The Innovation System of the Public Service of Brazil
Preliminary Findings from the OECD
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In a changing world, governments cannot stand still. New problems demand new responses, and old challenges require revisiting, given changed possibilities. Changing citizen expectations of governments necessitate new ways of engaging, better and more tailored services, and policies that deliver better outcomes. Governments, in short, need to innovate.

Of course, innovation already happens in governments – everything government does was an innovation at some point. However, the innovation that occurs is often reactive or opportunistic rather than strategic, and increasingly government organisations are falling behind the rate and direction of change occurring outside of the public sector. Governments can, and must, do better. Public sector innovation needs to move from being a sporadic activity to one that is systemic, if governments are going to be ready and able to address the challenges of today and tomorrow.

The Government of Brazil is aware of this challenge and opportunity. While public sector innovation has certainly experienced greater attention and effort in recent times in the civil service of Brazil, and there are numerous innovative projects already happening and delivering value, there is further to go if the system is to deliver what is wanted and needed.

However, it is fair to say that all governments are still learning about how to best support and encourage public sector innovation. There is no one set recipe for how to achieve an effective public sector innovation system, i.e. a system that consistently and reliably develops and delivers novel solutions for government priorities that meet the existing and emergent needs of citizens. An innovation system is also dynamic, meaning that a change in one area will cause or require changes in others. In addition, the performance of the system will only be as strong as its weakest part, as the limiting factor sets the ceiling for what is possible. The dynamic and interdependent nature of the system necessitates ongoing attention and stewardship, rather than rigid prescriptions, if the system is to deliver what is wanted and needed.
Appraising the characteristics of today’s system, in order to appreciate what is in place as well as what can be built upon. Testing three different future scenarios – continuing as is, increased focus and investment, or a radical shift to innovation at the centre – in order to better highlight and appreciate the dynamics of the current system.

Identifying possible areas of opportunity that could help mature the innovation system.

This work does not pretend to have all of the answers. In light of the dynamic and interdependent nature of an innovation system, and the uncertainty around what an effective public sector innovation system looks like, the aim of this work is not to provide explicit recommendations. What should be done will ultimately depend on what is wanted and needed, and these are qualities that will continue to evolve and change, sometimes rapidly. Rather, the goal is to reflect the system back to its participants, to empower them with insight about how to influence

UNDERSTANDING THE BRAZILIAN CONTEXT

Given the uncertainty around how best to support and steward a public sector innovation system, the Government of Brazil has partnered with the OECD to explore its own system. What does the Brazilian public sector innovation system look like? How was it arrived at? How might it evolve over time?

The OECD (2018a) has developed a model for understanding what affects the performance of public sector innovation at a system level (see Figure 1). Through its research and investigation of the Brazil system, the OECD has further validated the model, and has used it to help make sense of the functioning of the system.

The preliminary findings contained in this report outline the key observations from the research in 2018, including:

- Exploring the historical context and understanding what has already occurred and what led to the current system.

![Figure 1: Determinants of public sector innovation at the individual, organisational and system levels](image_url)

**Reason for innovation**
- Motivation to innovate
- Problem identification
- Clarity about innovation

**Possibility for innovation**
- Opportunity to innovate
- Ideas generated
- Parity of innovation

**Capability for innovation**
- Ability to innovate
- Proposals developed
- Suitability for innovation

**Experience of innovation**
- Learning from innovation
- Project implementation
- Normality around innovation

- Evaluation
- Lessons diffused
and drive the system. With an appreciation of the system, actors can thereby understand their role within it, and dynamically assess how they can best contribute to and shape the system no matter how the context or the level of ambition changes. To this end, the preliminary findings outline key areas of opportunity to help provide actors with starting points for conversation and consideration, recognising that the right answers will be ones that emerge from within the system and that appreciate the nuances and subtleties of its context.

This document presents the preliminary findings of the OECD peer review team. It complements and learns from the recent Digital Government Review (2018b) and a companion review on innovation skills and leadership in Brazil’s senior civil service (OECD, 2019 forthcoming). The views and findings expressed in this document will be further discussed, detailed and justified in the final report on the Innovation System of the Public Service of Brazil, to be published in 2019.

**THE NEED FOR A SYSTEMATIC APPROACH TO PUBLIC SECTOR INNOVATION**

This review builds on an emerging understanding of public sector innovation systems developed out of the Observatory of Public Sector Innovation’s research with other countries. This work does not seek to place a pre-eminence on innovation (“implementing something novel to the context in order to achieve impact” (OECD, 2017a)). Rather, it is based on an understanding that in a changing environment governments also often need to change – whether it be what they deliver, how they work, or how they engage – or risk being left behind, becoming irrelevant, or failing in their core responsibilities. When existing responses are struggling to deliver the same results, it cannot be assumed that the current options available to government are sufficient. Therefore, innovation must play a greater role in effective government.

In short, in an operating environment of significant flux and disruption, innovation cannot remain an incidental, accidental or occasional thing. Rather it must become a core capability along with the other established functions of government. Innovation will not be the only answer, but it must become one of the core strategies available to government, to be drawn upon when and as needed.

There are a number of factors requiring governments to give more attention to innovation, and that explain why a more systematic approach to public sector innovation is required. The most significant of these factors (drawn from OECD 2018a) are outlined in Figure 2.
The OECD, supported by the Ministry of Planning, Development and Management (MPDG), the Brazilian National School of Public Administration (ENAP), the Federal Court of Accounts (TCU) and the Federal Justice Council, is working to explore (see Box 1) how to best support a systematic approach to public sector innovation in the public service of the federal government of Brazil.

BRAZIL’S PAST INNOVATION JOURNEY

What have been the major milestones and developments that have shaped Brazil’s public sector innovation journey? In order to understand the public sector innovation system of today, it is necessary to appreciate what has led to it. Without an understanding of the past there can be no
This is the second investigation of a national government’s public sector innovation system, with the first having been done with the Government of Canada (2018a). The review with Brazil has involved extensive interviews and workshops with Brazilian public servants and some other relevant stakeholders.

Innovation is, in part, about what is possible – about imagining and then realising new and different possibilities. Therefore, understanding a public sector innovation system requires understanding what the actors within it believe, as that shapes what is possible as much as formal structures, processes and rules do. All the support and intervention to assist public servants to innovate will not make a difference unless the actors believe that they can, should and are able to innovate. Thus, it is important to understand the experience of innovation within the civil service. How is the system experienced by different people, and are there common aspects, both positive and negative, to that?

