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Brief Overview

This document contains the key findings of the Digital Government Review of Panama requested by the Republic of Panama, through the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental), after the country’s voluntary adherence in 2017 to the OECD Recommendation of the Council on Digital Government Strategies (2014). Using the Recommendation as a framework of reference, the Review was conducted by the OECD Secretariat together with peer experts from OECD member countries (Belgium, Chile and Spain). The Review will be completed by June 2019.

Based on the assessments made during the fact-finding mission occurred in November 2018 and additional desk research the following findings can be highlighted:

- Panama presents a sound governance framework for the development of digital government. Led by AIG and framed by the National Digital Agenda, the Panamanian governance structure enables the coordination, alignment and development of synergies across different policy sectors of government.

- Panama has also evidenced positive inroads building capacities to support implementation, prioritising the development of digital skills, strengthening the planning of investments in digital technologies and keeping updated its legal and regulatory framework.

- The country has started a data-driven public sector policy, advancing on open data availability and progressively promoting the reuse of data across public sector organisations. Room for improvement can be found in the promotion of a data culture to enable better monitoring, forecasting and delivery of public services.

- Panama should unleash the potential of service design and delivery, building on important projects and initiatives underway that reflect the government commitment to improve the relation with citizens and businesses. The promotion of an internal culture of service design and delivery, an improved relation with private and civil society stakeholders and the strategic use of emerging technologies can support better quality, responsiveness and sustainability of public services.

Although the overarching and cross-cutting role of AIG has been critical for the rapid development of the country’s Digital Agenda, the medium and long-term sustainability of these efforts might be at risk if distributed leadership, joint ownership and shared responsibilities are not promoted throughout the public sector. After a period where the AIG’s role related to horizontal coordination and implementation was fundamental to promote strategic projects and mobilise public stakeholders, the Government of Panama should now consider prioritising the creation of shared expertise and digital implementation capacity across different sectors and levels of government.

Panama is well positioned to take advantage of its acquired foundational strengths in digital government at central level to now progressively focus on emerging and broader strategic goals and programs that address its national and local needs. This approach will create conditions for further sustainability of the policies underway and bring the country to a new level of digital government maturity that can engender improved social wellbeing and sustainable economic growth.
1. Background

Building on a positive and increasingly useful bilateral co-operation in different work streams of the digital transformation of the public sector, and as a component of the Inter-American Development Bank (IDB) operation with the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental), the Government of Panama requested the OECD Directorate for Public Governance to develop a Digital Government Review.

The OECD Digital Government Review of Panama builds on the experience and knowledge acquired by the Reform of the Public Sector Division of the Directorate for Public Governance through similar projects conducted over the past 20 years in a number of OECD member and non-member countries.

The Review is being conducted using the OECD Recommendation of the Council on Digital Government Strategies (2014) as a framework of reference, which contains twelve key recommendations grouped in three main pillars (Figure 1.1). It was voluntarily adhered by the Government of Panama in 2017.

The analysis will be framed on the basis of the six dimensions for a digital government identified by the OECD (Figure 1.2) assisting the Government of Panama in its efforts to advance in the digital transformation.

The review evaluates the efforts made so far to progress in the development of e-government.

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Figure 1.1 OECD Recommendation on Digital Government Strategies

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<td>10. Reinforced institutional capacities</td>
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(e.g. to foster administrative simplification, de-bureaucratization, simpler access to services) to enact a full shift towards a digital government approach, which is considered by the OECD members as a cornerstone of the path towards a digital economy and a digital society (Figure 1.3).

The aim of the review is to assist the Panamanian Government in its efforts to realize the digital transformation by moving from an e-government to a digital government approach. The latter will enable taking the full benefits of digital technologies to foster a citizen-driven modern administration supporting the development goals of Panama in government and in the key sectors of the country’s economy. This document presents the key findings formulated by the OECD peer review team, following a fact-finding mission in Panama City on November 2018. The views and findings expressed in this document will be further discussed, detailed and argumented in the final report of the Digital Government Review of Panama, to be presented by June 2019.

Figure 1.2 Digital Government – 6 Dimensions

Source: OECD, inspired by the OECD Recommendation on Digital Government Strategies, 2014

Figure 1.3 From Analogue to Digital Government

Source: OECD, inspired by the OECD Recommendation on Digital Government Strategies, 2014
Citizens’ dissatisfaction with their governments is one of the most critical challenges facing Latin American and Caribbean (LAC) countries. The rise of the consolidated middle class (34.5% in 2015 against 21% in 2001) and of the vulnerable class (40% in 2015 against 34% in 2000) has boosted aspirations regarding the social and economic development of LAC countries, but has also reduced citizens’ trust in institutions. According to the Latin American Economic Outlook 2018, 75% of the LAC population has little or no trust at all in governments in 2017, a rise of 20 percentage points when compared with the perceptions observed in 2010 (OECD/CAF/UN ECLAC, 2018).

This context, together with a two-year economic contraction in 2015-16 and high inequality, challenges LAC governments to better respond to citizens’ needs and demands, by developing more trustworthy, efficient and effective institutional frameworks that by being collaborative and forward looking can renew the social contract with their constituents. An open, innovative and digitally-enabled state is required to renew governments’ connection with citizens and businesses for improved and more equitable wellbeing of LAC societies.

Panama has progressed positively in several socio-economic indicators during the last decade, demonstrating important improvements in terms of social equality when compared with the LAC context. The middle class has seen an increase of 11 percentage points from 2008 to 2015 while the share of population living in poverty, or with a vulnerable socio-economic status, decreased significantly (see Table 1.1).

These changes in the distribution of the Panamanian population in terms of income have also contributed to a shift in expectations towards government. When comparing how trust in national government evolved from 2006 to 2016, Panama faces a decrease from 36% to 33%, significantly less than the 10 percentage points observed in the LAC region and the 6 points observed in the OECD context (see Figure 1.4).

Although the decrease of trust should be seriously considered by the Panamanian authorities, it should also be motivation for the national Government to continue its efforts towards better public governance that can serve citizens wellbeing and the country’s economic development.

As digital technologies penetrate citizens’ everyday lives and businesses’ activities, several indicators demonstrate how Panama has moved towards an information and knowledge society. In line

<table>
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<th>Table 1.1 Citizens’ socio-economic status (%)</th>
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<td><strong>Panama</strong></td>
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<td><strong>Share of population by level of income, 2015 (6)</strong></td>
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<tr>
<td>Less than USD 4 PPP</td>
</tr>
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<td>17</td>
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<tr>
<td><strong>Share of population by level of income, 2008</strong></td>
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Source: (OECD/CAF/UN ECLAC, 2018)
with developments observed in many emerging economies, progress on the availability of digital infrastructure in the Country has been very significant in recent years. Although fixed broadband subscriptions per 100 habitants are still modest (11% in 2017), the exponential growth of mobile cellular subscriptions per 100 habitants (reaching 147% in 2017) demonstrates that the challenge of connectivity for the population is practically overcome in the Panamanian context. As observed in most emerging economies, the high-level adoption of mobile communication by citizens allows governments to skip the stage observed in more advanced economies of developing fixed broadband connectivity, leapfrogging directly to the deployment of mobile broadband internet access and use (see Figure 1.5).

