-centric, proactive, and seamless digital public services to meet the needs and expectations of users. This is also driving demand within public sector entities for innovative ways to improve their operations and delivery, resulting in a rise in dedicated strategies, funds, and labs for innovation.
- **domination of large legacy providers:** vendor lock-in and large ICT contracts mean that there has been little incentive for suppliers to drive innovation or cost-effectiveness (Filer, 2019[2]). There is also a reliance on conventional contractor-supplier dynamics, which limits collaboration.
- **investment in competition and market participation:** governments leverage public procurement (including GovTech) to also foster the participation of start-ups and local businesses, promote entrepreneurship, and improve their competitiveness globally.
- **emergence of agile methodologies:** work methods originating from software development are becoming standardised as ways to introduce experimentation, iteration and agility to project delivery.
- **growing financial pressures:** especially due to the climate transition, defence, and ageing populations (OECD, 2024[3]).
- **need to maintain available, responsive, and secure digital services:** to continue delivering to citizens and businesses and to ensure that critical data holdings remain accessible and protected.
- **need to develop digital talent and skills in governments:** public administrations struggle to attract, develop, and retain digital talent – especially when in competition with the private sector for specialist roles – as well as when it is appropriate to partner strategically with the market.

This definition establishes GovTech as a key practice to foster innovation in digital government, enabling its practical implementation and highlighting the value it can bring to collaborative governance. It covers all parts of the operating model of GovTech, including the actors, the interactions, and the outputs.

Figure 1.1. Operating model for GovTech engagement



Source: Authors' own design.

Main GovTech actors

There are three main groups of actors that are critical to the collaborative development of digital solutions: the public sector entities, the users, and the innovators.

Public sector entities

Public sector entities can include national governments, sector ministries, agencies, municipalities, and public schools and hospitals. These organisations 'own' the policy or delivery challenge that are the subject of GovTech projects – identifying a problem within its sphere of accountability and actively participating in the development of its solution. Their involvement may include funding, sharing relevant data, offering expertise, and testing solutions. A key part of their involvement is also in providing the leadership to adopt and promote the use of GovTech across public sectors.

Users

The involvement of users is crucial in the development of digital solutions to ensure successful outcomes that meet their needs. Users can include both the citizens and businesses that use the services and the public sector employees that will need to help develop, manage, and even the solutions. As with other approaches to digital transformation, users are engaged in the process to better understand their needs and get insights on how they experience the solution. This enhances the responsiveness, quality, and usability of the new solutions.

Innovators (start-ups, academia and intrapreneurs)

The innovators bring ideas and expertise to help develop digital solutions. They are often start-ups that have been traditionally underrepresented in the government market but can also include more established innovative companies. They can bring innovative approaches and solutions that can better respond to the needs of citizens and the public sector entities. A broader range of collaborators has also emerged amongst the academia and non-governmental organisations (NGOs), as well as from some "state start-ups" within public entities that function as teams of entrepreneurs integrated within the public sector (often called "intrapreneurs"). For example, the French government established 'beta.gouv.fr' as an incubation programme to support its public sector in building simple, effective, and user-centred digital solutions by training and teaming up intrapreneurs to innovate internally (beta.gouv.fr, 2024[4]).

Collaborative interactions for GovTech

The collaborative interactions that GovTech innovation entail are characterised by co-creation and experimentation. These interactions aim to transcend traditional supplier-contractor relationships to build new forms or public-private partnerships. Rather than relying solely on detailed terms of reference and technical specifications, the focus is instead on the expected outcomes for the solution and actively involving GovTech actors in the process of building it. The objective is not simply to outsource a solution to a supplier, but rather to complement each other and co-create it. GovTech innovation recognises the need for experimentation, that is, developing digital solutions iteratively and conducting pilots before scaling them up to full implementation. These GovTech interactions can result from:

- **Public procurement:** government contracting enables GovTech collaboration, including via early market engagement, outcomes-based requirements, and agile procurement practices, such as pre-commercial procurement, design contests, innovation partnerships, or open competitions.
- **Grants and monetary prizes:** for challenges in earlier stages where funding may not be readily available, entities can use hackathons and design sprints. However, a public procurement process may still be required if the public sector entity intends to adopt and scale up the solution.

These interactions can also be facilitated by initiatives like ‘demo days’ that promote and advocate for the value of GovTech (see Chapter 4), as well as GovTech incubators or accelerator programmes (see Chapter 3) that help develop the capability and capacity of innovators to participate in GovTech. They can also benefit from the role of multilateral organisations that promote the use of GovTech, build capacity, facilitate opportunities for collaborations, or even help provide funding and investment.

GovTech outputs

The goal of GovTech is to collaborate on the development and implementation of innovative digital government solutions, but its outputs will vary depending on its purpose and its interactions. GovTech has a role in both developing new digital solutions – such as a platform, an app, an algorithm, etc. – but also in the adoption and integration of existing solutions available in the market. Possible outputs could range from a list of ideas, mock-ups, proof-of-concept, pilot projects, or even fully scaled solutions.

While the long-term goal is usually to implement a full-scale solution, it is common for GovTech processes to include intermediate outcomes at earlier stages of development as part of experimentation, iteration, and piloting potential solutions. Some GovTech projects may aim to only produce an idea or proof-of-concept, but the impact of these outputs alone is considerably lower. Finally, there is also potential for GovTech solutions to be scaled up or replicated, which can offer a cost-effective option with limited budget to dedicate to digital government efforts, including for regional, local, or municipal governments.

Overall, the outputs should genuinely enhance the maturity and quality of a country’s digital government by contributing to agile, user-centric, responsive, and cost-effective public processes and services.

Examples of how GovTech is used

GovTech acts as a key enabler of digital government, allowing public sectors to address the key challenges that it faces in collaboration with GovTech actors. It is already being used to:

- ensure that digital government investments are cost-effective and deliver their intended outcomes.
- offer scalable and replicable solutions to offer more options to public sectors with limited resources.
- explore technologies, especially for the development and deployment of AI solutions.
- develop solutions that better meet user needs for more people-centred public services.

- enhance capability and capacity to address key policy areas, like the green transition.

The public sector can use GovTech to:

- **explore what is possible:** for example, as part of its strategy for AI in the public sector, Spain is intending to use its GobTech Lab to develop pilot projects and AI solutions for use by public sector entities (Government of Spain, 2024[5]). This is because GovTech collaborations are useful scenarios in which to test and validate solutions before committing to the implementation of a full-scale solution. In Luxembourg, its GovTech Lab has continued exchange with the GovTech community on the digitalisation of government, including on digital identity (Ministere de la Digitalisation, 2024[6]).
- **experiment with new approaches:** Colombia's MiLAB guides public sector officials through a phased process, bringing them together with private sector actors to define their challenge, explore potential solutions, and then work in collaboration to co-create and scale them (OPSI, 2020[7]).
- **develop scalable solutions:** GovTech Poland has been developing innovative mechanisms for the public sector to have a dialogue with users to better understand and meet their needs. The mechanisms were tested in the initial phase, before being scaled out for use across Poland's public sector (GovTech Polska, 2024[8]).

Furthermore, GovTech reflects the need to create space for strategic partnerships between the public and other sectors to foster the participation of start-ups and small-to-medium-sized enterprises, which helps to address the issue of embedded legacy ICT vendors across government.

Acknowledging complementary approaches to GovTech

While GovTech is an evolving concept, most approaches still centre around four elements: the public sector, innovators, collaboration, and the use of technology. For example, Accenture and Public have focused on "cutting-edge technology solutions developed by various players – notably start-ups, but also medium and large enterprises, non-profits and others— that are transforming public services" (Accenture and Public, 2018[9]).

Some recent industry reports focus on the GovTech partners themselves, suggesting that GovTech is "[c]ompanies (especially SMEs and startups), which use innovative technologies to deliver products to the public sector, which are specifically designed to address its needs" (Anbouba et al., 2020[10]). Other sources highlight also the 'ecosystem', stating that "GovTech is an emergent innovation ecosystem in which private-sector start-ups and innovative small and medium enterprises (SMEs) deliver technological products and services, often using new and emerging technologies, to public sector clients" (Filer, 2019[2]). This is an approach shared by other multilateral organisations, such as the Development Bank of Latin America and the Caribbean (Santiso, 2020[11]).

Similar to the OECD, the European Commission's approach focuses on GovTech as a disruptive process, in which "governments are looking towards the world of start-ups and SMEs for providing products and services for new, creative and innovative solutions, more agile ways of working, and for having more choices beyond the offers of established large IT (service) providers" (Kuziemski et al., 2022[12]).

The European Commission has also reinforced this approach in legislation, with the Interoperable Europe Act including a definition of GovTech as the "technology-based cooperation between public and private sector actors supporting public sector digital transformation" (Official Journal of the European Union, 2023[13]). This approach more closely aligns to what is central to the GovTech labs described later in this paper, including in Lithuania, Luxembourg, Norway, and Brazil, as well as for the Inter-American Development Bank (IDB, 2021[14]).

While the focus of the approach may differ, there is broad consensus that GovTech is the collaboration between the public sector and non-government actors to deliver better digital solutions for government.

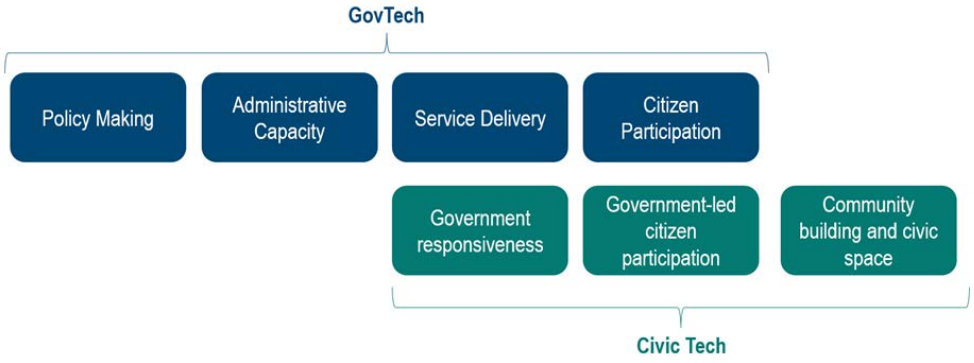
It should be noted that GovTech is also used to refer to 'government technology' and the general use of digital technologies in the public sector. For example, the World Bank refers to GovTech as "a whole of government approach to public sector modernisation" that emphasises accessible and citizen-centric public services, a system-wide approach to digital transformation, and more efficient and simple government IT systems (The World Bank, 2023, p. 4[15]). Similarly, 'government technology' is the term used by Singapore's GovTech Agency (GovTech Singapore, 2024[16]) and the World Economic Forum (Mergenthaler and Buckup, 2024[17]).

GovTech and CivicTech

While GovTech and CivicTech are two terms that have used interchangeably in the past, they should be seen as distinct practices. While both involve collaboration on digital solutions, GovTech is used to develop tools that enhance public sector delivery and CivicTech involves the *use* of digital technologies to reinforce democracy by enabling the public to be informed, to participate in decision- and policymaking, and to increase governments' responsiveness and accountability.

Plausibly, the areas of application of GovTech and CivicTech may overlap, creating confusion among practitioners: increasing government responsiveness in service delivery and enhancing citizen participation led by the government (see Figure 1.2). The difference is that GovTech should be understood as being focussed on the internal workings of public sector entities to support their digital transformation, while CivicTech enhances government interactions with the public. For example, the French Government developed Agora – a mobile application for citizens to share their opinions and vote on issues, creating a continuous democratic dialogue that can exist outside of the election cycle (Agora, 2024[18]).

Figure 1.2. Comparing the areas of application for GovTech and Civic Tech



Note: Authors' own design

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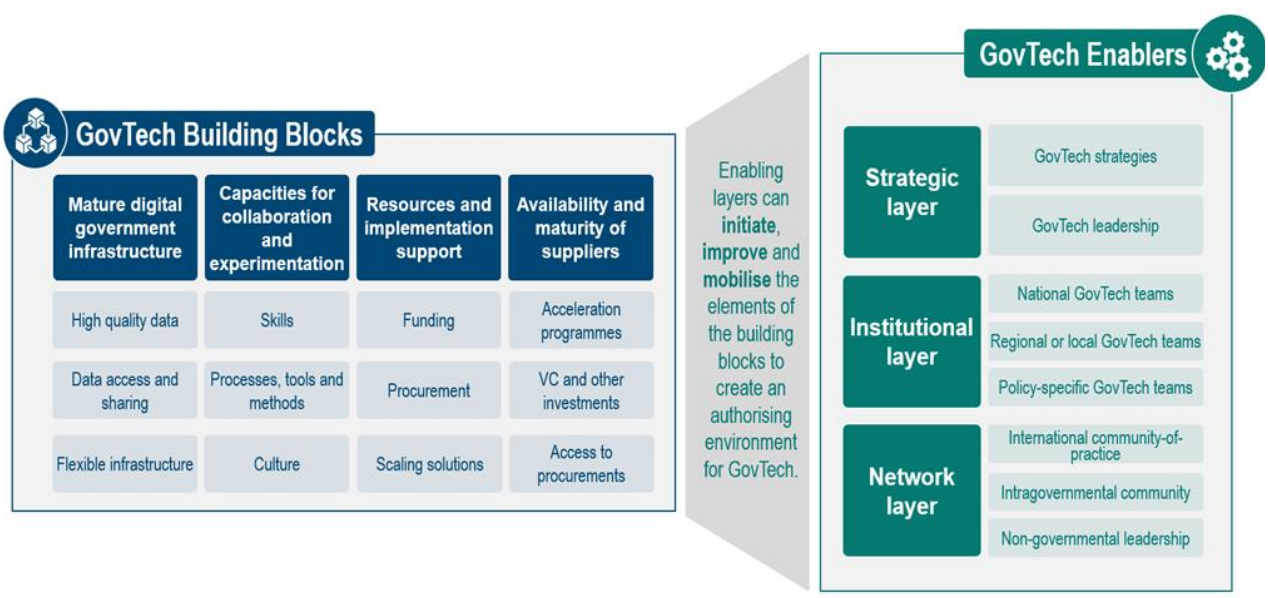
2 GovTech Policy Framework

This chapter introduces the GovTech Policy Framework, which outlines the factors that maximise the potential for GovTech engagements to be successful and sustainable. The framework presents both the building blocks and the enablers for GovTech.