Given this, and recognising that much is still to be learnt about public sector innovation systems and how they can best be supported, this review takes a ‘design-led’ approach, to appreciate not just what is happening, but to try to unpack why that is the case.

The process included:

- Initial background research into the historical trends and current features of innovation in the public sector of Brazil.
- A first mission in May 2018, undertaken to understand the context and develop insight into the ‘lived experience’ of innovation within the civil service, involving over 50 interviews with nearly 70 people. This mission was done in conjunction with the OECD companion review into innovation skills and leadership in Brazil’s senior civil service (OECD, 2019 forthcoming).
- A second mission in September 2018 was held to enable further interviews, with nearly 40 people, in order to validate initial observations of the system and to test those observations through the investigation of specific case studies. These observations were then further tested through two workshops with a range of participants. Finally, some scenarios were tentatively explored in order to further test the understanding of the dynamics of the system. This mission included one peer reviewer from the Privy Council Office of the Government of Canada, and one from the Centre for Public Service Innovation of the Government of South Africa. The peer reviewers provided valuable insight from differing country contexts.
- A third mission is being undertaken during the Innovation Week of 2018 in Brasilia. This will help to test the preliminary findings outlined in this document as well as explore what interventions might be most feasible and appropriate for the Brazilian context.

Understanding of the present, as previous developments shape not only what happens now, but also influence what might be feasible in the future.

Figure 3 provides an overview of some of the key milestones and developments that have helped to shape the public sector innovation system. Some are specific initiatives that aim to foster greater innovative activity and capability, whereas others are events or interventions that have helped to influence the appetite or opportunity for innovation by civil servants. The events identified are primarily to do with the federal government, however, being a federal system, developments at the other levels of government have also been influential.
Figure 3: Key milestones and developments in Brazil’s historical public sector innovation journey

1967
- Decree Law 200/1967 – provides for the organisation of the Federal Administration, establishes guidelines for Administrative Reform and provides other measures

1988
- Post-dictatorship Constitution enshrined

1991
- National Program of “Desestatization” (NPD) and privatisation of state-owned enterprises

1993
- Procurement Law 8.666

1995
- ‘Plano Director’ Master Plan for State Reform published

1996
- Federal Management Innovation Award created (ENAP)
  - Congress of Information Technology and Innovation in Public Management (CONIP) Excellence Award created
  - Public Management and Citizenship Program (EAESP-FGV, Ford Foundation & BNDES) created (sub-national)

1998
- Constitutional amendment (19/98) implementing public administration reforms and introducing efficiency as a principle for public administration
  - Constitutional amendment (20/98) implementing social security reforms and revising limits to public servant benefits
  - Privatisation initiatives at the subnational level

2000
- “Plano Avança” Brazil, a modernisation agenda
  - Electronic procurement introduced, including establishment of “Comprasnet”, a portal for electronic reverse auctions
  - Fiscal Responsibility Law (Complementary Law 101), which revised the budgetary and expenditure frameworks to implement codes of conduct concerning expenditures for public officials.

2002
- e-Gov Award (ABEP and MPDG) created

2004
- Transparency Portal established
  - Law 10.973/2004 of Innovation / Legal framework for science, technology and innovation (primarily oriented to private sector)
  - Innovation Award, “Innovare”, for the practices in the justice system (Innovare Institute)

2005
- Establishment of Gespublica (National Program for Public Management and Debureaucratisation), to improve the quality of management practices in public sector organisations

2009
- “Citizens Decree” (6.932/09), promoting public service simplification and integration
  - Decree 6.944/09 for the improvement of public administration, rules for recruitment tenders, and public sector innovation
  - National Year of Public Management
  - First collaborative law making consultation process in the Executive Branch (“Marco Civil da Internet”)
  - Culturadigital.br, a social network created for the discussion of cultural policies
  - Creation of E-Democracia, the social participation portal of the Chamber of Deputies (Câmara dos Deputados)
  - Complementary Law 131, which amended the Fiscal Responsibility Law to include transparency and social participation obligations

2011
- Law of Access to Information (12.527/11)
  - National Open Government Action Plan
Brazilian Open Data Portal established
Public Services Portal created

2013

“LabHacker” innovation lab created (Resolution 49/13) in the Bureau of the Chamber of Deputies

2014

National Policy of Social Participation and National Social Participation System (Decree 8.243/14)

2015

First Public Sector Innovation Week held
TCU establishes Colab-i innovation lab
MPDG establishes Inova, a functional area with focus on modernisation and fostering innovation in the federal administration

2016

InovaGov network created (MP, CJF, & TCU)
Digital Citizenship Platform established (Decree 8.936/16)
Digital governance policy (Decree 8.638/16)
ENAP creates GNova Innovation Lab in partnership with Denmark’s MindLab
Innovation Law updated (13.243/16)
Constitutional Amendment (95/2016) capping public expenditure for the next 20 years
Open data policy (Decree 8.777/16)
ANVISA pilot project on innovation

2017

Public governance Decree (9.203/17)
Simplification of public services Decree (9.094/17)
“Brasil Eficiente” (Efficient Brazil), a programme to improve the lives of citizens using public services and reduce redtape
Code of defence of the rights of users of public services (Law 13.460/17)
igov nights established to help innovators network
InovaGov holds open innovation conference
Launch of the Govdata Platform
Provision of services using a “Single Sign-on” solution for authentication
ANAC establishes innovation lab
DNIT creates n3i - the Nucleus of New Businesses and Innovation
Ministry of Planning and ENAP partnered to carry out the first ever Public Services Census in the Federal Government in Brazil.