The percentage of mobile subscriptions per 100 inhabitants shows a relevant decrease more recently, but with values always substantially above 100% of the population there is a clear maturity in the telecommunications market that highlights the importance of mobile communications for digital economy and digital government policies and their associated investment. The increasing use of 4G connections in the country – 21% of the total mobile subscriptions in 2018 - reflects the imperative of designing and delivering services using mobile communications in the Panamanian context.

Nationwide 1,320 Access Points of free WiFi Internet connection (2 Mbs), in places of public interest, including remote areas.
This means connectivity is a less relevant priority for Panama’s digital policy, but considerable space for growth remains in the effective use of the Internet by the population and in the provision of relevant content and services by the Government. While the share of Panamanians that use the Internet has grown from 17% to 54% between 2006 and 2016, this evolution follows the tendency observed in the Latin America and Caribbean (LAC) context (see Figure 1.6). In fact, according to the Panamanian Observatory of Information and Communication Technologies (OPTIC) (Observatorio Panameño de Tecnologías de Información y Comunicación), the percentage of the Panamanian population that uses the Internet in 2018 is already 70%, demonstrating the digital change underway in several social, economic and governmental sectors in the country (OPTIC, 2018). The commitment of the Panamanian government towards a digital economy and society will allow the Country to rapidly improve this indicator in the short and medium terms when compared with other LAC countries. The Government of Panama also invested strongly in the provision of public free Wi-Fi access points, reaching a coverage of 84% of the population, demonstrating the public commitment towards an inclusive digital transformation of the economy and society (Autoridad Nacional de los Servicios Públicos, 2018).

The progressive digitalisation of the Panamanian public sector during the last decade is a clear reflection of the country’s positive effort to keep the pace of change and embrace the challenges brought by the current technological disruptiveness as an opportunity to transform its public sector. Several emblematic public projects and initiatives highlighted in this document demonstrate that effective change is underway across the different sectors and levels of government.

Nevertheless, the OECD peer review mission to Panama in November 2018 also found considerable consensus among the Panamanian ecosystem of digital government stakeholders (i.e. AIG, CIOs and officials of key public sector organisations, private sector, academia, and civil society) for building on past and current efforts for a more integrated and sustainable policy approach for the digitalisation of the public administration. Some of the foundations of the digital transformation of the public sector exist already in different projects and initiatives, allowing the Panamanian government to progressively concentrate its efforts on the country’s evolution towards a higher digital government maturity for improved citizen’s trust, reinforced wellbeing of the population and robust economic growth.

Figure 1.6  Individuals using the Internet (% of population)

2. Strengthening Governance

Digital government strategies are critical artifacts in guiding policy action in work streams that are constantly and rapidly evolving. Strategies are able to align together goals, objectives and initiatives, but also have a fundamental role in building consensus and contributing to the necessary cross-government coordination for efficient and effective policy implementation. Additionally, their public availability and regular monitoring positively contribute to improved transparency and accountability by the ecosystem of digital government stakeholders (OECD, 2016). Aware of the importance of this policy instrument, all OECD countries that completed the OECD Digital Government Performance Survey (2014) and 73% of the Latin American and Caribbean countries that participated in the OECD Government at a Glance Survey (2016) have a digital government strategy.

Following a first version made available in 2014, an updated version of the Digital Agenda 2014-19 Panama 4.0 was launched in January 2016 containing the initiatives of digital government and connectivity for the modernisation of public sector organisations (AIG, 2016). The strategy secures the necessary alignment with the Government Plan 2014-2019 and the Strategic Plan of the Government 2014-2019, and also defines the country’s goals according to international indexes and commitments assumed by Panama internationally (e.g. Sustainable Development Goals).

The strategy incorporated the demands expressed in several meetings organised with digital government stakeholders about their expectations for the period 2014-2019. Questions on transparency, digital government services, planning, capacity building, interoperability and adequate legal and regulatory frameworks were considered as priorities to be integrated in the new policy document. The result was a detailed and comprehensive strategy, structured around important strategic lines and values (see Figure 2.1), as well as key actions and goals considering the timeframe 2016, 2019 and 2024.
During the peer review mission, the role of the Agenda was highly acknowledged among the stakeholders as the central strategy that guides the government’s cross-cutting digitalisation efforts. The common recognition of this central policy instrument reflects a positive alignment of views and expectations by the ecosystem of digital government stakeholders.

The OECD peer review team observed that institutional legacy determines that transparency and accountability are still considered as main drivers resulting from society expectations. While those dimensions should always be considered as critical, the Panamanian context for the digital transformation of the public sector seems to have matured to uptake more strategic approaches focused on priorities such as higher agility, performance, user-driven approaches and citizens’ wellbeing. For instance, the Panamanian government could better prioritize the development of a data-driven public sector culture, including open government data approaches and reinforcing interoperability between public digital systems, for an advanced robust transformation of the public sector and public value creation (see also Section 4.).

Additionally, there seems to be space to move beyond the good positioning of Panama in international indexes providing incentives for strengthening the digital government maturity towards concrete internal drivers to ground a strong commitment of the public sector to embrace the opportunities and tackle the challenges brought by the digital transformation based on a national agenda.

A reinforced vision for the future of Panama, and the role of digital government to support a digital economy and society, would bring considerable value to the efforts and commitments already underway across different sectors and levels of government.

**LEADERSHIP AND COORDINATION**

The existence of a public sector organisation with a clear leadership role on digital government policies is critical for the coherence and sustainability of national efforts, namely in a disruptive context of rapid and constant technological evolution. In line with the Recommendation on Digital Government Strategies (OECD, 2014), and relevant experiences observed in OECD member and non-member countries, the challenge is to provide such an entity
with the proper mandate, political support and adequate resources that can enable coordinated and synergetic policy action across the different sectors and levels of government (OECD, 2016).