The GovTech Policy Framework is a policy tool that outlines the factors that maximise the potential for GovTech engagements to happen successfully and sustainably**.** The framework consists of two parts: the *GovTech Building Blocks* and the *GovTech Enablers*, which are illustrated in **Figure 2.1** below:

Figure 2.1. The GovTech Policy Framework



Source: Authors' own design

The *GovTech Building Blocks* represent the ideal set of conditions that should be in place at the micro level within a public sector entity to minimise the risk and maximise the success and positive impact of GovTech collaboration. The framework outlines the elements needed in the public sector for GovTech to be effective, including a mature digital government infrastructure, capacities for collaboration and experimentation, the resources and implementation support, and finally, the availability and maturity of GovTech partners (Chapter 3).

At a macro level, the *GovTech Enablers* create the environment to support and encourage good practices and a vibrant GovTech ecosystem. By addressing these enablers at the strategic, institutional, and network layers, countries have the potential to initiate, improve and mobilise the elements defined under the building blocks to create the best possible environment for GovTech collaborations to flourish (Chapter 4).

While these are the ideal factors, governments could consider what principles could be adopted in the short-to-medium term to enable them to pursue GovTech opportunities in parallel to developing these building blocks and enablers in their public sectors. They are not intended to preclude public sector entities from using GovTech while they develop their digital government maturity.

To guide public sector entities in implementing GovTech, the framework can be used alongside the GovTech Decision Tree (described in Chapter 5) to determine which public sector challenges are the most appropriate to address with the support of GovTech.

Rationale for developing the GovTech Policy Framework

While GovTech can be utilised by any public sector entity in any country, it is important to establish certain enabling conditions for GovTech engagements to be effective and sufficient digital government maturity to help achieve the desired outcomes.

These enabling conditions are necessary to ensure that GovTech engagements include:

- **a co-ordinated approach:** GovTech support needs to be mobilised and co-ordinated in close alignment with strategies for digital government and public sector innovation, which is enabled also with commitment from executive and political leadership. This helps create a cohesive and unified approach, using resources and expertise effectively to maximise impact.
- **risk management:** while GovTech may require an increased appetite for risk and innovative procurement approaches, it is still important to act with integrity and due diligence to ensure that GovTech partners are mature and financially viable enough to work with the public sector.
- **a means of implementation:** including the processes to procure, collaborate on, and scale-up solutions. These processes ensure that GovTech projects are delivered effectively and efficiently.
- **fair and equal treatment:** GovTech engagements should be based on genuine collaboration among partners (instead of directing suppliers to meet pre-determined requirements). The public sector should not impose unnecessarily burdensome restrictions and neither partner should seek to undermine or exploit the process.

Thus, the intent of the GovTech Policy Framework is to be used as a tool to raise awareness, analyse capacity, and drive action as a tool for:

- **awareness:** the framework offers a resource to recognise GovTech across the public sector, and to foster meaningful dialogue about the use of GovTech.
- **analysis:** governments can use the framework to assess and evaluate the state of their GovTech ecosystem, including to identify the key opportunities for further development.
- **action**: the framework serves as a valuable guide for developing action plans as governments embark on GovTech initiatives.

By using the GovTech Policy Framework as a tool in this way, public sector entities can engage GovTech actors in the right way to maximise the impact of their collaborations.

Methodology for developing the GovTech Policy Framework

Both the GovTech Policy Framework and its contextual information provided in this paper are based on the OECD's extensive work on digital government, public sector innovation, and public procurement for digital solutions. The framework supports the implementation and dissemination of the OECD Recommendation on Digital Government Strategies [OECD/LEGAL/0406],the Recommendation on Public Procurement [OECD/LEGAL/0411] and the Declaration on Public Sector Innovation [OECD/LEGAL/0450], and takes into account further existing OECD standards such as the Recommendation for Agile Regulatory Governance to Harness Innovation [OECD/LEGAL/0464], the Recommendation on Open Government [OECD/LEGAL/0437].

It offers a practical tool to policy makers as an option to make use of those OECD standards in the context of digital government approaches and in the pursuit of innovation. It uses the analysis and findings of country-specific and thematic reports such as the Digital Government Reviews of Luxembourg and of Latin America and the Caribbean, which have helped informed the development of a concrete framework with which countries can analyse and build their capacity for effective GovTech practices.

The framework was developed by the OECD Working Party of Senior Digital Government Officials (E-Leaders) and its GovTech Thematic Group, which consists of digital government officials and GovTech experts from OECD Members and partners. The framework also benefited from the feedback and content enrichment received through engagement with representatives from around twenty GovTech teams globally representing the public and non-governmental sectors. Finally, additional data collection was undertaken through a call for GovTech policy examples from countries, which further informed and refined the development of the framework.

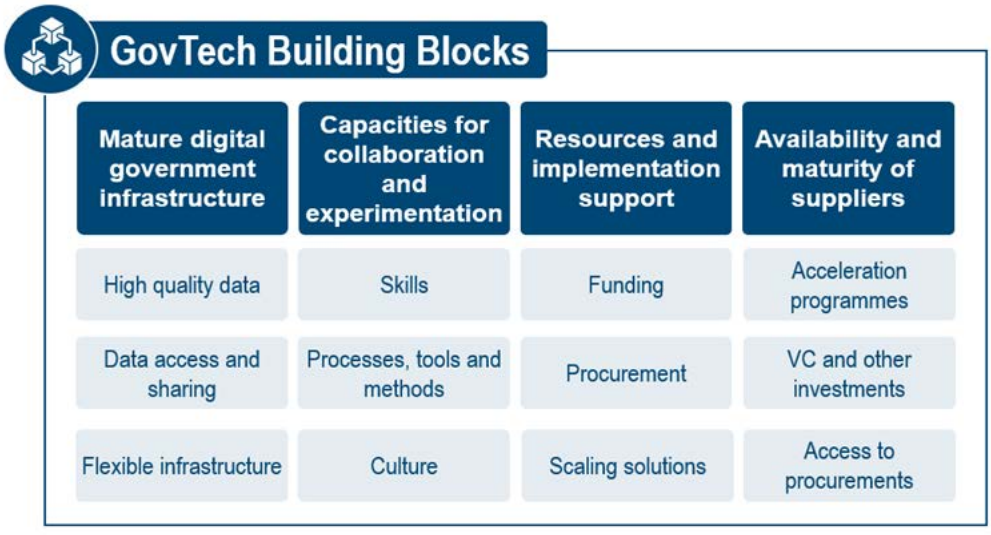
3 GovTech Building Blocks

This chapter outlines the GovTech Building Blocks that represent the set of conditions at the micro-level needed to establish GovTech while minimising the risks and maximising the success and positive impact of these collaborations. These GovTech building blocks include mature digital government infrastructure, capacities for collaboration and experimentation, resources and implementation support, and the availability and maturity of GovTech partners.

The *GovTech Building Blocks* represent the processes, policies and initiatives within a country that can maximise the likelihood of success for a GovTech engagement on a micro level. Four core building blocks have been identified as critical for the quality and long-term viability of the GovTech projects:

- **Mature digital government infrastructure:** to provide the basis on which solutions can be built.
- **Capacities for collaboration and experimentation:** to enable GovTech projects to be initiated and organised effectively.
- **Resources and implementation support:** to assure the quality and sustainability of projects.
- **Availability and maturity of GovTech partners:** to ensure that there is an ecosystem of quality counterparts to co-create GovTech solutions with minimised risk.

Figure 3.1. GovTech Building Blocks



Source: Authors' own design.

The first 3 building blocks determine the public sector's capacity for leveraging GovTech innovations, while the last reflects the needs of the market and its capability to maintain and supply of GovTech solutions.

Mature digital government infrastructure

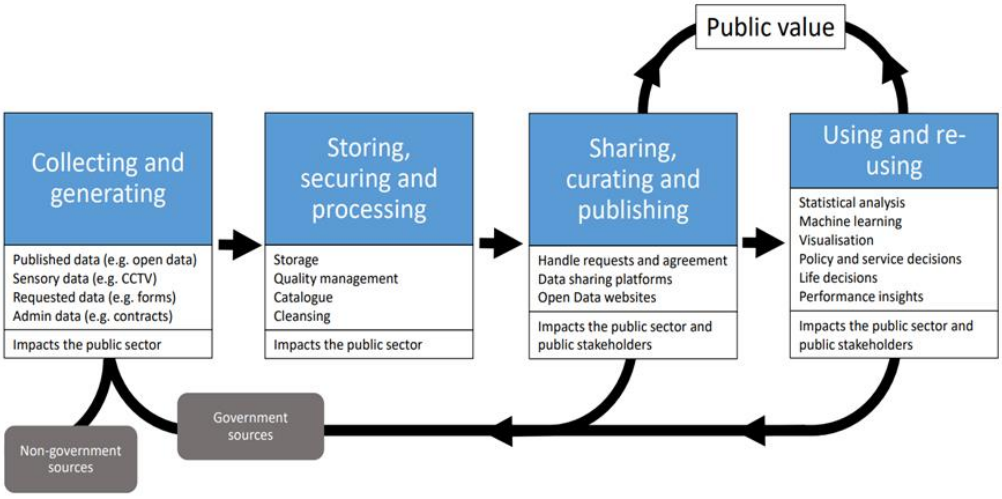
GovTech solutions build upon existing public sector data and digital government infrastructure. Effective GovTech engagements are dependent on a public sector entity's existing technology environment and governance arrangements, which can either limit or foster opportunities to feely explore different solutions and ways to develop them. The quality of GovTech solutions is therefore dependant on the quality and maturity of digital government infrastructure. This is because the way the public sector develops digital services is influenced significantly by its legacy technology and infrastructure, common components and tools, and its service standards (OECD, 2020[1]). Data governance, including both data infrastructure and architecture, is also essential to support the design and delivery of digital services and build a data-driven public sector (OECD, 2019[2]). These factors not only enable GovTech collaborations to take place, but also influence the quality and efficiency of these initiatives. As such, there are three components of mature digital government that hold a significant influence over successful GovTech projects: high quality data, data access and sharing, and flexible infrastructure.

High quality data

Many GovTech solutions are data-intensive and often rely on high-quality data to create value, especially for those collaborations that are being used to explore and pilot AI solutions. Prior to engaging with GovTech actors, public sector entities should determine whether there is sufficient high-quality data on the challenge to be addressed. If such data are missing, the organisation might consider reformulating the problem. For instance, public sector entity can refocus the collaboration with innovators from building the solution to ideating around the ways to improve data quality or find innovative data sources to build solutions and algorithms.

High-quality data are a result of long-term alignment of adequate data governance, digital tools, and digital skills within the public sector. However, in the short term, governments can take steps to improve data management, and in turn, the resulting quality and public value of the GovTech solution. The Government Data Value Cycle (Figure 3.2) can serve as a guidance for comprehensive approach to improving the access, sharing, and use of high-quality data (van Ooijen, Ubaldi and Welby, 2019[3]).

Figure 3.2. Government Data Value Cycle



Source: (van Ooijen, Ubaldi and Welby, 2019[3])

Artificial intelligence (AI) and big data analytics are two of the three technologies most often used by GovTech start-ups (StateUp, 2022[4]). Data are one of the main enablers and fundamental foundation for AI in the public sector (OECD/CAF, 2022[5]). Therefore, the quality and usability of GovTech solutions depends on the existence of high-quality data. Inadequate data can instead result in algorithms that inform poor decisions, reflect societal inequalities, and embed discriminatory practices (Berryhill et al., 2019[6])

Data access and sharing

High-quality data should be both available and accessible while data privacy and security should be protected. GovTech actors should be able to use this data to gain insights, conduct analysis, and develop algorithms and innovative applications. Data-sharing systems reduce the friction and delays in GovTech co-operation. If ad hoc data access and sharing arrangements need to be done on individual project basis, it can risk introducing uncertainty, delays in project timelines, and increased resource costs.

For GovTech collaborations, the challenge with data access and sharing is two-fold: inter-entity data sharing and access to external actors. Firstly, solutions might require data from different registers or

databases that are not within control of the organisation leading the project. Common challenges in such cases are around data discoverability (how to find the data), sharing (how to make it available to other organisations), and interoperability (how to process it) (van Ooijen, Ubaldi and Welby, 2019[3]).

Once enough quality data are within the hands of public sector entity, the challenge is then sharing these data with the external GovTech actors. Public sector entities must ensure that there are technological and legal ways to facilitate this exchange. A systemic approach to open data can help develop digital ecosystems (Posada Sanchez, Pogorzelska and Vaccari, 2022[7]) GovTech start-ups can use the data to build solutions, which can be further facilitated by Application Programming Interfaces (APIs). This practice is growing across OECD Members, including Australia, Canada, Colombia, Denmark, France, Mexico, Portugal, Switzerland and the United Kingdom (OECD, 2019[2]).

Box 3.1. Data sharing in Lithuania

The Lithuanian Innovation Centre needed a solution that could evaluate science and business cooperation. Building such a solution required access to data about education and enterprises tha.t are owned by other organisations, and trying to access it delayed the development of the solution. To address this, Lithuania's State Data Agency is building a single data lake: the State Data Management Information System (SDMS IS). The SDMS IS pools data from various registries and information systems – creating a space to manage data from collection to its use and publication, with the entire data management cycle overseen by a single organisation. National and local public sector entities can access data sandboxes, dashboards, and other public sector data to facilitate efficient interorganisational data sharing.