2018

Public Spirit innovation award (Agenda Brasil do Futuro & Instituto Republica)
The Central Bank (Banco Central) creates LIFT, its laboratory for financial and technological innovation
Federal Prosecution Attorney’s Office – (Ministério público federal) creates advisory unit on sustainability and innovation
ANVISA creates a program on innovation management and transforms its prior pilot project (Fabrica de Ideias) into a lab (Lab-i-Visa)
National System for Digital Transformation and Brazilian Strategy for Digital Transformation (E-Digital) (Decree 9.319/18)
Law introduced to provide greater guidance to courts and auditing authorities around action by civil servants (13.655/18)
Launch of the first chatbot to help citizens navigate in the Service Portal.
First broad Quality management research in federal public services released by INOVA.
Red tape reduction legislation enacted (Law 13,726)

Source: Interviews, workshops and research
In addition, there have been a number of external events that have shaped the environment and appetite for innovation. These have included corruption scandals (e.g. the “Operation car wash” investigations) which may have hindered the willingness to try to do things differently, as well as events that may have demonstrated a need for greater innovation and responsiveness by government (e.g. the “Confederation Cup riots”). These events are important to bear in mind along with the more formal milestones and developments, as they can be as significant when it comes to influencing the opportunity and desire to innovate.

From the investigation of the past, typified but not limited to the events identified in Figure 3, a number of observations pertinent to the current public sector innovation context can be made.

- There has been a long-standing interest in public administration and the workings of the state. While not necessarily either consistent or continual, there have been repeated reform efforts to try and ‘debureaucratise’, modernise, or otherwise improve the standard of public administration. This has included ‘Plano Diretor’, the Master Plan for State Reform (between 1995-1998), and the “Plano Avança” Brazil modernisation agenda (2000-2003), Gespública (2005-2017) and most recently “Brasil Eficiente” (2017-) which seeks to reduce bureaucracy, digitise government services, and emphasise responsiveness to citizens.

- There has been a deep and ongoing concern with corruption and, perhaps consequently, a strong emphasis on openness, transparency, and scrutiny.

- There has been sometimes significant effort aimed at fostering public participation. This can be seen, for instance, at the city level by the uptake of participatory budgeting, and demonstrated at the federal level by the use of National Policy Conferences (e.g. see Pogrebinschi, 2012), online participation and consultation tools, and a national policy for social participation.

- Reflecting the country’s legal framework, there has been a legalistic approach to change efforts, which need to be linked to, and authorised by, specific laws and decrees.

- There have been a number of innovation awards introduced, which have helped to highlight and provide insight into the ongoing innovation activity of the civil service, with hundreds of winning submissions over the last two decades (see for instance Sousa et al, 2015).

- There has been a recent uptick in public sector innovation specific activity, such as the development of innovation labs, networks and targeted interventions to support or drive public sector innovation. This is likely reflective of broader international trends as well as a growing interest within the civil service of Brazil of how things could be done differently.
In short, the previous reform efforts within the federal public service of Brazil have been significant, but these have not yet been sufficient to meet citizen expectations of the public sector. There exists limited citizen trust in the civil service which, combined with a legal environment that requires explicit permission or direction for the public sector, leads to a challenging environment for innovation. Nonetheless, innovation has definitely been occurring, and the practice of innovation has been developing (e.g. through public sector innovation labs) and learning from international experience.

With this high-level understanding of the developments of the past, the parameters and dynamics of the current state can be more effectively examined.

UNDERSTANDING THE CURRENT STATE OF THE INNOVATION SYSTEM

Public sector innovation is definitely happening in the public service of Brazil. Previous analysis of innovation award winners (Cavalcante and Camões, 2016; Sousa et al, 2015) amply illustrates that this is the case. It is also clear that a number of federal government agencies have recently increased their investment and effort in building innovation capability. A number of recent interventions have also attempted to better enable, or at least reduce the barriers to, public sector innovation. The existence and growth of the InovaGov network and informal networking (i.e. igov nights) demonstrates that there is appetite for innovation from some quarters of the civil service.

Therefore, it can be said that there indeed exists a public sector innovation system in the federal government of Brazil, as innovative initiatives and outcomes are originating from the public sector. However, the question is: to what extent is the system able to consistently and reliably develop and deliver innovative solutions to meet the goals and priorities of the government? Is the system sufficiently mature and sophisticated, given what is expected of the public sector?

In order to help answer this question, the OECD (2018a) identifies three levels of analysis that are useful for thinking about innovation activity.

- The level of the individual – any individual can undertake or start something innovative. It may only really involve themselves or it might have wider ramifications. This individual lens helps to give insight into innovation at a practical level – e.g. what do people need to do or what do they go through when undertaking innovation.

- The level of the organisation – an organisation may have multiple innovative initiatives underway in response to multiple identified needs for innovative approaches. This organisational lens helps to give insight into innovation at a process level – e.g. what is involved when orchestrating innovation across multiple people.

- The level of the system – across the public sector there are interactions between multiple initiatives, contributions and issues from individuals and organisations, as well as intersections between other structures, knowledge, processes and fields of activity (e.g. the budgeting system). The system lens gives an insight into more than just specific initiatives or activity. It provides an opportunity to view things in aggregate, and to look at overall performance (i.e. just because there might be useful innovation occurring at an individual and organisational level, it does not mean innovation will be occurring as needed when viewed at the whole-of-system level).

If the activity in the public service of Brazil is viewed through these lenses, what does it reveal? Through its research the OECD has identified three cases that help to illustrate innovation and the differences that can be seen when it is driven from an individual level (even if that is multiple people), from an organisational level (even if that is not the whole of an organisation), or from a systemic level (even if that does not mean the whole of the system is involved).

The first highlighted case (Box 2) is a powerful example of how individuals can make change, and play a significant role in the innovation system, as well as bringing about value that can benefit the whole of the public service and others.
This is the story of how ENAP developed the idea of a ‘Coursera for Government’, a shared platform for different parts of the public sector training ecosystem to share infrastructure and processes to make available their online training for civil servants and others. This, in turn, helps make it easier to develop the capability of civil servants (and interested others).

ENAP, as the National School of Public Administration, plays a major role in training civil servants to develop their skills. Over the last few years, online training has become a bigger focus, and the school developed an infrastructure for hosting its own courses.

In 2012, there was an external speaker brought in, who introduced the concept of federated IT systems – i.e. architecture that allows different autonomous areas to have interoperable systems and share information, without requiring all to be on the same network. What might this look like for ENAP and the wider ecosystem of training organisations?

This idea sparked thinking about what this might mean for online education. Over time, the idea was developed, but it was not until later that there was the opportunity to put the thinking into practice, as the relevant area of ENAP did not have the necessary skills to explore the option. In 2016, there was the opportunity to engage someone with the right IT skills, and to have them as part of the relevant operational area rather than based in the IT area. Having them as part of the relevant team meant there was greater opportunity to explore possibilities and to get into the specifics of how such an idea might work.