In Panama, the **National Authority for Government Innovation** (AIG) (Autoridad Nacional para la Innovación Gubernamental) is mandated across the three branches of government (executive, judicial and legislative, including local governments) to "plan, coordinate, issue guidelines, supervise, collaborate, support and promote the optimal use of information and communication technologies in the government sector for the modernization of public management, as well as recommend the adoption of national policies, plans and strategic actions" (AIG, 2019). Created by Law 65 of 30 October 2009 (Asamblea Nacional, 2009), with a reinforced e-government mandate provided by Law 83 of 9 November (Asamblea Nacional, 2012), the Authority responds to the Ministry of the Presidency (centre of government) and its Administrator is directly nominated by the President of the Republic. It has evolved from a previous institutional approach that started as a Commission under the Vice-president of the Republic in 2002 with the support of the United Nations Development Programme. AIG is highly and positively recognised among the digital government ecosystem of stakeholders as the public sector organisation responsible for leading Panama’s digital transformation of the public sector policy.

The work developed by AIG on different fronts, coordinated across the government but also involving the private sector and civil society, is highly acknowledged by the ecosystem of digital government stakeholders in Panama. Since its foundation, but mostly in the last five years, the Authority was able to leverage political support, institutional mandate and availability of resources to strengthen the digitalisation of the country’s public sector and improve the relationship of the government with its constituents through digital technologies. AIG programs such as Online Panama (Panamá en Línea) for simplifying and automating procedures, the Citizen Contact Center (Centro de Atención Ciudadana 311), the National Internet Network (Red Nacional de Internet) consisting on free access points, Digital Municipalities (Municipios Digitales), the Open Data Portal (see Section 5.) and other shared platforms are able to clearly showcase to citizens, businesses and other public sector institutions the benefits of AIG’s policy leadership as a promoter and accelerator of the digital transformation of public sector organisations.

The Authority also benefits from an important policy lever to support the development and implementation of digital government policies across

The implementation of "Digital Municipalities" has improved taxpayer services through on-line procedures, as well as automated financial and accounting processes.
the government: the Administrator General of AIG participates regularly in the meetings of the Council of Ministers (Consejo de Gabinete). This allows the Authority to benefit from a strong alignment with the government’s strategy and priorities in different policy areas, acquiring a critical oversight capacity on public sector policies underway. Moreover, this facilitates AIG’s access to main decision actors and decision processes, providing a unique opportunity to embed digital technologies from the start in the decision and design stages of policy processes.

AIG also prioritises a collaborative and open culture for policy design, delivery and monitoring, namely through regular efforts to involve private sector stakeholders in its activities. The Advisory Council of AIG (Comisión Asesora de la AIG), that regularly brings together private sector representatives to advise the Authority on its priorities and actions, represents a strategic institutional asset for aligning public-private expectations, promoting value co-creation, but also encouraging co-ownership and co-responsibility on the policies being implemented.

During the fact-finding mission in Panama in November 2018, the OECD peer review team identified some critical expectations that can help AIG strengthen its role and simultaneously better respond to the needs of the Country’s digital landscape. AIG operational leadership on digital has allowed Panama to rapidly progress in several work streams (e.g. standards and guidelines, multichannel service delivery and the provision of interoperable cloud-based platforms through its data network), but also determined incipient efforts dedicated to the strategic and sustainable planning role of the digital transformation in the Panamanian public sector. This more strategic role could allow the Authority to be less absorbed by the technical delivery of projects and more focused on promoting a digital transformational culture and capacities across the public sector.

The mentioned repositioning of AIG could allow renewed efforts in the development of a system thinking vision that identifies and operationalises synergies across the public sector thereby overcoming siloed and fragmented digitalisation approaches. Such an approach could also renew efforts in improving the relationship with civil society, businesses and academia as well as reinforcing the ecosystem of digital government stakeholders and better enabling collaborative policy approaches. It could allow simultaneously an improved focus on communication and on the creation of a digital transformation culture across the public sector workforce.

**COMPLIANCE AND MANDATES**

Reflecting the Panamanian government’s commitment in the last decade to the digitalisation of the country’s economy, society and public sector, AIG benefits from a context with high political support and cross-cutting acknowledgment and recognition of its mandate and activities. The Authority counts on a very positive institutional environment that favours its coordination role across the public sector to promote digital transformation approaches with possible impacts on the efficiency of the administration, the levels of trust of the citizens in the government and on the social wellbeing of the population.

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The OECD peer review team assessed during the fact-finding mission an opportunity for reinforced mobilisation of different levels of government, building on several efforts already initiated. The political support, resources and high acknowledgement that AIG benefits (and contributes) from within the ecosystem of digital government stakeholders could be leveraged to build higher preparedness, engagement and empowerment of the municipalities, in the pursuit of their individual digital transformation agendas. To better communicate, discuss and collaborate with local government about compliancy necessities should be considered a priority for the Government of Panama to ensure local stakeholders understand the digital transformation needs and address them in a sustainable, informed, coordinated and possibly collaborative manner.

Additionally, since the fact-finding interviews during the OECD peer review mission found room for improvement on the level of compliance
concerning existing key digital guidelines and standards (e.g. once only principle, data exchange in the public sector), additional policy action seems to be needed to increase awareness and secure enforcement. Reinforced communication efforts that provide adequate guidance to different sectors and levels of government could play a fundamental role on expanding awareness of the benefits of the digital transformation of the public sector and the need for coordinated efforts and system thinking approaches in the public sector.

Budgetary influence could also be better exploited by the Government of Panama to shape broader fiscal and planning prioritisation, promoting strategic policy priorities through approval criteria (e.g. delivery of services to citizens and businesses, strengthening institutional digital capacities) and considering the involvement of AIG earlier in the national budgetary process. The suggested approach could reinforce the efficiency and sustainability of national digital government efforts and generate opportunities for improved service delivery with reinforced transparency and accountability on public sector digitalisation priorities.

**ENABLING LEGISLATION AND DIGITAL RIGHTS**

An updated legal and regulatory framework is an essential piece of sound governance for digital government policies (2014). To seize the opportunities and tackle the challenges of the digital transformation in economies, societies and governments, the legal and regulatory framework needs to positively respond to the pace of rapid technological change. This requisite is particularly relevant in the public sector context, where actions and activities tend to be framed by laws and regulation.

For several years Panama has had critical laws and regulations in place that enabled the progressive adoption of digital technologies in different sectors of activity, namely in the public sector. For instance, Law 51 of 22 July 2008 regulates the use of electronic documents and digital signatures (Asamblea Nacional, 2008) and Executive Decree 275 of 11 May 2018 regulates digitalization and digital documents procedures in government (Ministerio de la Presidencia, 2018). Law 83 of 9 November 2012 is a cross-cutting legislation on the use of digital technologies in the public sector covering topics such as the value of digital communication and digital signatures, the once only principle and the exchange of data in the public sector, accessibility for citizens with special needs and interoperability in the public sector (Asamblea Nacional, 2012).