Source: (VDV, 2021[8]) (Office of the Government of the Republic of Lithuania, 2023[9])

Flexible infrastructure

Flexible digital government infrastructure can enable effective collaboration. For GovTech, cloud computing and open-source policy can influence how solutions are built, maintained, and scaled.

Cloud computing is another of the most used technologies among GovTech start-ups (StateUp, 2022[4]), making it part of the key underlying infrastructure required for the development of solutions. Access to secure and scalable cloud infrastructure is thus essential (OECD, 2020[1]), as it mitigates the risks of disruption (OECD, 2022[10]). This is especially crucial if the solution uses AI or big data because it requires more computing power and may not be compatible with legacy technologies (OECD/CAF, 2022[5]). Additional compute also risks increasing the environmental impact, as data centres can be very energy intensive. Public sector entities should consider how to procure or access cloud infrastructure to support GovTech, including what access might be required for beta and live solution development, as well as to ensure that the providers are sustainable and support the green transition.

Open-source policies can also impact how GovTech solutions are built and what options are available to public sector entities to scale and maintain these solutions. StateUp (2022[4]) notes that there has been an increase in uptake of open-source software in the GovTech market. For instance, one of the most well-known GovTech start-ups, CitizenLab went open source in 2021 (van Ransbeeck, 2021[11]). However, there is debate around the trade-offs between cost-effectiveness and competitive advantage. For instance, open-source software can potentially reduce costs for GovTech start-ups, as they can leverage existing solutions without incurring licensing fees. Furthermore, using open source together with open standards might level the playing field, allowing smaller companies to compete with larger ones by leveraging shared resources and lowering the risk of vendor lock-in (OECD, 2022[12]). On the other hand, some argue that

proprietary solutions can offer a competitive advantage in terms of unique features and intellectual property. Balancing the need for transparency with protecting valuable intellectual property can be challenging, so GovTech actors should weigh these factors based on a project's goals, requirements, and intended solution. If the use of open-source is appropriate, then governments should communicate the requirement in advance and offer guidance on its use, including on how to ensure that participation in open source networks remains active and that solutions remain current.

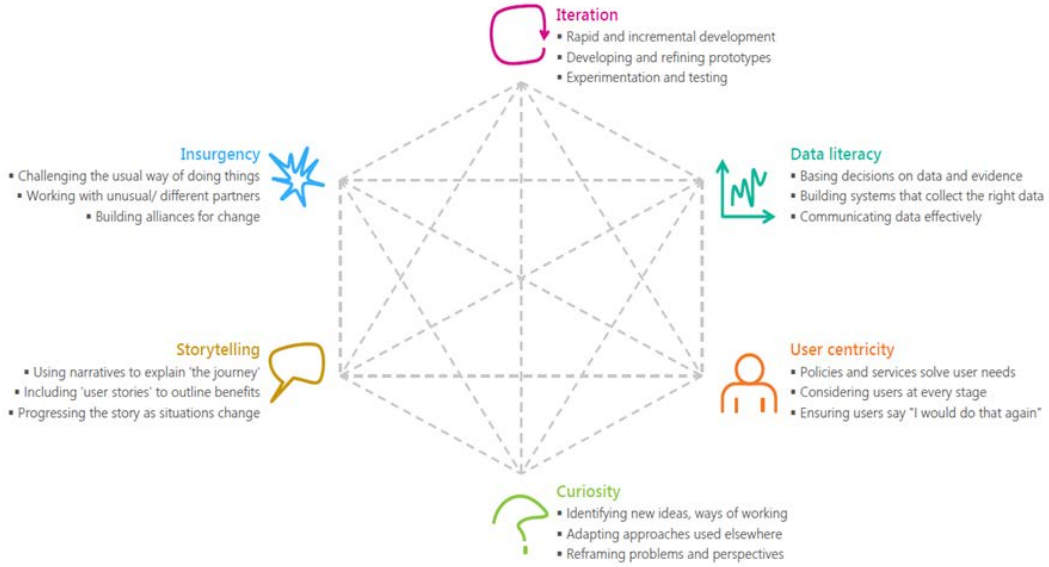
Capacities for collaboration and experimentation

To ensure the success of GovTech engagements, it is essential for public sector employees to have the necessary skills and capabilities to initiate and deliver GovTech projects. The public sector has traditionally favoured large projects where the public sector acts as the contractor, providing detailed terms of references, while the private sector primarily focuses on meeting those requirements. Most processes for managing projects therefore are predicated on this kind of relationship. GovTech takes a more disruptive approach and instead focuses on experimentation, iteration, and co-creation. Public sector entities need to evolve to find balance between managing risk and leaving room for more innovation. To achieve this, they need to enhance skills, update processes, tools, and methods for GovTech projects, and create an enabling culture to enable their success.

Skills

GovTech complements existing public sector capability to deliver digital projects and initiatives – it does not replace them. Public sector entities need sufficient level of skills to ensure a balanced and equitable partnership with external actors. Without a sufficient level of understanding and expertise, there is a risk of poor outcomes or the poor management of public resources. Given the focus of GovTech collaborations on digital innovation, engaging in GovTech collaborations requires a combination of skills related to public sector innovation and digital government. The OECD has identified six core skill areas required to support increased levels of innovation in the public sector: iteration, data literacy, user centricity, curiosity, storytelling, and insurgency (OECD, 2014[13]). **Figure 3.3** outlines these skills below:

Figure 3.3. Six skills areas for public sector innovation and what they mean

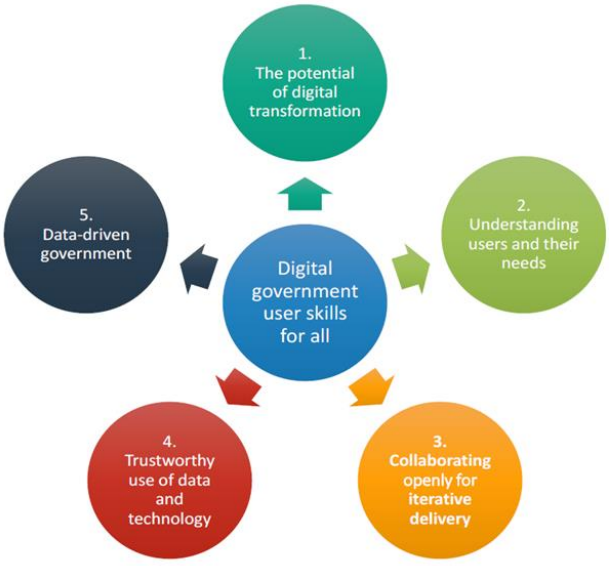


Source: (OECD, 2014[13])

This set of skills is key to effective GovTech collaborations. GovTech actors need to be able to seek out new ideas and reframing existing problems (i.e. have *curiosity*). They should also challenge the status quo and build alliances with alternative partners, such as start-ups and entrepreneurs (i.e. *insurgency*). It is important also to be able to define GovTech challenges in a way that attracts more co-creators or gather support to scale pilots into fully-developed solutions (i.e. *storytelling*). Skills related to *user-centricity* – such as solving user needs and involving users in the design, delivery, and evaluation of projects – allow public servants to better define the problem they are trying to solve and increase the quality of the solution being built. *Data literacy* is essential to help identify opportunities for and assess the impact of GovTech. Finally, GovTech actors should know how to successfully deliver GovTech projects in an agile way (i.e. *iteration*) – taking steps to ensure that the solution will meet user needs and integrate into the environment.

As GovTech focuses on encouraging more user-driven digital government, it is important to also consider the 5 digital government user skills defined in the OECD Framework for Digital Talent and Skills (OECD, 2020[14]) and illustrated below in Figure 3.4. This skillset is key to developing capability around data-driven decision-making and how to develop digital solutions in a way that is collaborative, iterative, and genuinely meets the needs and expectations of its users. Furthermore, these skills enable employees to ask relevant, informed, and challenging questions to go beyond superficial reporting when overseeing digital, data and technology activities. This is crucial for GovTech given the close collaboration with GovTech partners that might have higher technical expertise - public officials need to be able to ask the right questions.

Figure 3.4. Digital government user skills



Source: (OECD, 2020[14])

To address this, countries should assess its workforce to identify skills gaps and develop competence frameworks to help address them, including through formal and informal learning opportunities. This is described in greater detail in the OECD's paper on '*Developing skills for digital government*' (2024[15]).

However, a single person is not expected to have all these skills. Rather, multidisciplinary teams would be constructed in the public sector entities to cover all the skills in the innovation and digital skills framework. As innovation practices and digital technologies are key to GovTech projects, these teams should have at

least an 'emerging capability' in each of the skills listed. Where teams only have basic awareness of these concepts, then teams can address skills gaps by using structured processes for GovTech that entities can follow or by seeking assistance from centralised GovTech teams (where they are available).

Processes, tools, and methods

Public sector processes often need to be updated to enable GovTech and public employees should be equipped with the tools and methodologies they need to support the successful delivery of these agile projects. This aligns to the Declaration on Public Sector Innovation in acknowledging that support structures and processes as the key enablers for innovation (OECD, 2019[16]).

Traditional project management is often based on a 'waterfall' methodology, which relies on knowing outcomes in advance, long planning processes, and minimal opportunity for changes or innovation during implementation (OECD, 2017[17]). GovTech instead centres on a more agile prototype delivery approach. Public sector entities primarily use GovTech because they are in a 'discovery' phase and cannot yet define the outcomes. Instead, GovTech starts small, undergoes iteration with feedback loops, and adapts quickly to control and plan around the uncertainty. Traditional processes can also be siloed and leave user engagement to the end of a project. GovTech instead requires more of a user-driven approach that centres early, continuous, and effective collaboration with stakeholders (OECD, 2017[17]).

Figure 3.5. Traditional project delivery versus agile prototype delivery

Source: (OECD, 2017[17])

For GovTech projects to succeed, public employees also need to be supported with the guidance and policies on how best to manage agile projects. Implementing such processes would ensure that the necessary risk controls are maintained, while also building confidence, fostering trust, and facilitating more innovative solution development. This can be achieved through:

- **Open innovation processes:** organisations should maintain structured innovation processes that allow for internal and external collaboration in each of the phases of problem formulation, idea generation, idea selection, and idea conversion (Roy and Roy, 2019[18]). Hackathons, incubators, shared spaces, living labs, ideation platforms are some tools to do this (BearingPoint, 2018[19]).
- **Agile project management methodologies:** agile project management can be a tool to implement open innovation in practice (BearingPoint, 2018[19]).
- **Tools and methods for problem refinement, iteration and collaboration:** public employees should have tools and templates for design thinking, co-creation facilitation, and prototyping.

These processes and tools can either be specific to an organisation, standardised across the public sector, or supported by a central GovTech team. In the absence of agile project methodologies and processes, public sector entities may attempt to fit GovTech projects into traditional frameworks, which can stifle innovation, increase risk, and result in disappointment.

Culture

The success of GovTech projects depends on an organisational culture that encourages and enables innovation. Without organisational support and incentives, "rewards for innovation may be much smaller than the sanctions for trying and failing" (OECD, 2017[20]). This is often seen in tension between:

- regulated continuity versus space for risk taking.
- narrow specialisation versus cross-silo collaboration.
- hierarchical organisations versus diffused accountability.

According to the OECD Declaration on Public Innovation (2019[16]), the public sector should "acknowledge the advantages that a culture of openness, of learning from errors and of collaboration across silos and sectors offers to the practice of innovation; give permission to public sector entities and public servants to take appropriate risks and to explore and engage with new ideas, technology and ways of working as part of their core business" (OECD, 2019[16]). Similarly, the OECD Framework for Digital Talent and Skills in the Public Sector encourages a learning culture including a safe environment for employees to experiment, learn and develop through testing and failing (OECD, 2021[21]).

Without an organisational culture that supports experimentation and collaboration, GovTech engagements can happen only on an ad-hoc basis and rely heavily on active individual changemakers. Additionally, organisational support is critical to help overcome the additional scrutiny and mistrust that often accompanies these innovative practices and can magnify the fear of failure. Support for GovTech should be visible enough to encourage public sector employees that it is still safe to experiment.

The high level of scrutiny for GovTech is due to projects often not having a clearly defined project scope and timeline. While public sector employees can define the pilot stage, it is difficult to determine how complex and expensive the end solution will be. In addition, GovTech partners often leverage innovative and emerging technologies, which can increase the perception of the risk inherent in such an engagement. Furthermore, the outcome of a GovTech engagement is not guaranteed. A project owner might determine that a solution is not viable or that it does not solve the problem at hand. Organisations need to be prepared for and should tolerate such outcomes or public sector employees will be reluctant to experiment.

Another important aspect of culture is the tolerance and encouragement for collaboration across organisations, as well as between the public and private sectors. Public sector employees should be supported to engage horizontally – directly working with their peers to better understand a problem, explore potential data, and understand the scalability of the solution. This should include open engagement and collaboration with GovTech partners to discuss the challenges that the public sector needs help to address.

Creating a culture that enables experimentation and collaboration is a long process that needs to alter prevailing behaviours and approaches in the public sector. Nevertheless, establishing the necessary organisational culture is possible through supportive leadership that aligns with individual and organisational incentives. In the short term, creating spaces for networking can provide an impetus for change by sharing lessons from failures and celebrating successes. Awards can be another way to encourage innovation and provide visibility to such projects (OPSI, 2022[22]). While they alone do not create systemic change, they can motivate individuals, provide inspiring examples, and demonstrate that innovation delivers. Another approach could be to also acknowledge and celebrate the failures in the public sector to create an environment where risk is allowed, and innovation is encouraged. For example, UNICEF initiated 'Fail Fridays' for teams to discuss their failures and doubts with to facilitate learning and

"institutionalise risk-taking" (OPSI, 2022[22]). In the US, the Centre for Public Impact and the National Association of County Administrators run a year-long program to help local governments 'fail forwards' – learning from failure to foster a culture of innovation (Center for Public Impact, 2022[23]).