With access to the right skills, exploration of the possibilities began. The project started small, and built on the idea of what it might mean if there was a common platform for different training organisations to host and operate their online courses – e.g. a Coursera for government. The first step was to create a domain, and to iterate and learn from there. Initial questions – “What constitutes a course? What data do we need?” – led to other questions and steps, such as “If that is the data we need, then that is the data that we need to collect during the subscription process.” The initial work led to a more tangible proposal of how ENAP could act as a platform for courses (Massive Open Online Courses, or MOOCs) from different schools at marginal cost, due to it using existing infrastructure and the associated economies of scale.

Over time, the project has grown to involve a number of different institutions, and the platform experiences an average of 3,000 subscriptions per day. The courses are made available to anyone (not just civil servants),
and ENAP provides the hosting of the service, the data management, and the secretariat system for subscribers. Individual institutions are responsible for managing the rest of the process, and can use the data generated to help them refine and improve their offerings over time. Further innovative elements are now being developed, including the ability to automate customised messages to students, and in regards to educational methods and content management.

While the innovation highlights the value that can come from thinking differently, the journey was not always a smooth one. While the idea of sharing resources across public institutions might seem obvious in retrospect, during the process the idea was often not clear to others. Because of the novelty, there was no easy reference point for people to connect with, and so it was not easy to understand what was involved. “People just don't see it happening. They don't really understand what you're saying.”

The project was also one much driven from an ‘individual’ level, in that it was pushed by key people who saw a possibility and found or facilitated the institutional openness to do so, rather than because it fit with a clear organisational priority. If the relevant people had not been there, it is unlikely the project would have occurred in those terms. Of course, the project has been beneficial at an organisational level for ENAP, but it is fair to say that it did not start as an organisational project. This meant that it required those involved to have a lot of belief in the idea, and the passion to keep it going even when the inevitable hurdles arose, rather than because it was something expected. “The small problems, they are so small, but they are so annoying, and they are so frequent that they are dangerous to an innovation project.” It was a project dependent on those involved having good relationships with different parts of the system, being able to carve out the organisational space for the project, and being able to navigate the existing formal and informal channels to seek for institutional approval and support. Given there were sometimes clear immediate downsides (e.g. demands for IT skills and changes to workflows for round-the-clock hosting and servicing), it required perseverance to get to the longer term benefits that were not as instantly apparent.

This highlights a strength – that individuals can make a difference and introduce valuable new ideas and practices – and a weakness – that individuals often have to go ‘above and beyond’ in order to make change happen. Such innovation is often driven more by chance and circumstance, than systemic considerations.

Source: Interviews.
Voting is mandatory in Brazil, and in 1996 it was one of the first countries to introduce electronic voting. While this was an innovation in and of itself, the process of innovation did not stop there. Every election brings additional considerations and innovative aspects as the technology evolves, while maintaining an ongoing effort to ensure the system is secure, transparent, and auditable.

The Superior Electoral Court (TSE) is responsible for the running of the federal elections, which involve over 100 million voters spread over near 5600 municipalities across the country, and take place every four years. The TSE is also responsible for supervising state and municipal elections (through regional courts). The TSE thus oversees elections using electronic systems every two years. The elections themselves are significant events that need to run smoothly, and the TSE does a lot of groundwork before every election to ensure that everything runs smoothly.

Part of this work by the TSE is being open to new technologies and possibilities, such as the introduction of biometric elements to voter identification. There is also supporting activity such as training and preparation for supporting voting by Brazilian citizens overseas, and ensuring the voting process is accessible for blind and deaf people. Other initiatives include educating children about the voting process.

In the lead-up to the elections, the TSE runs field tests and simulated electoral tests across all of the states to ensure that things are ready and that potential issues can be identified and addressed. Hackathons and public testing of the voting system (and the supporting source code) are conducted, with involvement by universities, the public prosecution office, and the National Brazilian Intelligence Agency to try to hack the system in order to detect issues or mistakes.

Given the clear need to avoid mistakes during the election, there is extensive testing beforehand – “We commit a lot of mistakes so we can make it right.”

There is clearly ongoing innovation that is occurring within the TSE as it works to ensure that the electoral process runs smoothly and is efficient and trustworthy. However, it appears to be an instance where innovation is very much occurring through an organisational lens, rather than from a more systemic perspective. Innovation is centred on a particular priority (efficient and trusted elections).
Innovation will often arise from the individual level, and this should be valued as a feature of the innovation system. Individuals, including leaders, will often be better placed to see emergent opportunities or challenges than slower-moving organisations or systems will. Innovations led at this individual level do, and always will, play an important and vital part of any public sector innovation system. The work of the companion OECD review into innovation skills and leadership in Brazil’s senior civil service will help to address questions of capability and opportunity at the individual level. However, efforts at the individual level are something that should not be relied upon alone as the means by which to meet and address changing societal needs and concerns.

The second highlighted case (Box 3) is a perfect example of a situation where innovation has been driven by bigger picture organisational concerns. Oftentimes, innovation will naturally be led by individual organisations. However, the nature of such innovation is that it will inevitably involve organisational rather than system-wide or societal concerns, as the organisations seek to address their particular priorities.

What then does innovation look like when driven by system-level concerns? The third case (Box 4) provides an example of innovation being driven by whole-of-system concerns (and ambitions).
agencies might need to access when digitising their service (though government agencies are not obliged to use SETIC to do such contracting if they do not wish to). SETIC provides access to software tools to assist digitisation, a single sign-on solution, and SEGES provides methodologies to help agencies consider the costs and benefits of digitisation (such as the standard cost model), and tools to help agencies simplify and transform their services such as design thinking. In short, SETIC and SEGES offer a one-stop-shop for government agencies that are seeking to digitally transform their services quickly and efficiently. SEGES works with service owners by matching the particular tools and offerings available to the outcomes desired.

The transformation work has been a gradual process, with first working with targeted agencies who had a clear desire to transform their services, and the first such service came online in January 2018. As the process has been refined, more services have come forward to explore digitisation with SETIC and SEGES, and as of September 2018 there were 110 services undergoing digital transformation in 25 different departments.