A consensus seems to exist among all the public sector organisations interviewed during the OECD fact finding mission in Panama City in November 2018 that the legislative and regulatory framework needs to be updated, in particular reflecting the potential application of recent and disruptive technologies such as artificial intelligence, blockchain or data analytics. A consensus was also found on the need to update the law on public procurement (Asamblea Nacional, 2006), in order to better enable the development of e-procurement and contribute to more efficient digital technology investments in the public sector (see section 3.4), although the existing legislation already considers a mechanism available only for ICT procurement through AIG oversight. A personal data protection law was also indicated as an urgent need during the writing of this report, and therefore the importance of the recently sanctioned Law 81 of 26 March, 2019, which will take effect two years after its publication in the Official Gazette (Gaceta Oficial).

A digital by design approach, embedding digital technologies in the Panamanian legal and regulatory framework from the start, seems to be required to secure the continuous growth and development of a digital economy, society and government. In order to fully embrace a digitally transformative approach with the necessary outreach capacity, the Government of Panama should consider enhancing the citizens digital (and data related) rights angle. This approach would raise relevant issues such as personal data protection, personal data ownership and transparency on its management, but also the more advanced discussions about the right of citizens to accept or not decisions based on AI algorithms (a kind of opting out right on AI). The ethical use of data is also increasingly relevant in this discussion given that technologies increasingly stand on data.
3. Building institutional capacities

DIGITAL CULTURE AND SKILLS IN THE PUBLIC SECTOR

Given the progressive, rapid and widespread penetration of digital technologies across government’s processes and services, reinforced efforts are required to prepare civil services with the proper skills that can enable them to deliver. Across OECD member and non-member countries, governments are emphasising cross-cutting efforts to equip their public sectors with different sets of talents and skills in a permanent effort to address change. Digital user skills need to be constantly updated to enable an efficient use of basic productivity tools (e.g. email, word processor, spreadsheet, work-flow applications) and increasing efforts are also necessary to attract, retain and keep updated digital professional soft and hard skills in the public sector (e.g. data analysts).

However, other important skillsets are increasingly recognised as critical for addressing the digital transformation of the public sector. Digital complementary skills are required for public professions that are today profoundly transformed by the digitalisation of our economy and society (e.g. tax collection, public sector communication, management of citizen services and planning). Digital management and leadership skills are also necessary in equipping public officers with a digital transformation mind-set that can allow them to better perform their activities whilst acknowledging the opportunities, benefits and risks of using digital technologies in the public sector (OECD, 2017).

In line with the trends observed in most OECD member and non-member countries, the stakeholders in Panama interviewed during the OECD fact-finding mission in November 2018 recognised the Government’s efforts to reinforce digital skills in the public sector through multiple approaches and initiatives. These efforts for building capacities across the public sector have been part of the general digitalisation process but a consensus was found for reinforcing efforts to establish a broad and consistent approach that secures the digital capacity of the public sector.

The OECD peer review team observed that training is still mostly focused on the development of digital and professional skills of the IT departments, with an emerging focus on the development of complementary, leadership and management skills. Although a digital transformation culture can be observed in several of the stakeholders interviewed, stronger efforts to promote this culture across different sectors and levels of government and especially among senior government officials will reinforce the sustainability of Panamanian digitalisation efforts in the public sector to reach a higher digital government maturity stage.

The clarification of profiles for key roles and subsequent identification of skills and capacities needed in the public sector could help Panama to move towards a more strategic approach in terms of agility, performance and efficiency. An advanced culture of delivery in a digital transformation context would strengthen government’s ability to respond to citizens’ increasing and evolving expectations towards public services. In this sense, in order reinforce the digital culture and maturity in the Panamanian public sector, the Government could consider prioritising the development of an action plan for attracting, retaining and building the needed digital talent and skills across different sectors and levels of government. This could build a competence mapping plan and aligned with a communication and promotion campaign around all journeys towards digital in the public sector.

STRENGTHENING CAPACITIES ACROSS SECTORS AND LEVELS OF GOVERNMENT

As mentioned above (check Section 2.2), the mandate and capacity of AIG to lead and implement the digital government policy in Panama is highly acknowledged and positively appreciated in the different sectors of government. The Authority manages an extended roll of programs, projects and initiatives that support
a cross-cutting digitalisation of the public sector, allowing the public administration to better serve citizens and businesses. Initiatives such as the Citizen Contact Center (Centro de Atención Ciudadana 311), the Government Cloud and the Governance Framework of Digital Government (Marco de Governanza de Gobierno Digital) (see Section 5.) are clear examples of policy outputs with a cross-cutting outreach throughout the public sector, improving efficiency and coherency of the Panamanian government efforts towards a digitally-enabled state.

Although this overarching and cross-cutting role of AIG has been critical for the rapid development of the country’s digital government agenda, the medium and long-term sustainability of these efforts might be at risk if distributed leadership, joint ownership and shared responsibilities are not promoted throughout the public sector. A risk of overreliance in AIG’s role might determine that the proper capacities and capabilities do not develop in the different sectors and levels of government. When discussing with different Panamanian institutions their ongoing policy efforts and priorities for the future, the OECD peer review team assessed that improved digital maturity is needed. Some improvement can be achieved through the development of capacities (see section 3.1) but would be supported by involving and attributing a more active role for different government institutions in the development of digital government policies.

After a period where the cross-cutting leadership and implementation role of AIG was fundamental to kick-off and promote strategic projects and mobilise public stakeholders, the Government of Panama should now consider prioritising the creation of shared expertise and digital implementation capacity across different sectors of government. This approach will create conditions for further sustainability of the policies underway and their impact, and bring the country to a new level of digital government maturity.
PLANNING OF INVESTMENTS IN DIGITAL TECHNOLOGIES

The rapid and disruptive dissemination of digital technologies in government’s processes and services increases public sector responsibilities for developing an optimised approach to investment in digital technologies that is capable of properly managing and deciding upon different technological trends (e.g. insourcing vs. outsourcing software development, proprietary software vs. open source software, private local hosting and processing vs. public cloud computing). Strategic planning is fundamental for the development of a system thinking culture across the public sector that promotes the sustainability of digital technologies investments, avoids gaps and overlaps, and generates positive impacts in the social and economic context of the countries.

In line with the OECD Recommendation on Digital Government Strategies, namely its key recommendation n. 10 (2014), the experience of several OECD member and non-member countries also demonstrates that important policy tools can be implemented within digital technologies investments frameworks allowing improved policy leadership and reinforced efficiency and coherency on public spending:

- The existence of budget thresholds mechanism for the pre-evaluation of digital technologies investments above a certain value can promote a better alignment between several sectors of the government, avoiding duplicated expenditures and securing alignment with existing digital technologies standards and guidelines (check Section 5.).