Resources and implementation support

Public sector entities need to have the adequate resources and implementation support to get the full value of GovTech engagements. This means making GovTech part of the broader strategic approach to digital government investments in two ways: both as a method to support digital investments and as an example of an investment to be delivered (OECD/CAF, 2023[24]). First, GovTech is one of the methods of engagement identified under the OECD's Digital Government Investment Framework to support procurement, commissioning, and early market engagement (OECD, forthcoming). Secondly, projects that leverage GovTech are also considered digital government investments that should be managed in line with this framework to ensure that they are planned, implemented and monitored effectively to deliver their intended outcomes. To facilitate this, public sector entities need to consider the appropriate funding, procurement methods, and pathways for scaling solutions that are required for the sustainability and integrity of GovTech.

Funding

While it is possible to have GovTech engagements without it, having dedicated financial resources can result in more impactful GovTech solutions. As GovTech projects focus on developing pilots and often have a higher risk of failure, their budgets need to be flexible and conducive to experimentation. There are two primary sources of funding for public sector entities' GovTech projects: traditional budget negotiations, based on the need to solve a specific problem, or funds for public sector innovation. Public sector entities often struggle to build business cases for GovTech projects to be financed under the first option, given that the potential scope of the solution is hard to define beforehand. This leads many organisations to pursue the latter option: funds for public sector innovation. There are two variations in how these funds are generally administered:

- **General innovation funds:** these often reflect the cross-cutting nature of innovation and serve the need for flexibility in funding, which is often difficult to attain through traditional budget processes. According to previous OECD research, 14 of the 25 surveyed OECD countries had at least one general innovation fund that aimed to support prototyping, innovative solutions implemented elsewhere, or the implementation of new projects (OECD, 2017[25]). General innovation funds often support broader digital transformation initiatives. For example, Ireland has launched the Public Service Innovation Fund in 2019. It is a competitive fund, that supports innovative ideas from across public sector entities with funding between EUR 25,000 - 60,000 (Our Public Service, 2023[26]). Canada has taken a different approach – the Government's Experimentation Direction recommends that senior managers dedicate a percentage of their budget to experimentation, backing this expectation with reporting requirements on their spend (OPSI, 2022[22]).
- **GovTech-specific funds:** While general innovation funds can be used successfully for GovTech projects, some countries have opted to create funding specifically for collaboration with GovTech actors. Allocating dedicated funding to GovTech projects demonstrates a commitment to explore and implement digital solutions effectively through innovative collaborations. For example, between 2018 and 2019, GovTech Catalyst in the UK provided funding for public sector entities to undertake the pre-commercial procurements for GovTech solutions. Other GovTech-specific funds have been tied to GovTech programmes themselves, ensuring that public sector entities receive money, training and platforms for structured co-creation with GovTech actors. For example, Lithuania

launched a procurement sandbox in 2021 to fund and undertake GovTech design contests. Each project was able to receive up to EUR 53,000.

Overall, it is important to design public sector innovation and GovTech-specific funds to be flexible in terms of how resources can be used, to avoid fragmentation, and to maintain predictable budgets over the longer-term for more strategic investment (OECD, 2017[25]).

Public Procurement

Public procurement can often be seen as a barrier for GovTech. However, With the right procedures and process in place, procurement can instead facilitate successful GovTech engagements in pursuing innovation while still maintaining integrity in the use of public resources. Without using more dynamic procurement approaches, public sector entities risk stifling the innovation that GovTech can bring – leading to poorer quality outcomes and less value-for-money.

Existing procurement rules enable collaborative and challenge-driven approaches to GovTech (OECD, 2022[27]). Some key procurement methods that can be used for GovTech include pre-commercial procurement, innovation partnerships, and design contests, as described in **Table 3.1** below:

Table 3.1. Public procurement practices commonly used for GovTech

	Pre-commercial procurement (PCP)	Innovation partnership (IP)	Design contest
Description	PCP procures research and development (R&D) services from potential suppliers. It can be divided into development phases and the number of participants may be reduced at each stage based on predetermined criteria. Contracts can include the purchase of the prototypes and/or limited volumes of final products, but not commercial volumes. PCP helps buyers prepare for follow-up procurement activities and creates a future supply base	IP is a two-step approach as it procures R&D and the resulting innovative product. The R&D phase can be divided into stages used to shortlist suppliers on the basis of predetermined criteria. The supplier(s) is (are) expected to develop the solution and ensure its real-scale implementation for the public buyer. The buyers' needs should be described with sufficient precision to allow potential tenderers to understand the nature and scope of the challenge.	Design contests are organised to select the best design (idea). Autonomous jury can evaluate criteria such as user friendliness, suitability, ergonomics, and artistic, reputational or innovative character of the proposal. Best ideas are rewarded with prizes, and winner can be awarded contract for further development
When should it be used?	When there is a need for solutions that are not on the market and require a pilot for R&D activities.	When there is a need to procure both the R&D and the full-scale solution development.	When the challenge can be addressed by adapting existing solutions already on the market.
Is it required for innovation?	Yes	Yes	No
Is a solution procured?	No	Yes	Yes
Potential timespan	18-48 months	18-36 months	3-12 months
Budget required	Medium-Large	Medium-Large	Small-Medium
Complexity	Medium-High	Medium-High	Low-Medium
Examples where it is used	StartOff, MiLab Colombia, CivTech Scotland, GovTech Catalyst	GovTech Lab Luxembourg, America's Seed Fund	GovTech Lab Lithuania, GovTech Polska

Source: (Englund and Hareide, 2022[28]) (European Commission, 2021[29]) (Eurpean Commission, 2021[30])

These procurement practices can encourage more agile and iterative project delivery – better reflecting the needs of GovTech collaborations, supporting public sector entities in collecting ideas on different solutions, exploring different concepts, and working with different actors simultaneously and flexibly.

Standard tender processes can still be used for GovTech, especially if it concerns the procurement of a solution that already exists in the market (European Commission, 2021[29]). While this approach may be less flexible or agile, it can be adapted or used more dynamically to support GovTech collaborations.

However, there have been examples where countries have defined specific procurement rules to facilitate GovTech. In Brazil, the Government introduced the National Startup Bill, which facilitates bidding for challenge-based procurements (i.e. without a prescribing a solution) up to a value of BRL 1.6 million (or approximately EUR 260,000), as well as the option to integrate the solution without an additional procurement process (Carvalho, 2021[31]). Some other standard tender processes include:

- **Early market engagement:** by engaging with GovTech partners prior to procurement (see Box 3.2), buyers can better understand the technological landscape, assess what solutions are available, and what might require further R&D (OECD, 2022[27]). It also helps to ensure that all actors understand the nature of the challenge. By notifying the market of future procurements, smaller providers are also given greater opportunity to participate (OECD, 2022[12]).
- **Minimal participation requirements:** to include only the essential prerequisites for participation. Unnecessarily focusing on requirements like number of years' experience or operation can lock start-ups and smaller providers out of the market (European Commission, 2023[32]).
- **Technical specifications based on outcomes:** technical specifications should focus on the outcome to be achieved, but not the manner or solution the supplier uses to achieve it (Englund and Hareide, 2022[28]). The 'needs description' should be functional and allow innovative GovTech partners to offer variety of solutions. Being overly prescriptive can mean missed opportunity by making procurement rigid and inflexible, allowing no space for agility, modifications, or iteration.
- **Better contract design:** contracts can be made more 'start-up friendly' by having smaller contracts that require less negotiation, include more frequent payments tied to milestones, and maintain only essential reporting and other administrative requirements (European Commission, 2023[32]).
- **Shared rights to intellectual property (IP):** GovTech partners can be less inclined to participate if buyers can retain sole rights to a solution, as it can preclude further product scalability (European Commission, 2023[32]). Similarly, buyers want to avoid vendor lock-in and be able to continue building the solution, regardless of whether the supplier relationship continues. In Lithuania's GovTechLab partnerships, there are some collaborations where IP is open and free to reuse, while other projects maintain the IP of the commercial partner so that they can monetise and scale the solutions. Another model is for the commercial partner to retain the IP for the minimal viable product, but the buyer retains the right to make certain elements public for future procurements.

Box 3.2. Doing early market engagement in the right ways

Australia's Digital Transformation Agency developed practical guidance on doing early market engagement in the right ways. While procurement approaches may vary, it reminds buyers to:

- **Be thorough** –keep accurate and thorough records of your market research activities.
- **Be consistent** – keep your records and documented information in a consistent manner. This enables the information to be accessible to public authority in the future.
- **Be flexible** – be prepared to customise your probity considerations, particularly for unusual or complex sourcing projects. You may wish to engage an external probity officer to assist.
- **Be inclusive** - probity processes should ensure a level playing field so that smaller sellers have the same opportunities to engage as the bigger or more embedded sellers.
- **Be vigilant** - when handling information, it is critical that there is no element of formal bidding, actual or perceived conflict of interest, commitment or undertaking towards any potential seller(s). Carefully consider whether you are using potentially sensitive information or a seller's intellectual property to inform a formal sourcing process. Any information you receive from sellers must be treated in-confidence and only used for the intended purposes.
- **Be fair** - have a good range of seller-types included in your early market research. This will help to show that you have cast a wide net and considered as many as you were able.

Source: Digital Transformation Agency (2021) Early Market Research, Source: https://www.buyict.gov.au/sp?id=early_market_research

Scaling solutions

One of the key benefits of GovTech engagements is the potential to scale-out pilot solutions. Scaling can occur at three different levels: internal, cross-organisational, and international.

The primary challenge lies in achieving internal scalability to transition a solution from the alpha to the beta stage, and then to full-scale deployment. This challenge is often twofold: securing funding and addressing procurement considerations. While pilots typically require less funding, resources for full-scale solutions may not be readily available. To aid this, public sector entities should establish clear goals for the pilot solution to achieve (e.g., timesaving, service quality) and leverage these measured results to develop a compelling business case to support financially the implementation of a full-scale solution. Mechanisms can also be built into the budget process to mitigate the risk of negotiating additional funding for the delivery of the full solution. CivTech Scotland, for example, allocates additional funding of approximately EUR 240,000 to EUR 700,000 (depending on the initial procurement) to develop the GovTech solution from 'minimum viable' to a 'commercially viable' product (CivTech, 2023[33]). There also needs to consider the capacity within delivery teams required to support the scaling and integration of GovTech solutions, which may also need new processes, ways of working, or resources to support them longer-term.

Another challenge in the scaling process is in procuring the full-scale solution following the initial pilot. It can be difficult to balance the need for open and fair procurement with incentives for the incumbent GovTech partner to continue working on the solution. Norway's StartOff programme (using a PCP) sought to solve this challenge by assisting organisations through both the pilot procurement and in buying full-scale solutions. During the procurement of full-scale solution, StartOff shared the initial needs description for the pilot with suppliers, along with all new information discovered during the pilot phase. That ensured

that the original GovTech partner(s) are not designing the subsequent procurement and instead compete on an even playing field.

Furthermore, countries could do more to support the full-scale deployment of solutions across the public sector. For instance, if one municipality co-creates an innovative participatory budget platform, other municipalities should be able to procure such solutions. The challenge for cross-organisational scalability is lack of awareness of solutions and insufficient resources to buy and use them.

To solve these challenges, many GovTech teams organise demonstration days to showcase potential solutions or build databases with solutions implemented elsewhere. For example, Lithuania's GovTech Lab has funded a program to showcase and test solutions already on the market. The intent is to overcome the challenge of limited resources by leveraging what is already available and facilitating access to ready-made solutions, including for open source solutions that can be replicated or scaled either by in-house teams or as part of further GovTech collaborations.

Finally, GovTech partners should be able to scale internationally, given that challenges across public sector entities in different countries are often similar. In addition to issues around funding and awareness, GovTech partners can find it difficult to access the foreign markets and key decision makers. To mitigate this challenge, the GovTech Global Alliance has launched the Global Scale-up Programme (GSUP) (GovTech Global Alliance, 2023[34]). The GSUP is aimed at GovTech solutions with mature green-tech related products that have the potential to be scaled up quickly. The programme enables access to decision makers in governments, procurement agencies, and innovation ecosystems in multiple locations – streamlining the introduction of GovTech partners to a new ecosystem to enable solutions to scale further.

Availability and maturity of suppliers

GovTech is reliant on a mature and capable ecosystem of GovTech partners. It is not the sole responsibility of the public sector to possess the necessary skills, resources, and scalability options for GovTech projects. GovTech innovators must also be equipped to meet the needs of the public sector, grow their companies, and scale up their solutions. However, governments have a vested interest in implementing policies that help build a more mature ecosystem of GovTech partners. This is particularly key in mitigating the high failure rate amongst start-ups or smaller providers, which often face barriers to success around access to finance, entrepreneurship skills and capabilities, access to international markets, and access to networks (OECD, 2022[35]). There are three major initiatives that the public sector can implement to help ensure the availability and maturity of GovTech partners: acceleration programmes, venture capital and other forms of investment, and access to procurement.

Acceleration programmes

To ensure the success and growth of GovTech start-ups, it is crucial to provide them with adequate support and resources to develop and scale their businesses. High-quality incubation and acceleration programs play a vital role in this process (European Commission, OECD, 2019[36]). This support could involve:

- **Participation of GovTech start-ups in general accelerators:** innovators can benefit from joining accelerator programs that offer support, mentorship, and access to networks and resources.
- **Creation of GovTech tracks or GovTech-specific training within general accelerators:** tailored training programs can be integrated into existing accelerator initiatives, providing targeted guidance and expertise on the unique challenges faced by GovTech start-ups.
- **Creation of dedicated GovTech accelerators:** focused environment for GovTech start-ups to receive sector-specific support, mentorship, and connections. For example, GovStart is a 6-month

programme in Europe and the UK with dedicated learning content, events and tools for start-ups that want to transform public sector. Another example is CivStart in the US, which focuses on building startups that solve local government challenges.