BOX 4. A CASE STUDY OF INNOVATION AT THE SYSTEMIC LEVEL: DIGITAL TRANSFORMATION

Brazil is a country with longstanding experience in eGovernment and digital government initiatives. As outlined in the OECD Digital Government Review (2018b) coordinated efforts have been underway since 2000, when the E-GOV policy was launched. The Digital Citizenship Platform is one of the most recent developments, and has been instrumental in helping with the digital transformation of federal government services.

Under this initiative, led by the Secretariat of Information and Communication Technologies (SETIC) and the Secretariat of Management (SEGES), within the Ministry of Planning, Development and Management, there is an ongoing process of digitisation of services. From an analysis undertaken by SEGES and ENAP, it was identified that there were 1740 federal government services.

SETIC and SEGES assist government agencies with the digitisation of their services through a multi-pronged approach. SETIC has centralised and streamlined the contracting process for relevant services and processes that agencies might need to access when digitising their service (though government agencies are not obliged to use SETIC to do such contracting if they do not wish to). SETIC provides access to software tools to assist digitisation, a single sign-on solution, and SEGES provides methodologies to help agencies consider the costs and benefits of digitisation (such as the standard cost model), and tools to help agencies simplify and transform their services such as design thinking. In short, SETIC and SEGES offer a one-stop-shop for government agencies that are seeking to digitally transform their services quickly and efficiently. SEGES works with service owners by matching the particular tools and offerings available to the outcomes desired.
Each government agency has differing levels of maturity and different levels of IT investment. The hope is that over time the digital transformation work will lift more agencies up to a similar level as those at the lead.

The digital transformation process also provides richer data and intelligence for both the Ministry of Planning, Development and Management and the agency that is responsible for the relevant service. Digitisation provides feedback from citizens about their service experience, which can be used by agencies to consider how they can improve what they are doing. There is also a public performance panel with information about the services, such as how long it takes to receive a particular service or how services are performing on a range of metrics.

When a new service is created, the relevant agency can work with SETIC and SEGES to ensure that the service is “digitally native” or digital by default. As with the rest of the process however, government agencies are not obliged to work with the Ministry of Planning, Development and Management, and can choose to go on their own if they think that is most appropriate.

SETIC and SEGES are undertaking ongoing reflection about the work to ensure that as new lessons are learned from implementation this intelligence is informs the broader digital transformation push.

This case is illustrative of how systemic and scalable change can happen in the Government of Brazil. It is foreseeable that, as more and more services are digitised and the benefits better understood and demonstrated, the Government of Brazil will have access to significantly richer information about how services are used and the citizen experience of them. This data will likely help send a signal about where there are areas for improvement or opportunities for further innovation.

On the other hand, it also suggests that there is a range of preconditions necessary for such systemic change. For instance:

- A clear mandate, in this case in the form of the Digital Citizenship Platform and a range of other digital transformation measures across government

- Available resources, in that agencies are not bearing the cost of the digital transformation process themselves

- Available expertise and support, in the form of a team at SETIC and at SEGES with the necessary skills to help service owners navigate the digitisation process and think through the different tools and options available to them

- A clear sense of benefit, in that agencies can readily see the value offered by digitisation

- A low level of contestability or potential for controversy, in that digitisation is not an area likely to receive a lot of scrutiny as it is something understood as a clear good.

Source: Interviews.
This last case involves a particular set of circumstances, and it is likely that preconditions such as these will be rarely realised, as they rely on a specific confluence of events. This in turn suggests that systemic innovation will be rare in the absence of factors that make the case for innovation much clearer and more pressing.

These cases help illustrate the differences of innovation being led at the individual, organisational and system levels.

- In the face of a need or opportunity, innovation will be led by individual efforts, as people seek to achieve particular goals, to solve specific problems, or to respond to a changing context. Individuals are often better able to identify emerging issues or needs, and thus will often be the ‘first line’ of response.

- Organisational level innovation can mobilise more significant efforts and resources. Innovation at this level will often have more legitimacy and be more sustainable. As organisations have more structured responsibilities and relationships, innovation is however more likely to be in response to pressing concerns, such as delivering on organisational priorities or responding to particularly pertinent problems (e.g. crises).

- System level innovation is the most powerful, in that it takes the biggest view and can lead to widespread change, but it is also the most challenging, in that it requires greater coordination, alignment of interests and favourable preconditions or structural drivers.

A government seeking a more sophisticated and mature public sector innovation system should recognise that where the system-level elements are not in place, then the focus of innovation will fall to the organisational level. However, innovation at the organisational level is likely to be shaped by organisational priorities and crises, rather than a whole-of-system/citizen-centred perspective. Innovation that is primarily driven at the organisational level will also remain bound by the organisational context if the system is not supportive of diffusion. Where the organisational elements are not in place, then the focus of innovation will fall to the individual level. However, innovation at the individual level is likely to be shaped by individual experiences and perceptions, rather than a more collective effort. The innovation that is driven at the individual level is unlikely to be sustainable, as it will rely on people going above and beyond to make exceptional efforts, and thus will be reliant or dependent upon individual motivations, energy and abilities, and thus, to an extent, chance.

In short, an innovation system that does not see innovation consistently occurring at the system level is one that cannot expect innovation activity sufficient to reliably develop and deliver innovative solutions to meet the goals and priorities of the government.

From its investigations, the review team found that systemic innovation appeared to be a rare exception rather than a standard.

If, then, there does exist a public sector innovation system, but evidence suggests that a more systemic approach is required, what might be needed before it will deliver on the scale required?

**APPRAISING THE SYSTEM**

The OECD (2018a) has identified a range of determinants of innovation activity at the individual, organisational, and system levels.

This review focuses on the four relevant to the system level (as outlined in Figure 1):

- **Clarity** – is there sufficient clarity about what is needed and how innovation fits in with other priorities? Without clarity – i.e. an explicit signal as to the value and need for change – the inherently ambiguous nature of innovation means that it will likely always come second to more explicit and better understood agendas, or alternatively be driven by individual motives, the needs of individual organisations and external events. Clarity might take the form of explicit strategies, identified expectations or goals for innovation, or articulated roles that people can play in the innovation process.