- Mandatory cost-benefit analysis namely through the application of common business cases approaches also allow streamlined digital technologies investments, capable of better responding to the planned outputs, outcomes and impacts.

- The availability of project management standards for digital technologies projects across the public sector also support improved policy leadership and reinforced efficiency and coherency on public spending.

In Panama, AIG has oversight of digital government policies through its role in pre-evaluating digital technology procurement, evaluating investments above 50,000,00 Panamanian Balboas (approx. 44,000,00 euros). This mechanism demonstrates that a culture of evaluation and monitoring of digital technology investments is already institutionalised in Panama, with substantial benefits for the coherency of the policy in place.

However, when consulting AIG and the stakeholders during the fact-finding mission in November 2018, there appeared to be a general consensus regarding the need of strengthening policy levers for improved efficiency and coherence in investments. The development of business cases approaches that could be applied to all sectors of government was considered a medium term priority, as well as the development of standardised project management models. Improved monitoring mechanisms to measure the efficiency, impact and return on investment of projects was also considered a fundamental piece to allow a clearer vision of the digital projects and initiatives underway in the country.

TOWARDS DIGITAL COMMISSIONING

Digital Technologies procurement is commonly recognised as a critical policy mechanism for effectively delivering digital technologies investments. Recommendation 11 of the OECD Recommendation on Digital Government Strategies (2014) attributes importance to this policy in sustaining overall objectives for the modernisation of the public sector. The benefits of strategic coordination on procuring digital technologies can be found through aggregation of demand that promotes efficiency, the improved alignment of investments made regarding the digital government policy in place, the better oversight and monitoring capacities that can avoid gaps and overlaps, and new possibilities for transparency and accountability on the investments made.

In 2014, 52% of OECD countries had an ICT procurement strategy for central government according to the OECD Digital Government Performance Survey (2014). Given the fast pace of development,
the multiplication of trends and the considerable complexity of digital technologies nowadays, a consensus exists on the permanent need for reinforcing and updating government efforts in this policy area. The shift from a straight e-procurement paradigm focused mostly on the acquisition process to a broader digital commissioning paradigm that allows private contractors to partner in developing solutions and services that create public value is increasingly considered a priority by OECD member and non-member countries.

In Panama, AIG and most digital government stakeholders interviewed during the fact-finding mission recognised that the current procurement law represents an obstacle for mature digital technologies procurement. A broad consensus was found on the need to update the mentioned law or, following the example of most OECD countries, develop specific legislation that can regulate the procurement of digital technologies. Very significant understanding was found among the stakeholders when considering digital procurement as a critical policy lever for an improved digital government policy. Building on this consensus and on the efforts towards digitalisation developed in the last years, the Government of Panama should prioritise at short or medium term the development of specific regulations for digital technologies procurement that can build on the role AIG already has on the matter.
4. Data-driven public sector

Governments produce, collect and use data all the time. However, this is often done in a way that emphasises existing siloes without respecting standards or considering how it might duplicate data stored elsewhere. Sometimes this is down to a deliberate decision, other times it is simply that organisations are unaware of the impact of their choices, and in other ways the legal or governance structures in a country may be an obstacle to the easy use, or reuse, of the data which governments already hold. This is indicative of an inadequate understanding or recognition of data as a strategic asset for public sector organisations.

In all these cases, the impact on the citizen is not insignificant. Whether it is the challenge a citizen faces in proving that they are who they say they are when attempting a transaction over a remote channel (whether telephone or the internet), or the overhead placed on them to provide physical documents to several organisations to meet a single need, the ability for citizens to provide information once only is one that countries should prioritise.

Nevertheless, it is not solely in the delivery of services that governments can unlock the transformative impact of a ‘data-driven public sector’ (DDPS). Countries that have implemented a strategic approach to the use of data throughout the public sector are better able to show foresight in anticipating and predicting societal trends and needs and consequently developing more effective
long-term plans. Additionally, data plays an important role in being able to analyse the performance of all types of government activity and to use that information not only to make improvements but to be transparent about success, and failure, in ways that support accountability and stimulate public engagement and trust (Ubaldi, van Ooijen and Welby, 2019).

CONTEXT FOR DDPS IN PANAMA

The 2015-2019 Government Strategic Plan (Plan Estratégico de Gobierno) recognised that development of ICT would only be an effective tool of modernising the state if it was accompanied with measures that allowed for internal collaboration and interoperability. Importantly, Law No. 83 of 9 November 2012 (Asamblea Nacional, 2012), on electronic government, makes provision for all government databases to be interoperable.

Some important efforts are being made to encourage the modernisation of the National Institute of Statistics and Census (INEC) (Instituto Nacional de Estadística y Censo) and the role it plays alongside the National Authority of Transparency and Access to Information (ANTAI) (Autoridad Nacional de Transparencia y Acceso a la Información) in supporting the Open Government and Open Government Data agenda in Panama. As a result, there are some initial encouraging signs of an open data ecosystem beginning to emerge with initial conversations between academics, civic-minded software engineers and the government starting to take place late in 2018.

Another important development in the application of data to the experience of citizens and businesses in Panama is the recently approved law focusing on the issues of data protection and private data. The recently enacted Law No. 81 of 26 March, 2019 (Asamblea Nacional, 2019), which regulates the protection of personal data, provides a two-year period from its publication in the Official Gazette (Gaceta Oficial) to be in effect. Reflecting the increased global interest best demonstrated through the European Union’s General Data Protection Regulation (European Union, 2016) and Panama’s adherence to the Budapest Convention on cybercrime in 2013, the country is beginning to consider how it might defend the rights of citizens and businesses in the safe and effective use of their data. Once again, this is an early improvement where the building blocks are being put in place that can allow Panama to work with a consenting public to make full use of data in ways that encourage trust.

Being open in order to increase transparency and accountability in the eyes of the public and civil society is an important element of building trust. However, this commitment to openness has not yet led to a more proactive recognition of the importance in opening data for re-use. As such, there is not yet a data-driven culture to the government of Panama where policy making, service delivery, or performance monitoring is underpinned by an exploration of the opportunities found in applying, opening, sharing and reusing data either within or outside the government.