Governments can play a proactive role in developing the ecosystem, including by funding potential accelerators, initiating the establishment of GovTech-focused accelerators, or providing insights to start-ups into the inner workings of government. Accelerators can foster a thriving GovTech ecosystem and provide valuable resources and support for start-ups as they grow. One such example is New Zealand's Creative HQ, which does this at the city-level in Wellington (Creative HQ, 2024[37]). The European Commission's GovTech4All project also works to develop the pan-European GovTech ecosystem focused on three key pilots: securing cross-border data, assisting citizens with digital benefits, and innovating public procurement (Interoperable Europe, 2024[38]).

Venture capital and other investments

Access to capital is essential for fostering the growth of GovTech partners, especially start-ups and scale-ups. Investment is needed to finance the development of the solutions and to support rapid growth and scalability. Venture capital (VC) funding has generally proven to be a critical turning point for start-ups (Breschi, Lassébie and Menon, 2018[39]). Both start-ups and governments should have a vested interest in the success of start-up fundraising, given that some of benefits of such collaboration can be reaped only if solutions are scaled beyond the initial pilot stage of GovTech engagements.

However, investors often approach the market with caution due to concerns about lengthy sales cycles and perceived 'red tape', which in turn can limit company's growth (Knight Foundation, 2017[40]) (Santiso and Ortiz de Artinano, 2020[41]). While these concerns may sometimes be exaggerated, GovTech start-ups do often require more patient capital to accommodate longer timelines and slower scaling processes (Filer, 2018[42]) (Santiso, 2019[43]). While the total value of investment in GovTech start-ups is growing, from just EUR 2 billion between 2008-2018 (Jandel, 2018[44]) to as much as USD 20 billion between 2010-2022 (UVC Partners, 2022[45]), the investment still lags behind other tech industries. For instance, fintech startups have attracted EUR 79 billion in 2022 alone, which was already a decrease of 38% from 2021 (Dealroom and ABN AMRO Ventures, 2023[46]). However, the positive investment trend in GovTech should be considered a sign that investors see the importance of GovTech in a post-pandemic society, as well as a change in investors' perspectives towards 'impact' investing (StateUp, 2022[4]).

A range of funding and investment options should be made available to GovTech partners, including:

- **Venture capital (VC):** including generalist VC funds that can invest in GovTech start-ups as part of broad portfolio of investments (e.g. UVC partners), specialised funds focused on impact investment, education or climate (e.g. Contrarian Ventures), GovTech-specific VC (e.g. the GovTech Fund in the US or Fundo GovTech Brazil launched by KPTL and Cedro Capital in 2022), or support from other corporate investors, like family offices or other large providers .
- **Government-led investment funds:** such as Córdoba Smart City Fund, which is financed by municipal revenue. Government-led VC can cover areas where the private VC market is not yet mature enough (Breschi, Lassébie and Menon, 2018[39]). In some countries, up to half of the VC-supported start-ups are supported by government (Breschi, Lassébie and Menon, 2018[39]).
- **Philanthropic funds and venture philanthropy:** to bridge a funding gap for start-ups and other GovTech partners with a focus on social impact, public value and democratic goals (Santiso and Ortiz de Artinano, 2020[41]), where profit generation and rapid scalability is less crucial. For example, the Knight Foundation funds CivicTech start-ups, while the Westpac bank's New Zealand Government Innovation Fund provides funding to companies and government agencies' projects.
- **Funding through grants:** government grants can also be used to fund research and development activities. Creating grant programmes can be a solution where procurement for early-stage

products is difficult and funding is needed to bridge the gap between ideas and pilots. For example, South Australia's Go2Gov programme provides funding directly to star-ups and early-stage businesses for feasibility and proof-of-concept stages (fixe, 2023[47]).

While there are diverse investment options available and the level of investment is trending upwards, it has not yet achieved the level required. Governments could encourage investment by signalling interest in GovTech and facilitating access to capital. Initiatives like dedicated GovTech investment funds, investor education programs, and collaboration platforms could help stimulate private investment in GovTech and enable start-ups to scale their solutions and deliver on their potential.

Access to procurement opportunities for greater market participation

Equitable access to procurement opportunities is another way to support the GovTech ecosystem by fostering competition and providing opportunities to scale pilot solutions with new clients. Governments can minimise the barriers to participation in the procurement process by establishing more open, accessible, and streamlined procurement processes that improve access for these providers to the government market. Common guidelines on eligibility and qualification requirements for procurement would also enable greater participation of start-ups and newer providers. Another potential solution could be through promoting subcontracting arrangements or opportunities for consortia, which could enable smaller providers to leverage the access and resources of the larger, more established providers.

Pre-vetting GovTech partners, through a dynamic purchasing system for example, is another way to build trust in these suppliers. For example, the Korean Government built Venture Nara to help start-ups and innovative companies access public procurement platforms and display their products (OPSI, 2022[22]). Singapore has the IMDA Accreditation programme to enable expedited procurement of products and services from accredited companies by government and large enterprise buyers (Singapore Government Developer Portal, 2022[48]). BrazilLab instead grants GovTech partners a seal to certify that they are mature and capable of selling technological solutions to the public sector. It does not bypass any procurement processes but rather provides an extra layer of due diligence to help build confidence.

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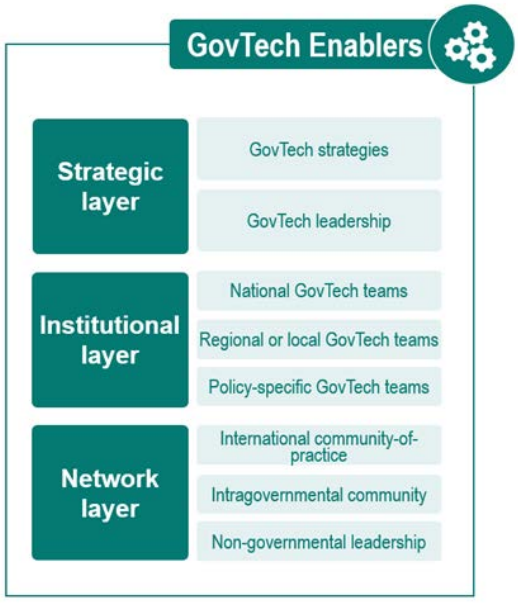
4 GovTech Enablers

This chapter outlines the *GovTech Enablers* that create the environment needed to foster the growth of an active GovTech ecosystem and facilitate the expansion of good practices. These enablers ensure that the whole GovTech ecosystem operates in a co-ordinated way and progresses in a unified direction through engagement at the strategic, institutional, and network layers.

The *GovTech Enablers* help to co-ordinate and facilitate the effective use of GovTech at the macro level. While the *GovTech Building Blocks* can contribute to the success of individual GovTech projects, the enablers ensure that the whole GovTech ecosystem is co-ordinated and moving in a unified direction. There are 3 layers of enablers: strategic, institutional, and network (see **Figure 4.1**), which are used to initiate, mobilise, and improve GovTech collaborations by creating the right environment to foster good practices and an active GovTech ecosystem.

Figure 4.1. The GovTech enablers



Source: Authors' own design.

Strategic layer

The strategic layer acknowledges the crucial role played by the strategy and leadership in mobilising support for GovTech within the public sector. By focussing on this layer, public sector entities can encourage new GovTech initiatives, support and integrate existing initiatives, and demonstrate the strategic importance of GovTech as part of the broader digital government agenda. It can serve as a top-down facilitation of GovTech, providing a clear roadmap and direction for its advancement. By combining strategic guidance and strong leadership, governments can effectively ensure that GovTech has the necessary attention and resources to become a priority area and secure its sustainable growth.

GovTech strategies

Strategies are crucial for a coherent digital government, as they help aligning actions with policy objectives to ensure effective, efficient, and organised implementation (OECD, 2021[1]). For GovTech specifically, strategies can play a vital role in maintaining support and momentum, particularly during political changes or when the novelty fades. Good strategies are complemented with goals and milestones and backed up by financial resources, investment plans, or even changes in policy and regulation. GovTech strategies help address the gaps in the building blocks, such as infrastructure, skills, funding, or the maturity of GovTech partners. They can also ensure alignment and coherence with other work underway on digital government, digital economy, and public sector innovation (OECD, 2014[2]; OECD, 2020[3]).

Due to its place in the 'digital government toolbox', GovTech is generally incorporated into national digital or digital government strategies. For example, Estonia's Digital Agenda 2030 includes a chapter on "Open innovation and development of GovTech community" (Ministry of Economic Affairs and Communications, 2021[4]), which promoted cooperation with the private sector (including start-ups and GovTech partners) as a key principle in developing digital government solutions. France also included a GovTech Lab and GovTech Catalogue in its digital government strategy to encourage the creation of digital public services using the best available solutions (Department of Public Service and Transformation, 2019[5]). Brazil's *Digital Transformation Strategy (2022-2026)* also includes a strategic action to foster the participation of GovTech partners to help solve key challenges across different policy domains (CGEE, 2022[6]).

Some dedicated GovTech strategies do also exist and can be valuable in providing legitimacy and support for the practice. For instance, the Government of Ireland released the Cruinniú GovTech Report in 2019 that resulted in collaborative efforts from government, industry and academia to define Ireland's aspirations for GovTech and identify measures to track progress (Expenditure, 2019[7]) These strategies may often be less formal than the national digital strategy but are still valuable in driving GovTech adoption, as well as in signalling to the GovTech ecosystem that this is a priority practice for the government.

However, it should also be noted that having a strategy is not essential for the emergence of successful GovTech programmes, as with the establishment of CivTech Scotland in 2016, GovTech Lab in Lithuania, and GovTech Polska in Poland in 2019. These organisations were launched by intrapreneurs and used a bottom-up approach to build genuine support. The feasibility of this approach will depend on a country's context, and a strategy will generally be needed to build a sustainable practice.

GovTech leadership

Digital government benefits from leadership needed to drive a coherent and sustainable digital agenda, e.g. the Chief Information Officer (CIO) and Chief Data Officer (CDO). Similarly, GovTech needs leadership to set a clear direction, mobilise resources, and advocate for its importance. This is because GovTech is:

- **relatively new and disruptive:** GovTech engages with the unknown by innovating processes and diversifying supplier ecosystems, so leaders need to build endorsement for the value that it brings.
- **generally higher risk:** GovTech involves iteration and experimentation, which often requires a higher risk appetite. It needs leaders to advocate for it in strategic planning and project approval.
- **highly cross-sectoral:** GovTech can involve a diverse range of stakeholders, organisations, and even suppliers. Senior leaders are often more able to co-ordinate efforts across these sectors.

Strong leadership is therefore critical to advocate for and drive adoption of GovTech across organisations. This should be done in line with a leader's focus on communicating a clear vision on digital government, actively championing its benefits, supporting decentralised decision making, and being actively engaged, visible and approachable (OECD, 2020[8]). However, GovTech leadership can be either:

- **directly or indirectly responsible:** some countries have dedicated leadership roles for GovTech, as with Poland and Lithuania, whereas other countries have leaders with broader responsibilities for digital government or government data, who act as informal GovTech champions. Direct responsibility helps to elevate the role of GovTech in the digital agenda, but having informal champions may be more achievable for countries with limited resources.
- **political or non-political:** political leadership can provide authority and influence, but there is a risk that politicising GovTech could hinder its long-term effectiveness and sustainability. Non-political leadership, like the CIO, can provide stability and continuity for GovTech projects.

Overall, having leaders to drive GovTech ensures that the practices are coherent, have sustained focus, and are backed up by the commitment needed to enable a broader digital transformation. These leaders act as catalysts for change – both as champions for GovTech and in enabling its success.

Institutional layer

The institutional layer represents the GovTech teams that have been established across governments at the national, regional, or local levels, or within a specific policy domain. These teams provide hands-on support and guidance to run GovTech programmes or projects and take the lead in addressing any gaps in the building blocks. These teams actively contribute to building capacity, providing dedicated time and focus, and promoting GovTech. They can create environments that foster experimentation, learning, and innovation, which mitigates the impact of any maturity gaps. For example, if there is a lack of tools or processes to scale innovative solutions, these teams can establish innovation spaces within their programmes for GovTech projects to address this gap. These teams can also help drive change or promote better engagement across different policy sectors and public sector institutions. Therefore, these teams have value in ensuring the smooth execution of GovTech initiatives and programs.

Many GovTech teams and programmes have been established to overcome divergence in organisational culture between public sector and start-ups, the complexity of public procurement, and the unique market dynamics of GovTech compared to other emerging ecosystems, such as fintech (Kuziemski et al., 2022[9]). They will often also be designed to overcome challenges around funding, resourcing, and capability within agencies through structured programmes or processes that can be applied agnostically and seek to replicate near-perfect conditions for the co-creation of digital solutions. This is often complemented by capacity-building activities (such as workshops or academies), community and ecosystem building activities (such as events or networking opportunities), support for entrepreneurs (accelerator programmes), funding GovTech projects, and creating GovTech marketplaces.

While many GovTech teams are focussed on delivery, there is benefit in having an organisation in charge to provide leadership, governance, and strategic alignment, and a mandate for GovTech to happen (OECD, 2021[1]). This can be challenging due to the scope, scale, and replicability of GovTech – covering different levels of government and policy domains, but also because the practice covers different portfolio responsibilities like digital government, public sector innovation, public procurement, and entrepreneurship. For example, GovTech teams have typically been part of other institutions, such as digitalisation ministries or agencies (e.g., in Luxembourg and Scotland), innovation ministries or agencies (e.g., in Lithuania), or procurement agencies (e.g., in Norway). Therefore, having a dedicated organisation can help better connect GovTech actors, as well as to monitor and evaluate the collaborations.