- **Parity** – is innovation given parity with business-as-normal, such that innovation is as equal a consideration as other strategies or responses? Without parity between innovation and default options, innovation will occur...
primarily as a result of exceptional efforts on the part of individuals ("going above and beyond") working to surmount the obstacles that arise, and organisations responding to external drivers for change or pursuing narrow agendas. The pursuit of parity in practice will be about the ease of ability for the status quo to be challenged, such that existing options having to defend themselves, or ensuring that risk calculations consider both the costs of acting and the costs of inaction.

• **Suitability** – is there the requisite suitability for engaging with new ways of working, so that new opportunities can be feasibly undertaken? In the absence of suitability (of technology, infrastructure, systems, and capability matched to the operating context), individuals and organisations will face a range of increased costs when innovating. In practice, suitability might be about ensuring that external developments are monitored, that citizen expectations of government are understood and inform the work of government, and that senior leadership is familiar with new technologies and the associated possibilities.

• **Normality** – is there a sense of normality around innovation, such that it does not seem unusual, different or expected? If innovation is not viewed as part of the day-to-day business, it will be perceived as an occasionally useful aberration, rather than something that everyone should act in alignment with in order to achieve better outcomes. Normality of innovation could be seen if innovation is widely practiced, expected and defended as part of regular operations and core business.

**Responding systemically, instead of responding to symptoms**

The reason these determinants matter is that there can be a natural tendency to respond to symptoms, rather than the underlying causes. For instance, Table 1 identifies some of the barriers to innovation in the Brazilian civil service context.

Simply responding to any one of these (e.g. risk aversion), without regard to their deeper causes, can be problematic for a number of reasons, including that:

• The symptom may be masking an underlying issue, and dealing with the symptom may just move the focus of the problem to somewhere else. For example, an expressed concern with risk might be mitigated by putting in place added attention to the risks of not trying something new. While this may help ensure that more innovative options are considered, people may respond by instead focussing on concerns about

<table>
<thead>
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<th>Table 1: Identified systemic barriers to innovation</th>
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<tr>
<td><strong>Clarity</strong></td>
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<td>-----------------------------------------------</td>
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<tr>
<td>Lack of understanding of what innovation is or what it involves</td>
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<td>Lack of continuous sponsorship / management discontinuity</td>
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<td>Difficulty of gaining leadership support</td>
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<td>Difficulties in public procurement of innovative products and services</td>
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Source: Interviews, workshops with civil servants, and IPEA 2017
resources or implementation, thereby manifesting their deeper discomfort or uncertainty about innovation in other ways.

- In an interdependent system, the removal or reduction of one obstacle will likely lead to another obstacle becoming more apparent. The strength of the system will always be somewhat determined by its weakest part. There will always be some barriers; the question will be which barriers are acting as the most significant limiting factors. For instance, even if risk aversion was somehow addressed as an issue, and there was an increase in appetite and opportunity for innovation, then capability limits would quickly reveal themselves, as those who were less experienced tried their hand at innovation. This in turn would likely lead to more innovation failures and consequently a demand for greater risk aversion to avoid wasting time and resources in failures.

- Without an understanding of the deeper causes or issues, a response to one barrier could unintentionally create new issues. For example, risk aversion might be dealt with by increasing the incentives for civil servants to innovate. However, this could place greater emphasis on individual-led innovation, rather than system level innovation, and end up encouraging a bias to incremental innovation and short-termism.

An effective response will be one that is appreciative of the underlying determinants of innovation. Responding to individual symptoms risks missing the mark, or resulting in layered responses that actually increases complexity as each symptom is dealt with in a piecemeal fashion. What then does an appraisal of the current state of the system against each of the four determinants reveal?

**Clarity**

Innovation is an inherently ambiguous concept, as what it is and how it manifests depends upon the context, i.e. what is new varies between different settings and over time. Given this, innovation is likely to suffer in comparison to any other agenda that is easier to understand, and thus easier to act upon. Therefore, an effective innovation system is likely to require some degree of structured clarity about innovation.

The OECD (2018a) proposes that it is possible to appraise the extent to which there exists clarity by whether:

- actors understand what innovation means, either from talking about it, seeing it or experiencing it firsthand
- actors know why, when and how innovation is a priority, and can situate it in relation to other priorities
- actors know how (if) they can contribute to innovation and what role others play
- actors see how innovation fits with shared history and their own context.

In the case of the public service of Brazil, investigations revealed a broad conceptual agreement around the core elements of what innovation means, however it was less clear what this looked like in practice. In addition, as currently understood in the system of Brazil, the concept and the word of innovation is one invested with a lot of different and overlapping meanings (see Box 5). There is further to go before it could be said there is significant clarity about what innovation is or what it looks like.
BOX 5. WHAT IS PUBLIC SECTOR INNOVATION?
VIEWS FROM SYSTEM ACTORS IN BRAZIL

It is about difference:
- Doing something different or doing something you are already doing differently
- Something new that generates results, has practical application and impact
- Distinct from discovery (knowledge), it is something that must be applied
- Distinct from invention (prototype), it must be useful/respond to someone’s needs.

A process:
- A systematic process that can be managed, not waiting for luck
- Innovation is work, it is a process, it is a method
- Being able to make mistakes in order to learn, and then to transform
- Innovation has to do with the way we operate, but also the way we conceive our solutions.

To solve a problem / to achieve a purpose / to transform:
- Innovation is a new way to solve a problem
- Creating value based on new business models, to overcome our current challenges
- A tool to achieve transformation
- Innovation is a tool for change and therefore, for our government’s improvement
- The transformation of a good individual idea into the solution of many people.

About the citizen/public good:
- Finding new ways to solve people’s problems, or attending to their needs, attending to their needs in a way that is either more efficient for them, or more efficient for the state
- Centred on citizens
- It is to create solutions for and with the citizens as opposed to bureaucratic insulation
- An opportunity for Brazil to finally leave behind the 20th century agenda
- To do government services better and more efficiently
- Empowering the citizen and private sector.

A spectrum/multi-faceted:
- Ranges from continuous improvement to something that is disruptive
- Disruptive innovation where you can put some more effort to have to do with the risks and it has different whole process of managing it
- Can result in new procedures, processes, functionalities, and characteristics to things that already exist
- Something that will sustain any entity today. Innovation means something sustainable.

A necessity:
- The ability to respond to the emerging demands of a rapidly changing society
- Necessary to change constantly, just to stay in the same place
- It is survival.