Nevertheless, the appetite to become leaders in the application of data to transform policy and services gave the peer review team confidence that this will change. Law No. 33 of 25 April 2013, creating the National Authority of Transparency and Access to Information (ANTAI) (Autoridad Nacional de Transparencia y Acceso a la Información) also made provision for an Information Officer and associated team to exist within each public institution with responsibility for proactive transparency, open data and information requests (Asamblea Nacional, 2013). However, this role and this team is not always in place. In order to support efforts around both Open Government Data and the Data-driven public sector, the Government of Panama should consider it an immediate priority to develop a strategy for appointing people into those roles and coordinating that activity across different sectors and levels of the public sector. Furthermore, there was a commonly held expectation that the political discourse surrounding the forthcoming Presidential election included a recognition that questions of digital, data and technology were a priority for all candidates.
CULTURAL ATTITUDES TOWARDS DATA

Data relating to the performance of the economy, tourism and construction are critical to how Panama plans its policy agenda. Furthermore, Panama is a committed observer of international indicators and uses these benchmarks to set government priorities. As a result, there has been a focus on the competitiveness of Panama and the need to simplify bureaucracy, particularly for businesses. However, in conversation with different representatives of the institutions in Panama there is less evidence of data being considered in the specifics of predicting policy needs or the delivery of services. One of the biggest challenges that still exists is consequently limited data sharing between organisations and an absence of cross-sectoral thinking to ensure standardisation of systems or schemas.

Such a segmented approach to data has influenced some of the thinking about the relevance of platforms which are being developed to tackle a particular problem or respond to the needs of a particular organisation with the vision for these technology interventions appearing to lack the strategic overview of responsibility for data throughout the government. Despite the provisions of Law No. 83 of 9 November 2012, on electronic government that stipulates all government databases should interoperate there are areas of government where this has not yet been possible at a large scale.

The nascent state of the data culture within Panama, regulated by Executive Decree No. 511 of 24 November 2017 (Ministerio de la Presidencia, 2017), does not mean that there were no examples of good data practice or value being derived from publishing data on the national open government data website (Datos Abiertos de Panamá) (https://www.datosabiertos.gob.pa). There has been an increasing partnership between civil society and the government on this issue with the aspiration for ever closer working. However, it is not currently the strategic responsibility of an individual or an explicit expectation of an organisation such as the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) or the National Authority of Transparency and Access to Information (ANTAI) (Autoridad Nacional de Transparencia y Acceso a la Información) to ensure that a cross-government vision exists for how the country might move towards establishing a data-driven culture. As a result, people still need to look in several places and cannot rely on the data that is available to be timely, or licensed, in a way that will allow for simple reuse.

One of the most encouraging areas of data being applied to transform the government was the creation of a performance framework. The National e-Government Indicators (Indicadores Nacionales de Gobierno Electrónico) (INAGOB) consist of 24 different digital government metrics (procedures, citizen attention, access to information, governance) embedded in current laws and aligned to well-known international indices, and 10 dimensions for central and local government digital transformation. This has allowed the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) to produce a baseline for the impact of their activity on which the Authority can build as it looks ahead to the next phase of their digital transformation. Data is collected relating to the satisfaction and performance of services and the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) publishes csv files detailing the results of comparisons between institutions. Whilst near real-time dashboards are providing institutions and their ministers with insights into what is happening its application for improving the delivery of services is not universal and depends on the commitment of a given institution to consider data in its approach to delivery.

There is a potentially crucial opportunity in maximising the role of Information Officer mandated by Law no. 33 of 25 April 2013 (Asamblea Nacional, 2013). In order for that team to act as the champion of a data-driven culture within their organisation, they need to be supported by leadership roles at both the national and organisational level which are currently absent. This means that the data agenda is not as visible within the country’s strategic planning as it could, or should, be.
SKILLS, OVERSIGHT AND LEADERSHIP

As discussed in Section 3, there is an important need to focus on the skills and capabilities of the Panamanian public sector. In the case of data, hiring specific professional skills such as data scientists and data analysts would support any efforts the country wishes to make towards becoming a data-driven public sector. However, a more important factor in this area is in developing a base level of data literacy appropriate to the roles performed by any public servant.

This should increasingly be a priority for all sectors of the public service as they approach the policy needs of areas such as education, business, health, and welfare. In the case of education in particular Panama has an opportunity to work with external partners to equip their schools with the necessary digital and telecom infrastructure to train students (and teachers) to take full advantage of the digital transformation. An important part of any national curriculum should be the role of data literacy in the context of digital training which is not currently seen in Panama’s masterplan for education.

Several OECD countries are now exploring how to create a focal point for a discussion about the role of data in their digital transformation. In the United Kingdom, the policy for questions around data has been made the explicit responsibility of a particular department whilst in Korea there is a Chief Data Officer for the country, as well as specific requirements for a similar role in every public institution. Creating a specific role in this way is symbolic in demonstrating a commitment to the importance of data but is practically valuable in creating a recognised role to lead on developing national, and institutional, Data Strategies with the mandate to deliver the changes necessary to embed a data-driven culture.

Regardless of the role, Panama needs a focused strategy considering its approach to data. This work should start by responding to the great opportunity that exists at a practical level in mapping the data flows across the public sector and championing sharing and interoperability between its different parts. However, it should also concern itself with support to public servants in understanding how to make their data open, useable and reusable both inside and outside government as well as training and guidance for the application and reuse of data in their day to day work.

That strategy and any associated training must also consider the needs of citizens, businesses and other stakeholders in the Panamanian state in terms of their rights to having data stored and used in ethical and transparent ways that respect their consent. The General Data Protection Regulation brought into force in the European Union in 2018 offers a model for a comprehensive treatment of this area (European Union, 2016). With legislation currently being considered there remains a need for Panama to address its gap in terms of an independent Information Commission to regulate the way in which the public sector, or businesses, handle data and to whom the public can appeal in the event of any concerns about the use of that data.

Mobile Apps for safe and secure citizen reports and alerts to transit, security and social service authorities.
EXTERNAL APPLICATION OF GOVERNMENT DATA

A final area for Panama to consider in developing a Data-driven public sector is the role of Open Government Data. Panama is already an active participant with the Open Government Partnership and has since 2012 implemented several activities to support the Open Government agenda. One of the areas in which this has been successful is the creation of the National Authority of Transparency and Access to Information (ANTAI) (Autoridad Nacional de Transparencia y Acceso a la Información) in 2013 and the subsequent development of the national open government data website (Datos Abiertos de Panamá) (https://www.datosabiertos.gob.pa) regulated by Executive Decree, is a positive sign. Equally, the AIG SmartNation project shows good promise that will only increase in value if all sectors and ministries participate.

However, with the majority of those datasets detailing budgeting, national statistics, legislation and procurement it is clear that this has resulted in a focus on questions of transparency and accountability rather than re-use for broader social and economic value creation. Weather forecasting data has been opened up and although universities have done studies with the data, it has not stimulated much interest from app developers or hack events. Those responsible for public transport and transport infrastructure in Panama City are sharing data with the global service providers like Google and Waze but this has not yet translated into localised innovation. Indeed, despite an established public sector with responsibility for delivering various public goods and services that could generate Open Government Data, there was little evidence to see its role and potential being explored.