Based on lessons learnt from 13 GovTech teams in Europe, there is clear value in focussing on the institutional layer as a key enabler for GovTech based on: (Kuziemski et al., 2022[9])

- **Proximity to executive power:** to overcome challenges from bureaucratic culture and processes by having a strong connection to executive authority and the legitimacy of a political mandate.
- **Variety of models:** to help develop the right structure, organisation, and approach for the team.
- **Lean teams:** to facilitate agility and nurture a start-up-like operational setting.
- **Individual changemakers:** to drive adoption and best practice of GovTech in the public sector.
- **Public value:** to ensure that projects deliver efficiency, simplification, better user-experience, as well as broader value in areas like sustainability, circular economy, citizen-centric public services.
- **Right funding at the right stage:** to fund the development of pilots for digital initiatives, but also as a tool to deliver valuable investment in the early stages of emerging entrepreneurship.
- **Friction with regulation or processes:** for when the agile, experimental, and outcomes-focussed nature of GovTech risks friction with internal process (usually in budgeting and procurement).

Finally, while the institutional layer can be categorised into national, regional, or local and policy-specific areas, governments do not need to establish teams in all these areas to be effective. However, teams can exist in each of these levels and complement each other, provided that the right co-ordination is in place.

National GovTech teams

Given GovTech methodologies are agnostic to sector or location, national GovTech teams can provide a centralised support for GovTech projects at the national level. These teams are often set up as part of ministries or agencies to support digital government transformation and a more innovative public sector. The benefit of national teams is that they can ensure coherent understanding and development of GovTech across the country. Being at the centre of government, such teams often have more access to decision-making processes on the building blocks, as well as a more comprehensive picture of what is happening across the ecosystem. Examples of national GovTech teams include: 10x in US, GovTech Polska in Poland, GovTech Lab in Lithuania, GovTech Lab in Luxembourg, MiLAB in Colombia, the Government and Digital Transformation Laboratory in Peru, DINUM in France, Accelerate Estonia, the GovTech Campus in Germany and Startup in Residence Intergov in the Netherlands.

Box 4.1. Examples of national GovTech teams

GovTech Lab in Lithuania

GovTech Lab was launched in 2019 and is part of the Innovation Agency Lithuania. It promotes public sector innovation by providing organisations with methods, tools, approaches and resources to use technology to solve public sector challenges. GovTech Lab's main activities include:

- **Co-ordinating GovTech challenges:** with a structured innovation programme for co-creation between the public sector and startups to build pilot solutions (GovTech Challenge Series). The programme consists of four main stages: 1) problem selection, 2) transforming problem into a challenge, 3) solution idea selection, and 4) pilot development. It is based on a design contest procurement mechanism and provides public sector entities with funding to build pilot solutions (approximately EUR 53,000). At the time of writing, GovTech Lab Lithuania organised six iterations of the GovTech Challenge Series, with 96 participating challenges.
- **Improving public sector innovation skills:** including through workshops to municipalities, national GovTech Academy, and GovTech study visits to other countries.
- **Building ecosystem and community:** it includes running international networks and programmes, including the GovTech Global Alliance, EU GovTech incubator, and Global Scale-Up Programme. It also organises conferences and events, for example for the GovTech Leaders, GovTech Awards, and the Public Sector Innovators' Breakfast.

Source: (GovTech Lab, 2024[10]) https://govtechlab.lt

MiLAB in Columbia

MiLAB is a GovTech and public impact lab in Columbia that aims to contribute to the digital transformation acceleration of the public sector. It connects government with start-ups and small-to-medium-sized-businesses that use emerging technologies and innovative methodologies. It also maps GovTech start-ups in the country and organises GovTech bootcamps for public sector officials.

MiLAB also runs a challenge-based programme, which consists of 5 phases: 1) Call for Challenges, 2) Identifying the challenge, 3) Connecting GovTech solutions, 4) Strengthening GovTech Solutions, 5) Implementation. As part of the programme, MiLAB provides innovative tools and processes to public employees such as human-centred design, design thinking, open innovation.

Source: (OPSI, 2020[11]) https://oecd-opsi.org/innovations/milab-govtech-and-public-impact-laboratory

Regional or local GovTech teams

GovTech teams can also be established in regional or local governments. This approach depends on the size and structure of the country, as well as the broader state of innovation and GovTech at the national level. Regional and local GovTech teams can benefit from their proximity to citizens and 'on the ground' challenges, while their impact can more easily be seen and felt by the local communities. It may also be quicker to establish GovTech teams at the local level, which can enable more agile collaboration (Filer, 2018[12]). Regional and local teams include CivTech Scotland, IdeiaGov from Sao Paulo State, Public Innovation Lab (iBO) in Bogota, CorLab Govtech Innovation Lab in Córdoba, Creative HQ in Wellington, Go2Gov and CivVIC in Australia, Public Venture Client Unit (GovTechHH) in Hamburg, GovTech Lab Bizkaia, BIND in the Basque country, and Startup in Residence Amsterdam.

Box 4.2. Creative HQ: an example of a local GovTech team

Creative HQ, established and owned by the Wellington Region's Economic Development Agency, has developed a GovTech Accelerator. The accelerator is a 13-week innovation programme that takes place annually. It takes projects and staff from government agencies (intrapreneurs) who are tackling problems, places them within the Accelerator structure, and applies innovation methodologies to create solutions that work. It primarily aims to reduce costs and de-risk innovation in the public sector. In essence, the GovTech Accelerator gives a chance for BIND public sector employees to build pilots themselves, in contrast to other programmes where engagement with external actors is mandatory. GovTech Accelerator has been running for six years and has accelerated 52 project teams that delivered innovative solutions across the public service.

Source: (Creative HQ, 2024[13]) https://creativehq.co.nz/govtech

Policy-specific GovTech teams

Given that GovTech can be applied across the policy domains, some governments choose to set up teams that are responsible for co-ordinating innovation in a specific policy area. Having a thematic GovTech team allows a more in-depth understanding about both the challenges and how potential innovations can support better decision-making. This contrasts with a more facilitator-like role of national GovTech teams, where the thematic and organisational scope is much wider. This set-up could help address the challenges related to scope, funding, and resourcing of GovTech projects – ensuring more involved co-ordination and coherence of GovTech collaborations within a specific policy field. For example, Portugal launched a Justice GovTech, which aims to introduce more GovTech collaborations to accelerate the modernisation and digital transformation of the justice sector (GovTech Justica, 2023[14]). Other examples include ImpulsiONar in Brazil and the EdTech centre in Lithuania, which are both focused on education.

Network layer

The network layer of the *GovTech Enablers* focusses on the ecosystem and how the GovTech practice is advanced through communities-of-practice and leadership internationally, at intragovernmental level, and between non-government actors. A strong network layer is key to building support, sharing knowledge and experiences, and strengthening the GovTech agenda.

International GovTech community-of-practice

The international GovTech community-of-practice plays a vital role in accelerating the growth of local GovTech ecosystems by facilitating the exchange of knowledge between countries. These networks serve as valuable sources of best practices, providing examples of successful GovTech initiatives and policy tools that can inform policy formulation processes. Actively participating in this community also strengthens a country's position within the global GovTech ecosystem – enhancing its ability to attract international collaborators and foster partnerships.

Box 4.3. International communities-of-practice

There are several examples of international GovTech communities-of-practice, including the:

- **GovTech Global Alliance (formerly CivTech Alliance):** is a worldwide network of public, private, and third sector organisations working in the Civic and GovTech sectors. Members are mostly from governmental GovTech teams across almost 20 countries, who exchange best practices, use cases, and tools to support GovTech programmes.
- **Iberoamerican Govtech Multisectorial Network (Red Multisectorial Govtech Iberoamérica):** facilitated by the IDB Group, offers a network of over 140 municipalities across Spain and the LAC region to learn about working with GovTech start-ups.
- **GovTech Global Partnership:** facilitated by the World Bank, brings key GovTech actors together to share knowledge and experience to support public sector innovation.

Source: GovTech Global Alliance (2023), https://govtechglobal.org; IDB Group (2021): https://blogs.iadb.org/ciudades-sostenibles/en/govtech-ecosystems-in-lac-innovation-focused-on-improving-citizen-services/; World Bank Group (2022): https://www.worldbank.org/en/programs/govtech/partners

Intragovernmental GovTech community

The intragovernmental GovTech community refers to the network of civil servants working within public sectors that play a vital role in facilitating the dissemination of GovTech, promoting awareness, and acting as GovTech champions. They serve as important feedback loop for national, local, or policy-specific GovTech teams, providing insights into the practical implementation of GovTech projects on the ground. Their first-hand experiences and perspectives enable continuous improvement and optimisation of GovTech initiatives. They act as catalysts for knowledge-sharing, collaboration, and effective communication to improve the understanding and application of GovTech within the public sector.

The intragovernmental community can be focussed either on GovTech or on digital innovation more broadly. For example, GovTech Lab Luxembourg introduced different event formats, including the GovTech Lab Innovation Club, to foster exchanges between civil servants, inspire creativity, and strengthen a culture of innovation. In Chile, the Laboratorio de Gobierno instead manages the Network of Innovators to connect and collaborate on digital more broadly – sharing methods, tools, and experiences to avoid duplication and promote reuse (Laboratorio de Gobierno, 2023[15]). France's 'Blue Hats' is another example of a digital community focussed open-source software, which could become a medium for GovTech ambassadors (numerique.gouv.fr, 2018[16]).

Non-governmental GovTech leadership

Public-private collaboration is at the core of GovTech, so it is important to have non-governmental GovTech leadership within a country. This is important to have actors outside the public sector to drive GovTech, but also to provide insight into the needs of innovators and investors, address any policy gaps, and ensure collaborations deliver shared value. The involvement of these actors can focus on lobbying, facilitating the availability of private GovTech innovation programmes, providing education opportunities, or facilitating the growth of the ecosystem.

There are generally 4 main types of non-governmental GovTech actors that take a leadership role:

- **Non-governmental GovTech labs or teams**: to mirror the functions of public sector teams.
- **Academic organisations**: to provide analysis and actively participate in the GovTech ecosystem.
- **Intergovernmental body**: to provide GovTech policy guidance and implementation support.
- **Associations or similar organisations:** to represent the interests of GovTech partners.

Box 4.4. Examples of non-governmental GovTech leadership

Non-governmental GovTech team: BrazilLAB

BrazilLAB is a not-for-profit organisation aimed at accelerating GovTech and connecting start-ups and public sector entities. Its work includes an acceleration program to support innovators in their go-to-market strategy, a 'GovTech Seal' to certify capable GovTech start-ups, and a programme to build digital capability in municipalities. It also works on advocacy, research, partnerships, and events.

Source: (BrazilLAB, 2024[17]) https://brazillab.org.br

Academic organisation: TU Delft

TU Delft has established the role of Professor of GovTech & Digital Government Innovation. It has also partnered with 3 other institutions to launch Digicampus – a space to foster implementation of innovative ideas in public services in the Netherlands.

Source: (Digicampus, 2023[18]) https://digicampus.tech/over-digicampus/

Intergovernmental body: govtechlab by CAF

CAF, a development Bank of Latin America, created govtechlab, a platform to promote the GovTech ecosystem in the region through policy and implementation advice, support for GovTech labs, and investment in GovTech ventures. govtechlab also launched the inter-governmental GovTech Leaders Alliance and developed a GovTech Index to comprehensively measure GovTech ecosystems.

Source: (CAF, 2024[19]) https://www.caf.com/es/especiales/govtech-lab-caf

Association: GovTech Campus Germany

The GovTech Campus is an alliance of actors from the federal and state government, private sector, academia, and civil society. It also works as a non-governmental team to connect actors, to build solutions to challenges, and to scale pilots for use in public sector entities.

Source: (GovTech Campus Deutschland, 2024[20]) https://govtechcampus.de

Synergies between the GovTech Enablers and Building Blocks

The *GovTech Building Blocks* and *GovTech Enablers* are interconnected parts of the GovTech Policy Framework. While the building blocks ensure the success of individual GovTech collaborations or practices, the different layers of enablers are essential for the overall functioning of the ecosystem. However, countries may have varying maturity in each of the components, with strong enablers in place but gaps in the building blocks (or vice versa).

Examples of strong enablers with limited building blocks often occurs when GovTech is prioritised and supported through the development of a strategy, the availability of a strong leadership, or GovTech teams, but where the public sector entities do not necessarily have sufficient skills and resources to undertake such collaborations.

In the longer term, the enabling layers can be used to build maturity and address these gaps. This could include improving data sharing, establishing GovTech funds, or creating GovTech procurement guidelines. While the strategic layer can have very direct influence on building blocks, the power of the institutional layer depends on the mandate given to the GovTech teams. Currently, many GovTech teams focus primarily on implementing challenge-based programmes, but not necessarily on improving broader building blocks. Finally, the network layer has more indirect influence over the GovTech building blocks through advocacy and community pressure.

In the short term, strong enabling layers can compensate for gaps in the building blocks without impacting them, especially through competent GovTech teams (institutional layer). Their challenge-based programmes can create a safe and controlled space for innovation and compensate for the lack of skills, process or fundings at individual organisations. However, this approach can cover only limited number of potential challenges and GovTech projects within a country. Therefore, if a goal is more systemic engagement with GovTech actors, compensating for the gaps is not enough to ensure a sustainable development of these collaborations. Instead, the enabling layers should actively work to address and fill these gaps.

Some countries have had historically strong innovative and digital government practices, which means that they might have well-developed building blocks even when they have limited enablers. While this can still allow for successful GovTech collaborations, establishing GovTech as a sustainable practice may be challenging. This can result in more ad hoc GovTech collaborations and preclude it from becoming a key instrument in the digital government toolbox. Strong enabling layers are therefore crucial to mobilise and unify the ecosystem, as well as to respond to advancements and new trends.