Sometimes difficult:
- Difficult to be understood and measured
- A rupture with what has been done before
- A change in mindsets
- It is to face a culture of “it has always been like this”, of risk aversion to making mistakes, of making “more of the same”
- It involves challenging/questioning the things that have always been done, the way it has always been done and the why
- “I sometimes hear people talking about innovation in such a broad way that it almost becomes like senseless.”

Source: Interviews and workshops.
Parity

The OECD (2018a) proposes that it is possible to appraise the extent to which there exists parity between innovation and business-as-usual by whether:

- processes are open to challenge
- information and decision-making bottlenecks can be circumvented
- it is easy to find and build a coalition of the willing around shared issues
- different types of risk can be distinguished, and the difference between risk and uncertainty is appreciated.

In the Brazilian context, the largest concern when it comes to parity is risk aversion. Risk aversion provides a considerable barrier to challenging processes, circumventing bottlenecks, finding others who might be willing to try something, or distinguishing between different types of risk.

Innovation can be challenging under the most hospitable of circumstances. However, the risk environment in the Public Service of Brazil is particularly noticeable, given a context where individual public servants can be (and are) held personally accountable for decisions. Concern with auditing oversight was a widespread issue, as well as the risk of being held accountable for a failed innovative initiative tried in good faith. In a private sector setting, a

Interviews provided a glimpse into an often highly trained and skilled workforce, with many of those interviewed having relevant skills or qualifications that would support them contributing to innovation efforts. However, it was not clear that there were any articulated expectations as to what role civil servants could or should play when it comes to innovation, or any sense of the different roles that people could play when participating in innovative efforts.

As has been noted, it is clear that innovation is happening in the public service, however it is less clear that there is a collective sense of the history of innovation within the civil service, nor of how innovation fits with the ‘story’ and identity of the civil service of Brazil.

In short, while there are some components of clarity, in the absence of a clear signal about why innovation matters and what role civil servants can play there will be limited engagement. Without sufficient clarity, innovation will be left as a second-order issue that is driven by individual concerns or in response to organisational priorities, and thus remain sporadic rather than systemic.
challenging risk environment may still be functional, as the potential for rewards can be high. However, in a public sector setting such a potential payoff will (and should) rarely be the case, and therefore those undertaking the risks involved will generally require some support other than the lure of extrinsic reward.

In an environment where the sentiment “the only risk you have is if you do something” is commonly held, there are nonetheless many people who are trying to innovate. While this may be admirable, in effect it means that individuals are taking on risks that should rest with the system and its structures and processes. If those undertaking innovation need to personally accept risk, there is a natural inclination for them to favour more incremental opportunities where the risks can be better managed, where risk mitigation strategies can be used, and where the risks can be assessed as being proportional to the possible outcomes.

Investigations attempted to identify possible forces that might be in place that would help to balance the structural drivers that are acting to limit the opportunities for innovation to be considered. Box 6 outlines the forces for innovation that were identified, however as currently framed these are unlikely to provide a sufficiently tangible or consistent driver to ensure parity between business-as-usual and innovation.

### BOX 6. STRUCTURAL FORCES WITHIN BRAZIL THAT CONTRIBUTE TO THE CONSIDERATION OF INNOVATIVE OPTIONS

**Debureaucratisation/red-tape reduction push**
While there have been multiple attempts in Brazil’s history to debureaucratise, the latest efforts have been instigated by the Council of Social and Economic Development and supported by the National Committee of Debureaucratisation and Decree 9094/2017 (and Laws 13460/2017 and 13726/2018) which require the simplification of services.

**Digital transformation**
There are a number of initiatives that are pushing for digital transformation of the Brazilian economy, including the civil service. Digital transformation can be an opportunity for innovation, however this is by no means guaranteed. Therefore, digital transformation may be a somewhat inconsistent force for innovation in and by the civil service.

**Financial pressures/constraints**
A budgetary ceiling has been mandated which came fully into effect in 2018. However, fiscal constraints are not a reliable driver of innovation, and the effect on innovation will depend on how the fiscal constraints are managed.

**Citizen agitation and citizen-centred government**
There is a growing development of a citizen-centred focus within the public service and a clearer sense of an associated responsibility to deliver better results, including through Law 13,460/2017, which provides for the participation, protection and defence of the rights of the user of the public services of the public administration. However, it is not entirely clear if there are sufficient feedback loops with citizens to help entrench this and create an ongoing structural focus on citizen expectations.

**Experience gap with the private sector**
Citizens and public servants are increasingly aware of a gap between what is happening in the public sector and what is happening in the private sector. This gap is somewhat acting as an impetus for change, as there is realisation that there are new possibilities.

**Open and transparent government / greater government integrity agendas**
A range of initiatives are focused on increasing public sector transparency and opening up government practices and performance to public scrutiny, both to improve performance and to ensure greater levels of government integrity. This work is likely to act as a positive force for the consideration of innovative options, however this is by no means certain.

Source: Interviews and workshops.
Given the defaults witnessed in the system (risk aversion, unclear legal environment, high potential costs for individual innovators if they are subject to audit even if they are not found to have done anything wrong) it is not clear that innovation is likely to occur outside of specific windows of opportunity.

Overall, there currently appears to be an over-reliance on individual innovators being willing to “go above and beyond” and making exceptional efforts to propose and pursue innovative proposals.

Suitability
The OECD (2018a) proposes that it is possible to appraise the extent to which there exists sufficient suitability by whether:

- areas that are matching the external rate of change are being learnt from
- technologies and their implications are socialised in government
- new operational models are engaged with and tested and tried in government
- there are efforts to understand changing expectations, and to identify the trends and signals that existing capabilities are insufficient.

Is the Public Service of Brazil well placed to take advantage of those innovative ideas that do manage to get to the stage of being considered? Investigations thus far suggest that the civil service has some of the necessary ingredients, but that it does not appear able to take advantage of all of them.

One important element of suitability will be the capability of individual public servants to be ready for the opportunities for innovation and to engage with new innovations, and this will be explored in depth by the companion review on innovation skills and leadership in Brazil’s senior civil service (OECD, 2019 forthcoming).

Another element will be engagement with the issues of digital government, something addressed by the Digital Government Review (OECD, 2018b).

However, there also needs to be some space and work within the system to explore new operational models.