For example, the Ministry of Labour and Labour Development (MITRADEL) (Ministerio de Trabajo y Desarrollo Laboral), has developed a platform to which over 500 companies are posting their employment needs and which then sources employees. The data that is associated with the roles employers are recruiting, the locations where they’re looking and the skills which employers are looking for are an interesting source of data that could stimulate training courses, the location of a new business and even competitors in the jobs market.

Whilst there are some limitations to the way in which open data is being used externally, one of the biggest challenges is that there is limited recognition of strategic decisions regarding the publishing of data. This means that organisations make their own decisions about how and when data is published. Whilst there is a top-level recognition of the need to standardise rules greater effort needs to be taken in ensuring that those rules are understood and that public servants are confident in applying them to facilitate increased sharing of their data, and a consequently broader application of it.

It is insufficient to create a website for indexing datasets if the engagement from government limits the interest of the datasets it contains or the understanding of its benefits whilst external parties also need to be encouraged to apply the data. In order to establish a culture that naturally considers how data could be applied externally the Panamanian government needs to think about how it brings civil society actors, and private sector entrepreneurs together with public servants to explore how Panamanian government data can improve lives whether through government policy, voluntary activities or commercial solutions to everyday problems.

The experience of Spain underlines the value of such an approach. The infomediation sector, those companies which analyse and treat public and/or private sector information to create value-added products to support efficient decision-making, created 5000 jobs and enjoyed turnover of between 1,500M€ and 1,800M€ in 2015 (National Observatory of Telecommunications and the Information Society (ONTSI) et al., 2016).
5. Service design and delivery

Service delivery is the central point of contact between a State and its citizens, residents, businesses and visitors. It has a major impact on the efficiency achieved by public agencies, the satisfaction of citizens with their government, and the success of a policy in meeting its objectives. Alongside confidence in the integrity of government, the most significant indicators of trust in government are the reliability and quality of government services. The quality of these interactions between citizen and state shape not only their experience of government, but influence the opportunities they access and the lives they build.

Increasingly, the digital transformation of our economies and societies is raising the expectations of citizens and businesses to access public services that comprehensively meet their needs, leading to pressure on governments to improve service delivery. Doing so not only increases satisfaction of citizens with public sector organizations but can also strengthen their confidence in local and national governments. This trust in services and service providers helps achieve policy outcomes focused on the wellbeing of citizens and the progress of societies. In this context, users are unforgiving of services that compare poorly with experiences of high quality delivery, whether from the private sector or elsewhere in government. To meet rising quality expectations, governments need to focus on understanding the entirety of a user’s journey across multiple channels, as well as the associated internal processes, to transform the end-to-end experience. Doing this may require adjusting and re-designing processes, defining common standards and building shared infrastructure to create the necessary foundations for transformation as well as ensuring the interoperability of public agencies to facilitate the data flows that will make integrated, multi-channel services possible.
CONTEXT FOR SERVICE DESIGN AND DELIVERY IN PANAMA

It is evident that Panama has evolved significantly in a short period of time, making progress in improving service delivery through several initiatives. Law No. 65 of 30 October 2009 created the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) (Asamblea Nacional, 2009). In the decade, since then, important additional support has been given to place this organisation at the heart of Panama’s transformation efforts, prioritizing the “delivery of efficient and effective government services” in the 2014 National Digital Agenda. Importantly for the upcoming change in government, digital transformation of services remains a public policy matter, supported across the political spectrum and across government.

One of the most helpful initiatives in establishing a basis from which to build is the website PanamáTramita (https://www.panamatramita.gob.pa/), which contains an index of the 2,700 central government procedures which take place between citizens or business and the state, and another 1,463 of local government. The official site is created by Law No. 83 of 2012, supported by Resolution No. 98 of 16 October 2017 which requires any new procedure or additional requirements to be justified before it is included within PanamáTramita (Autoridad Nacional para la Innovación Gubernamental, 2017; Asamblea Nacional, 2012). This has the effect of preventing public officials requesting documents or creating new processes that are not already detailed, limiting the growth of bureaucracy by public servants and for service users. Moreover, this collecting of insight, complemented by public consultations, has allowed for the prioritisation of 450 services to undergo digitisation according to a standardised model of business process management (BPM) which can then be applied to others in future.
Several platforms have been implemented to provide support in different sectors. For example, in the health sector there is a collaborative effort to digitise health records with participation from both the public and private sector actors. A cloud based local government resource planning platform (GRP) provided and managed by the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) has allowed municipal governments to focus on their core business rather than developing systems with the result that 68 out of 80 local authorities are using it for their websites and can in future standardise their processes around the tools it offers.

Panama’s future ambition for an increasingly digital experience of government has been supported by the development of a national network for data and voice connectivity that provides 87% of the country’s population with access to free wifi hotspots and more than 300 nationwide Internet centers (Infoplazas). Nevertheless, there is continued provision of services through telephone and face-to-face channels. The 311 service provides a 24/7 telephone based channel for assisting citizens with procedures on behalf of the whole of government. It is built around a cross-government Customer Relationship Management platform with agents having access to a knowledgebase curated by all organisations in government which allows them to provide first line support to citizens and businesses.

An important factor in Panama’s ongoing progress is the support for the transformation of service delivery through different political cycles. The institutionalisation of the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) and its work, as well as an enthusiasm from the Presidential candidates for the digital government agenda, suggests that this momentum will be maintained in the 5-year term that begins on July 1 2019. This commitment is integral to any efforts made for Panama to continuously improve its approach to service design and maintaining the openness to learn from regional peers and other countries around the world which has already proven so successful. An important start has been made and there are opportunities to continue this development of existing public services as well as those which will be needed.

With this foundation in place, the country can look to future confident of addressing the next phase of their ambitions to transform services. A significant challenge in this area is in how the services and technologies that have already been developed interact with one other in order to provide a fully transformed experience of the state for businesses, citizens and visitors.

ENABLERS, PLATFORMS AND SHARED CAPABILITIES

The National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) is operating at the centre of Panama’s government to provide leadership and advice to the institutions of the public sector. One of the ways in which it is doing this is through the development of strategic technological solutions.

The National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) has developed several shared services and platforms with particular success in adoption such as the 311 Citizen Contact Center (Centro de Atención Ciudadana), voice and data network connectivity, and the government private cloud infrastructure. However, it is important that sector specific interventions do not happen in isolation but are delivered as part of a calculated and planned strategic approach to providing transformed services at the macro level. Else, there is the potential to create a myriad of different legacy platforms requiring rationalisation in the future.