Nevertheless, further research is required to reach a definitive conclusion on the interactions between the *GovTech Building Blocks* and *GovTech Enablers*, given the evolving nature of the GovTech and this framework.

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5 Deciding when to leverage GovTech

This chapter considers when best to leverage GovTech by looking at its benefits and its risks, as well as the areas where its use is most relevant.

The GovTech Decision Tree shows that GovTech is most effective and has the greatest impact in scenarios where both the problem and potential solutions are clearly-defined, or where the problem is well-defined and the scenario is replicable, but a clear solution is not yet known or available in the market.

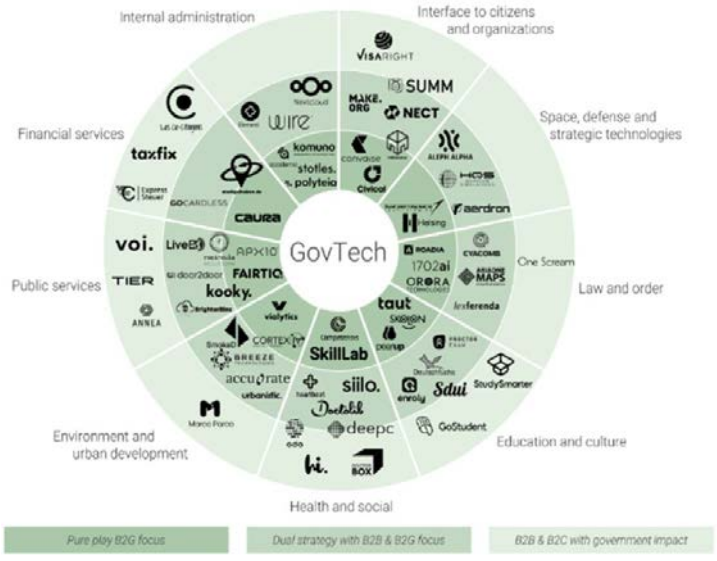
While GovTech can be a valuable enabler of the digital transformation of governments, it should not be used universally for every digital initiative. GovTech is best applied to support policymaking, administrative capacity, service delivery, and public engagement. To help decide when to leverage GovTech, government should consider its key benefits, risks, and the scenarios in which it can be used most effectively. To support decision-making, this chapter introduces GovTech Decision Tree.

Understanding the application of GovTech

While framing GovTech within specific policy domains or technology offerings has been useful in understanding the supplier landscape of the GovTech ecosystem, GovTech is best considered through its application across policymaking, administrative capacity, service delivery, and public engagement.

The application of GovTech has often been categorised by what GovTech actors can offer to public sector entities – i.e., focusing on specific policy domains or technology offerings instead of the challenges that they were hoping to solve. For example, GovMind and UVC Partners developed a GovTech start-up map based on nine different areas: space, defence, and strategic technologies; law and order; education and culture; health and social services; environment and urban development; public services; financial services; internal administration; and interface to citizens and organisations (**Figure 5.1**).

Figure 5.1. GovTech start-up map (GovMind and UVC Partners)



Source: UVC Partners (2022): https://www.uvcpartners.com/blog/govtech-is-gaining-more-and-more-momentum

Additionally, StateUp introduced another axis of categorisation: core technology. They analysed GovTech start-ups based on their core technological innovations, such as artificial intelligence, big data analytics, cloud computing, robotic process automation, and communications (StateUp, 2022[1]).

These categories can be useful in navigating the GovTech ecosystem but are limited in assessing where GovTech has the most impact. Entities like the GovTech Lab in Lithuania, for example, instead categorise GovTech projects by whether they address data-driven policy making, improve internal processes, or enhance services for citizens and businesses (GovTech Lab Lithuania, 2022[2]).

The OECD has built on this approach to instead frame GovTech within the context of its application to support policymaking, administrative capacity, service delivery, and public engagement.

Policymaking

GovTech can be used to solve challenges in the policymaking process, including with evidence collection, policy formulation, impact assessment, and evaluation monitoring. GovTech actors can help develop digital solutions to support these tasks, including with data collection and analysis, modelling, and foresight. These GovTech engagements seek to improve the efficiency, accuracy, and effectiveness of policymaking, enabling evidence-based decision-making and proactive public governance.

Box 5.1. Examples of previous GovTech challenges in policymaking

Seeking to overcome their policy challenges:

- The UK's ADViCE is identifying challenges where AI can support the green transition, linking these challenges with innovators and private funding to help solve them.
- The Startup in Residence in The Netherlands used GovTech to gain insights into laws and regulations that might be overly restrictive for start-ups and scale-ups.
- The GovTech Lab in Lithuania used advanced data collection and analytics to systematise forecasting of regional labour market demand to improve policies around vocational training.

Source: Startup in Residence (2023), SiR Intergov challenge winnaars (online): https://intergov.startupinresidence.com/nl/winnaars; GovTech Lab (2023), Build your government with GovTech Lab (online): https ://govtechlab.lt. (The Alan Turing Institute, 2024[3])

Administrative Capacity

GovTech solutions can help improve internal operations or enhance administrative capacity of an organisation, including internal workforce management, process optimisation, productivity enhancement, collaboration, communication, and more creative problem-solving. GovTech solutions can streamline processes, improve efficiency, foster innovation, and enhance the effectiveness of public sector entities.

Box 5.2. Examples of previous GovTech challenges for administrative capacity

When considering administrative capacity:

- CivTech Scotland used GovTech to leverage technology to try and create the most efficient and secure supply chain for public sector procurements,
- Go2Gov in Australia sought to increase wellbeing and resilience of remote and mobile workforces and provide evidence-based strategies for positive behaviour change.
- Creative HQ in New Zealand developed a smart solution to better identify and manage potential project delays for the planning and delivering of public transport infrastructure projects.
- MiLaB in Colombia sought to digitise and automate the validation of invoices for medicines and medical devices to check the data against regulations, optimise processing times, and strengthen price control mechanisms for these items.

Source: CivTech (2023), The Round 9 Challenges (online): https://www.civtech.scot/civtech-9-challenges; Creative HQ (2022), GovTech projects (online): https://creativehq.co.nz/govtech-projects/, The CivTech Alliance (2023), Go2Gov (online): https://www.civtechalliance.org/go2gov, MiLAB (2023), Retos (online): https://www.innpulsacolombia.com/milab/retos

Service Delivery

GovTech can enhance the delivery of public services through digital solutions that help conduct user research, enhance user-centricity, and improve service delivery. GovTech solutions can help securing the technical capabilities needed for proactive service provision and facilitate monitoring and evaluation of service delivery outcomes. These collaborations can enhance the quality, accessibility, and responsiveness of public service delivery – improving the overall experience for citizens and businesses.

Box 5.3. Examples of previous GovTech challenges in service delivery

When it comes to service delivery:

- The GovTech Catalyst in the United Kingdom gathered and analysed data from new sources, such as information collected by residents or data captured using council vehicles, to improve delivery across local council services.
- Creative HQ in New Zealand developed a solution to match the appropriate carer to the requesting senior using a product-service system with AI, that allows our community of seniors to access the care and support they require at a time that works for them.
- The GovTech Lab in Lithuania created a smart mental health assistant for relapse prevention.

Source: https://www.gov.uk/guidance/current-govtech-catalyst-projects, https://creativehq.co.nz/govtech-projects/m, https://govtechlab.lt/

Public engagement

GovTech can be used to improve the way governments communicate and interact with citizens. For example, GovTech can help improve public communication channels, help governments process citizen inputs, and support the delivery of participatory initiatives. In return these digital solutions can enhance transparency, promote inclusive decision-making, and ensure citizen engagement in these processes.

Box 5.4. Examples of previous GovTech challenges in public engagement

To improve public engagement:

- CivTech Scotland sought to discover how can technology offer everyone an individualised communications channel that is endlessly adaptable, never goes out of date and interacts with public sector services securely and in a timely way.
- StartOff in Norway developed a digital solution for service user testing be used within Norway's Labour and Welfare Administration's for new services to ensure co-creation and interaction.

These examples show two possible different targets of GovTech challenges in citizen engagement area – directly building general citizen engagement or public communication channels (Scotland), or using digital tools to engage citizens for co-creation in specific areas (Norway)

Source: Government Digital Service (2020), Guidance: Current GovTech Catalyst projects (online): https://www.gov.uk/guidance/current-govtech-catalyst-projects, CivTech (2023), The Round 9 Challenges (online): https://www.civtech.scot/civtech-9-challenges

Benefits of GovTech engagements for the public sector

When considering the application of GovTech, there are some proven benefits from using GovTech that are delivered through its agile and collaborative approach in partnership with other sectors, including:

- **Better quality outcomes:** GovTech can deliver better quality outcomes by leveraging the latest technologies and iterating with users to ensure that solutions are tailored to solve problems. For example, the Lithuanian Communications Regulatory Authority worked with Oxylabs to use AI to better detect child abuse content online – a manual process previously (Brazaityte, 2022[4]).
- **Cost-effectiveness:** as well as better outcomes, GovTech's process of piloting and experimentation offers an incremental and risk-oriented approach that can help optimise resources, spending and project delivery. Economies-of-scale are also created by scaling-up and reusing GovTech solutions and the engagement with the GovTech ecosystem can contribute significantly to aggregated productivity growth (OECD, 2020[5]). For example, IdeiaGov supported the development of technical solutions to support the pandemic response in Sao Paolo, which were funded and made available to different state agencies (Government of Sao Paulo, 2020[6]).
- **Accelerated public sector innovation:** according to the OECD's Innovation Determinants Model, positive experience of innovation is one of the main levers of change across the system. It can build normalcy around the innovation projects and lead to innovation being attempted again (OECD, 2018[7]). Seeing agility and a willingness to experiment can push public sector entities to overcome arbitrary restrictions and embrace more innovative practices, as we saw globally during the COVID-19 pandemic – optimising the use of public resources while reducing the burden on businesses The sharing of knowledge and experience also contributes to a sustainable culture of learning, while exposure to technologies can also spark further creativity and innovation – similar to how GovTech Singapore inspires continuous learning and experimentation within its digital transformation agenda (Cavanaugh, 2024[8]).
- **Economic opportunity:** by actively procuring from start-ups, governments can stimulate local economies, fostering the growth of start-ups and SMEs. This can have a multiplying economic effect and drive job creation across OECD countries (Breschi, Lassébie and Menon, 2018[9]). GovTech solutions can also be exported, as in the examples of Vistalworks that worked with CivTech Scotland to expand to Estonia and Lithuania, or with the Estonian product, X-Road that was implemented locally before being exported and used in other countries, such as Finland.

These benefits have been proven through analysis undertaken by Lithuania, as outlined in the bow below:

Box 5.5. Organisational benefits from GovTech

In 2022, Lithuania's GovTech Lab analysed 50 public sector entities that collaborated with GovTech actors between 2020-2022, which identified benefits beyond the creation of digital solution, including:**Increase in knowledge and competencies**: this included skills related to problem definition, agile methodologies, innovation procurement, use of emerging technologies.

- **Change in attitudes:** organisations became more confident in their own abilities, became faster-decision makers and problem solvers, and more open to innovation.
- **Network expansion:** engagement with other public or private sector organisations opened opportunities for further collaborations, including by raising the profile of the organisation.

Source: (GovTech Lab Lithuania, 2022[2]) https://govtechlab.lt/wp-content/uploads/2023/01/GIS_apzvalga.pdf

Potential risks of GovTech engagements

Engagement with start-ups, innovators and intrapreneurs can provide immense benefit. However, it is essential to acknowledge the potential risks that can arise in the absence of the right building blocks and enablers, or if the GovTech approach is used at an inappropriate time or in inappropriate ways.

- **Creating new dependencies:** GovTech emerged partly in response to a dependency on legacy ICT vendors that drove up costs and hindered flexibility. Governments should avoid the same dependency on GovTech actors. Proper knowledge transfer helps address internal capability gaps, while contingency plans ensure the ongoing support and maintenance of any GovTech solutions – especially if a GovTech partner is no longer viable given the high failure rate among start-ups, in particular. Finally, controls are needed to ensure transparency, ethical conduct, confidentiality, and avoid any conflicts-of-interest (COI) to mitigate the risk of any misconduct.
- **Disincentives for further innovation or collaboration:** the absence of the right enabling conditions for GovTech can disincentivise further innovation or collaboration. Frictions can be created from misaligned expectations, cultural differences, or complex and burdensome processes. Choosing the wrong challenge for a GovTech engagement also risks leading to disengaged actors and unrealised expectations. Finally, unsuccessful projects should still be celebrated and learnt to manage the risk that they discourage the future uptake of GovTech.
- **Inefficient use of resources:** improper use of GovTech can result in a mismanagement of public resources. First, without considering the scalability in the solution's lifecycle, there is a risk of not realising the expected benefits or return on investment. Second, if the underlying conditions for innovation and co-creation are not in place, there is a risk of wasted resources.
- **Security, privacy, and confidentiality risks:** consider the access to data, information and systems granted to their GovTech partners. Access should be restricted, information management and confidentiality should be outlined in the contract, and any COI should be managed.
- **Inconsistency in the use of digital tools:** GovTech solutions need to be developed with consideration of their interoperability and integration into their broader digital environment, otherwise the effectiveness and adoption of the new solutions might be at risk.

Many of these risks were realised with the accelerated digital transformation seen during the pandemic:

Box 5.6. Risks for GovTech: lessons learned from the Covid-19 response

The Covid-19 pandemic put strain on good governance, as governments struggled to keep pace with the spread of the virus, due to rapidly-changing needs, expectations, and responsibilities in the delivery of public services to support the public health response. Governments and industry collaborated quickly to develop new and innovative solutions at scale, but processes were sometimes circumvented or incorrectly used to enable the governments' response to achieve outcomes quickly. This included the overuse of direct or closed procurements, vendor lock-ins, limited transparency, and varying contracts and their scope to needing to conduct additional procurements.