Normality
The OECD (2018a) proposes that it is possible to appraise the extent to which there exists sufficient normality by whether there are:

- identified behaviours to support innovation
- reinforced links between innovation and regular business
- efforts for socialising innovation
- those willing to uphold innovation.

Innovation does not yet appear to be a ‘normal’ feature of the Public Service of Brazil, despite ongoing instances of innovative activity. Engagement with innovation as a topic or concern appears to be quite mixed.

There is a mix of perceptions as to how innovators are regarded within the public sector. This variation often depended upon the beliefs or attitudes of their managers or leadership about innovation. This variation suggests that innovation is not normalised, as differing areas experience innovation quite differently.

Overall, it appears that more may be needed to ensure that innovation is really part of the day-to-day practice and expectations of those working within the public service. It is not clear however, that existing initiatives and efforts will be sufficient to the task.

System as a whole
Without an articulated and connected agenda that places tangible and directed pressure on existing processes, structures and activities in order to facilitate the development, consideration and implementation of new options, innovation is unlikely to be either consistent or reliable in addressing government needs or responding to citizen concerns.

There are some significant activities and interventions that are already in place or are beginning to unfold. It
is somewhat unfair to fully assess a system that is still emerging, evolving and learning, and where many initiatives are still developing, and where interventions are still to fully make their impact.

Nonetheless, it appears that existing measures are likely to be insufficient to embed innovation systemically. In the absence of a more cohesive approach, the innovation system will continue to be driven by individual and organisational concerns. This will continue to generate innovative activity that provides benefits for the civil service and the governments and the citizens they serve, but is unlikely to match the rate and nature of external change, thus leading to unmet citizen expectations.

NEXT STEPS AND POSSIBLE OPPORTUNITIES FOR STRENGTHENING THE SYSTEM

During the Innovation Week of 2018, the OECD team will test different scenarios to further explore the system dynamics and to better test how possible interventions may play out over time.

However, from the work undertaken thus far it is possible to identify a number of potential areas of intervention. These interventions build on two considerations:

- Given what is known about public sector innovation systems, it is important to recognise that an intervention that seeks to ensure a systemic approach should avoid unnecessarily reinforcing a focus on innovation occurring at the individual or organisational levels.

- Interventions should not seek to emphasise innovation for the purpose of innovation, but be situated as part of a systemic approach to build greater competency and capacity in being able to consistently and reliably develop and deliver novel solutions that meet the existing and emergent needs of citizens.

The areas of opportunity align with the four determinants identified.

1. **Clarity**: There may be benefit in developing and promulgating a clearer agenda around what innovation is wanted for, why it is important to the public sector of Brazil, and the roles that individuals can play. A starting point may be to adopt something similar to the French Government’s manifesto for public sector innovation which outlines a series of values around public sector innovation. It also supports a high level of ambition for innovation and outlines specific areas for action. (SGMAP, 2017). In the Brazilian context, this could build on the innovation manifesto developed by InovaGov, and seek formal endorsement across the civil service.

2. **Parity**: Given a notably risk-conscious context, there may be value in finding a means to help put the risks of innovating in proportion. It is unlikely that anything can be easily done to remove the risks, but something could
be done to help put them in perspective and provide a balancing force to help mitigate them. A starting point may be to adopt something similar to the Government of Canada's experimentation commitment (see OECD, 2018a), which requires government departments to commit a certain percentage of their spending towards experimentation. It provides a structural means to ensure that agencies reflect on the allocation of their spending, and ask whether there might be alternative, potentially better, options.

3. Suitability (part one): While there is a degree of existing engagement with new technologies and the possibilities enabled by digital transformation, for various reasons the current state has a proclivity towards more incremental innovation. This can be valuable, however it risks the Brazilian civil service missing out on more significant forms of innovation or being blindsided by disruptive shifts. At the same time, existing structures and rules would seem to limit the opportunity for more radical forms of experimentation. An area of opportunity then might be to partner with external groups (private sector, academic, and/or social enterprises and non-government organisations) in order to begin to test and explore more significant shifts in how the public sector might operate.

4. Suitability (part two): In addition to exploration of more radical forms of innovation, the system element of suitability may also benefit from there being a stronger input of citizen feedback. While there are a number of channels that currently exist (e.g. the feedback process Simplifique, various channels for social participation, and the options provided within digital services), these do not necessarily provide a coherent sense of shifting citizen expectations regarding government services and policies. It may be useful to consider how to better harness and channel citizen insights into intelligence that can meaningfully demonstrate the need and appetite for innovation by the public sector.

5. Normality: Until innovation feels normal for system actors, it will never be systemic. In the current environment, there is a stated concern by system actors about a pervasive culture of avoiding errors or mistakes. It may be valuable to explore how more experimentation and learning through trying can be integrated into the working practices of agencies, to build confidence in the ability to try things that may not succeed, and skill in knowing how to do so safely and appropriately.

In addition, consideration could be given to stewardship of the system.

6. Stewardship: The dynamic and uncertain nature of a public sector innovation system means that it is one that will always be changing and adjusting. In order to ensure that it meets the collective needs, it would be beneficial...
for there to be a holistic view taken by part of the system, one that can help check the health of the system and monitor whether it is delivering. Such a stewardship approach may take a range of forms, and through Inova and other activities, the Ministry of Planning, Development and Management has already been playing part of this role. However, there may be benefit if such a role was enhanced. This enhancement could, in part, be modelled on the work of the Reform and Delivery Office (RDO) within Ireland’s Department of Public Expenditure and Reform. The RDO helps to coordinate a number of activities under an overarching goal of promoting a culture of innovation in the public service (DPER, 2017).

References


DPER (2017), Our Public Service 2020, Department of Public Expenditure and Reform.


ABOUT THE REVIEW

Public sector innovation systems are an area of recent explicit interest, and thus much is still being learnt about them. This review combines exploratory approaches with desktop research and other investigations, in an attempt to build a complete picture of the activity, actors and ambitions involved in innovation.

The aim of this review is not to critique, but rather to uncover what has happened, and to appreciate the present state of innovation in the Public Service of Brazil, why it matters and what it might mean for the future.

It is intended that this public sector innovation system review will provide a significant contribution to the understanding of such systems, and aid other countries as they navigate their own innovation journeys.