Within the context of GovTech, this demonstrates the importance of ensuring that procurement and risk management frameworks are flexible enough to enable innovation, but also sufficiently robust to ensure that GovTech happens with integrity and the best possible use of government resources.

Source: (ANAO, 2022[10]) https://www.anao.gov.au/work/performance-audit/digital-transformation-agency-procurement-ict-related-services

Questions to ask before undertaking a GovTech engagement

Understanding the application, benefits, and risks of GovTech, it is necessary for public sector entities to assess if GovTech is the right approached based on the challenge and potential solution. By following the GovTech Decision Tree (**Figure 5.2**), actors can determine where GovTech would have the greatest value.

The challenge

The primary focus of GovTech is to solve a 'challenge' for the public sector. The challenge should be framed around the need for innovation or a digital solution – time should be taken to understand what the problem is, who the users of the solution would be, how they would be affected, and what needs are not being addressed. This should be kept in mind when assessing a challenge against 3 critical questions:

1. **What is the scope of the challenge?** The scope of the problem should be narrow to facilitate a clear and effective collaboration between GovTech actors and the project in the public sector to ensure that the engagement is focused and productive. For example, instead of tackling deforestation, Lithuania's Ministry of Environment narrowed its goal to instead find a solution to monitor how tree coverage changes in the country (GovTech Lab, 2021[11]).
2. **Is the problem clearly defined?** The challenge should be well-defined to be clear on the results the actors are expected to achieve – setting clear goals to evaluate whether progress is being made towards addressing the problem, as well as to assess when and how to scale GovTech solutions. It should also be clear that the challenge can be addressed with technology. If a challenge requires policy or legal change, then it is more appropriate that the solution leverage other policy or innovation labs across the public sector.
3. **Is the problem relevant to other institutions?** GovTech engagements can have the greatest benefit when the challenge at hand is not unique to a single organisation but shared with other organisations – either nationally or internationally. This approach ensures that public sector entities receive updated solutions and attract more interest from the ecosystem, thereby increasing the likelihood of generating better ideas.

The solution

GovTech solutions can vary significantly. It is important to consider the nature of the potential solution, the capabilities required to develop it, and who are the most appropriate GovTech partners to engage. This can be supported by asking 3 additional questions focussed on the solution:

4. **What is the potential scope of the solution?** GovTech initiatives tend to be most successful when focused on the development of standalone digital tools, such as algorithms, platforms, or apps. These types of projects align well with the skillset and capacities of GovTech innovators. For example, during the Covid-19 pandemic, the Governments of Singapore and Australia worked collaboratively with GovTech actors on the rapid development and delivery of citizen-tracing apps, which formed a key part of the early pandemic response. The two governments were able to leverage existing technologies in innovative ways, creating scalable solutions that were considered and replicated by governments elsewhere (Goggin, 2020[12]).
5. **Are solution requirements clearly defined?** If so, there may be less opportunity for co-creation. GovTech is most useful when GovTech actors collaborate on new solutions. For challenges with clear solution requirements, countries might instead explore other procurement approaches.
6. **Is there a possible solution already available in the market?** Public sector entities should engage with their networks and do research to understand if there are solutions already available. These could include solutions from previous GovTech engagements that can be scaled up or adapted to address the challenge at hand. If no solution is available, GovTech actors can still be engaged but organisations should allow for additional time and iterations to develop a solution.

Using the GovTech Decision Tree to determine when to use GovTech

The GovTech Decision Tree in **Figure 5.2** guides public sector entities through the key decisions on when best to leverage GovTech, as well as providing an indication of the expected maturity of the output, possible alternative approaches, and whether a GovTech engagement is worth the effort required. To demonstrate this, each potential engagement in the Decision Tree is coloured with either:

- **Red:** to indicate very limited benefit from a GovTech engagement.
- **Yellow:** to indicate some benefit, but where some additional cost or effort may be required.
- **Green:** to indicate the most suitable for a GovTech engagement.

According to the GovTech Decision Tree, the scenarios that are most suitable for GovTech include:

Scenario 1: Challenge is well-defined and replicable, but solutions are unknown

An ideal scenario for GovTech is a challenge with a relatively narrow scope, specific to a particular area or process, for which there is no clear solution. This is where GovTech is leveraged for a purpose, and not just for the sake of innovation. This scenario allows for clear ownership within the public sector entity and enables GovTech actors to think creatively and experiment with outside-the-box solutions. Further, the opportunity to scale solutions provides additional incentives for GovTech actors to excel.

Scenario 2: Both the problem and potential solution are clearly defined.

Another suitable scenario is when both the problem and potential solution are clearly defined, and viable solutions already exist in the market. While this engagement may involve less co-creation, it still engages GovTech actors and requires some adaptation of the solution to meet user needs. This scenario is where it would be ideal to explore possible GovTech solutions off-the-shelf instead of creating one from scratch.

Further considerations

Beyond assessing the scenarios, public sector entities should consider if the necessary building blocks and enablers are in place to facilitate a successful engagement, including by asking:

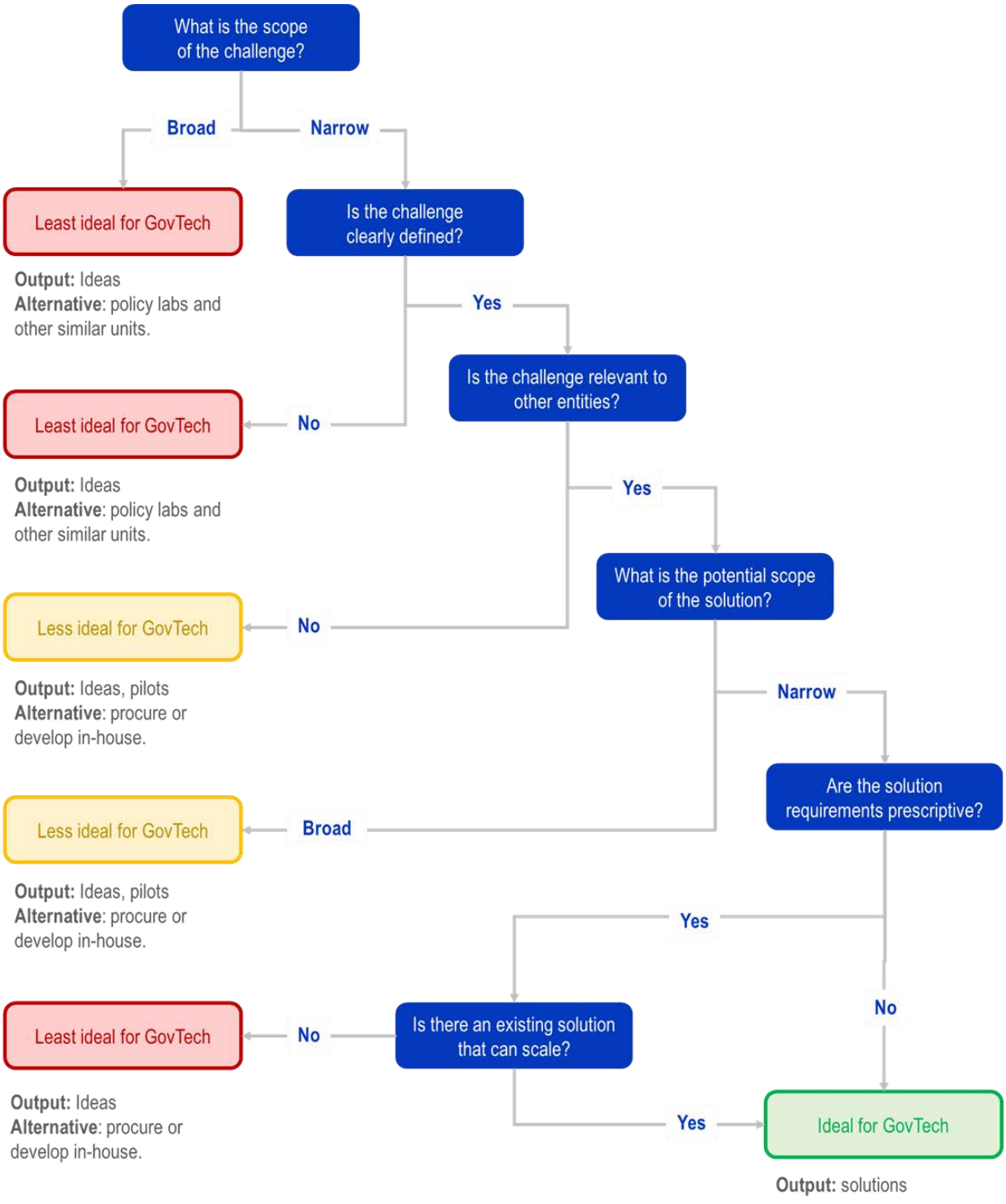
- Does the organisation have sufficient capabilities and resources internally?
- How will the organisation engage the market and attract the right innovators?
- Is the challenge relevant and interesting enough to attract innovators? If not, can it be reframed?
- Are there any sensitivities in engaging external GovTech actors?
- Is the data required for the solution available and accessible?

Potential projects should also undergo internal reviews and approvals to ensure good planning, which could include engagement with a centralised GovTech team. For example, in Lithuania, the GovTech Lab evaluates and approves projects against 5 main criteria:

- Evaluating how well analysed and understood the problem is.
- Assessing the broader need, including strategic alignment with government priorities and similar challenges elsewhere.
- Determining the potential benefit of the project.
- Evaluating the potential for innovation organisationally, nationally, and internationally,
- Determining the best delivery approach, including procurement and resourcing.

By considering these in line with the GovTech Decision Tree, organisations can be confident that they have the right conditions in place to enable a successful GovTech engagement.

Figure 5.2. GovTech Decision Tree



Source: Authors' own design.

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6 Conclusion

This chapter provides a specific set of actions governments could take to advance their GovTech maturity by using the GovTech Policy Framework as a guide to develop the building blocks, establish the enablers, and use the GovTech Decision Tree to consider when the time is right for GovTech.

While these actions maximise the impact and chance of success of GovTech engagements, countries do not need to have reached full GovTech maturity before GovTech can take place.

GovTech collaborations can be a key enabler for the digital transformation of the public sector. By using the OECD GovTech Policy Framework as a guide, governments could more confidently leverage GovTech for their digital initiatives and maximise the impact of their collaborations based on 3 possible actions:

Action 1: Develop the GovTech Building Blocks

Looking at the micro-level, investing time and resources in developing the GovTech Building Blocks can help governments build a successful and sustainable GovTech practice longer-term. This includes:

- **Mature digital government infrastructure:** aiming to build on digital government maturity relying on the necessary technology, infrastructure, tools, and data governance. This includes high-quality data that can be accessed and shared openly, which is supported by cloud computing and open-source policy.
- **Capacities for collaboration and experimentation:** successful GovTech engagement thrives alongside a capable public sector that has digital skills and multidisciplinary teams; agile processes tools, and methodologies; and a culture that encourages experimentation and accepts failure.
- **Resources and implementation support:** GovTech should be considered as both a method to help deliver digital investments and as a digital investment itself. This means considering how to make funding available, how to evolve procurement approaches, and how to scale successful pilots across organisations and internationally.
- **Availability and maturity of GovTech partners:** GovTech also works best when there is a mature and capable ecosystem of GovTech partners ready to support co-creation. This means considering acceleration programmes to support start-ups growth by facilitating access to capital, the scaling up of solutions, and minimising barriers to access procurement opportunities.

Action 2: Enhance the GovTech Enablers

At the micro-level, establishing the GovTech Enablers can help ensure that the ecosystem operates in a co-ordinated manner and progresses in a unified direction in alignment with the:

- **Strategic layer:** where governments could use GovTech strategies and champions in senior leadership positions to mobilise support and set a clear direction for GovTech.
- **Institutional layer:** where governments could seek collaboration and knowledge-sharing across institutions at the national, regional, or policy levels.
- **Network layer:** where both governments and GovTech actors should seek to mobilise the network collectively to strengthen the GovTech practice and garner broader support from communities.

Action 3: Consider when the time is right for GovTech

To maximise its effectiveness, governments should leverage GovTech in scenarios where either the problem is well-defined and the scenario is replicable, but the solutions are unknown; or where both the problem and potential solution configuration are clearly defined. The GovTech Decision Tree can be a useful tool to guide public sector teams when assessing scenarios benefiting from GovTech collaborations.

However, governments do not need to count on the full maturity in all building blocks and enablers before GovTech engagements can take place. Rather, governments can prioritise certain components in the short-to-medium term, while working on broader maturity to ensure the sustainable and effective use of GovTech in the longer-term.

OECD Digital Government Studies

Enabling Digital Innovation in Government

THE OECD GOVTECH POLICY FRAMEWORK

GovTech is a key enabler of digital government. As governments increasingly focus on how best to experiment with and adopt digital technologies such as artificial intelligence, GovTech offers a mechanism to do so in a way that is agile, innovative, and cost-effective. Not only does this help improve the effectiveness and efficiency of the public sector, but it can also foster the participation of start-ups and newer providers in the government market. However, despite the value that countries see in GovTech, there are varying levels of maturity in its implementation.

As such, this publication presents the OECD's definition of GovTech and sets out its GovTech Policy Framework – guiding countries on how to create the ideal conditions for GovTech collaborations and determine the right scenarios in which to use GovTech for maximum impact. By using the OECD GovTech Policy Framework as a guide, governments can more confidently use GovTech partnerships to enable a more effective and innovative digital transformation.

PRINT ISBN 978-92-64-89137-1
PDF ISBN 978-92-64-45397-5