The 311 Citizen Contact Center has been successful at providing a single front door to the Panamanian government but the proliferation of platforms behind that front door is continuing to support a fragmented user experience. There are competing channels whether online, through apps, over the phone or in person for different services. Across these institutions the importance of providing good service is not always understood. There are signs this is being understood with the transportation sector recognising such fragmentation is undesirable. In 2019 it is expected...
that the various transport related apps will be merged together, providing a unified user experience.

Other platforms have been developed by AIG to support the health census through the National Health Electronic Management (Gestión Electrónica de Salud Nacional) (GESNA) and the agriculture census through the National Agro-commercial Integrated System (Sistema Integrado Agrocomercial Nacional) (SIAN) planning using dereferenced data and BI modules available to multiple agency users.

One of the biggest opportunities for Panama to build on is the National Intelligent System to Monitor Alerts (SINMA) (Sistema Inteligente Nacional de Monitoreo de Alertas). A component of the Smart Nation strategy, it has been developed by the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) for use by many institutions as a cross-government platform to support the monitoring of public services and provide a route for citizens to report, or be alerted to, emergency situations. The platform improves interoperability and simplifies the interaction and exchange of information between relevant actors in transit, natural disasters, social programs and security, as well as others. Efforts so far show the potential for this approach to form the basis for a strategic approach to other aspects of transforming Panamanian public services.

Work on SINMA, GESNA and SIAN is a clear indicator of a commitment to developing mechanisms that make interoperability possible across the Panamanian public sector but this is still nascent. Greater support, whether through legislation, increased mandate or political will towards the ongoing efforts of the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental), needs to exist for the agenda of ensuring interoperability between platforms and government organisations.

Although Panama has the ‘Once Only’ principle enshrined in Law No. 83 of 9 November 2012 (Asamblea Nacional, 2012) the OECD peer review team were informed on multiple occasions of services where citizens or businesses would need to provide information already held by one part of government to another in order to address their issue. An increase in the integration of data and systems will enable Panama to consider the design of end-to-end services that respond proactively to the needs of citizens but will also highlight the challenges of legacy technologies.

The 104 hearing rooms of the Accusatory Penal System (Sistema Penal Acusatorio) (SPA) implemented at the national level contain the latest technology for recording and showing digital files for use of the parties in the process, with secure protection of the information on hearing room servers and data centres.
One of the biggest challenges identified was around an important enabler of transformed government: identity. Panama has an established physical identity mechanism and a law which allows for the use of an electronic signature, including a pilot by the Electoral Court of Panama (Tribunal Electoral de Panamá). However, efforts to implement digital identity as an enabler need to be revisited. A technical solution is under consideration but the OECD peer review team was not informed about a clear strategic vision for how it would be adopted across Panama. Moreover, it was unclear whether some of the broader enabling thinking was happening. In the field of digital identity there are various questions around available technologies and use cases that Panama should explore in order to successfully take advantage of its transformative impact.

Identity highlighted some of the challenges with the existing model of governance for digital government in Panama. Identity is the responsibility of the Electoral Court of Panama (Tribunal Electoral de Panamá), because they are the organisation which holds the analogue records with responsibility for analogue identity mechanisms. Unfortunately, due to the electoral period taking place, it was clear that the Electoral Court had not prioritized the provision of a Digital Identity platform designed to support the transformation efforts of other parts of government with challenges over communication and the technical approach being taken; however, it has invested in a pilot to be resumed for implementation at a larger scale, as well as a new biometric platform to be shared with other stakeholders. With digital identity so integral to the transformation of the state more involvement from the central authority, the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) could be relevant.

In the case of digital identity and other digital, data and technology initiatives the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) acts with a consultative and coordinating basis. In certain cases it may be beneficial for this central expertise to assume an increased responsibility for the strategic outcomes associated with the design, delivery and implementation of critical initiatives.

The role of the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) in offering guidance and building capability remains important. For example, questions of security or cyber protection that need to be emphasised will not be solved through the development of another technology platform but through the cascaded expertise of the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental), responsible for the Cyber-security Strategy and the government Computer Security Incident Response Team (CSIRT). The consensus model currently in place is good and has clearly been successful but there is a risk that examples of good practice do not contribute to a coherent and pan-governmental transformation.

The National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) has been effective in coordinating the Chief Information Officers from across Panama’s public sector but in certain cases there needs to be bolder leadership that moves beyond the softer consultancy advice and guidance, to support and enforce the strategic delivery of an ecosystem that can foster the transformation of Panama government services.

**INTERNAL CULTURE OF SERVICE DELIVERY**

The OECD peer review team was impressed with the implementation of a six year project begun in 2012 to transform the experience of the justice system across several branches of government. This collaboration between the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) and all the necessary stakeholders saw a transformative approach taken to the end-to-end experience of justice. By disaggregating that complex process it has been possible to gradually address different elements with the result that by 2018 they had transformed not just existing digital elements but also the issues related to physical infrastructure and analogue interactions in the entire experience of justice. As a result, there is no longer any paper involved and, according to information obtained during the fact finding interviews, the judicial system has reduced the time involved by...
96%. This kind of end-to-end transformation that addresses the entirety of a service in both its back office and public facing experiences provides an aspirational model for the rest of Panama, and other countries, to follow.

However, apart from this excellent example from justice, the language of service design appeared to be absent from the way in which public servants in Panama discuss their approaches to transform service delivery. The dominant themes of delivery in Panama are around digitisation and/or automation of existing processes rather than users and their needs. As a direct consequence, there is a greater focus on the technologies that can be deployed rather than on the transformation of the underlying services. This leads to the proliferation of apps and different technologies responding to particular problems from a technology point of view rather than considering the importance of implementing a ‘Once Only’ principle for data exchange and a channel agnostic approach to services to reflect the diversity of the country’s population.

The focus on technology means that even a conversation about the role of digital identity tends to consider how to digitise an analogue process rather than exploring the transformative impact which digital identity can have on avoiding particular steps, reusing existing data sources and rethinking the way in which a citizen or business might interact with the state. The challenge for Panama is to redesign the state in a way that recognises the context of their citizens, not simply to implement technology and digitise interactions.

Panama has started to offer digital services through the Panama On-line Program (Panamá en Línea) supported with funding from the Inter-American Development Bank (IDB). The work on process mapping led by the external consultancy is extensive and provides a blueprint for considering how they understand the existing landscape of their services. However, certain elements like a ‘Once Only’ principle, service design guidelines and digital identity must be prioritised alongside a much greater focus on the end to end transformation of the experience of services that build on the good practice demonstrated in parts of the Panamanian public sector.

**EXTERNAL INTERACTION WITH THOSE OUTSIDE GOVERNMENT**

The voice of the private and public sectors is represented through an annual public-private dialogue between AIG and the Center for National Competitiveness (Centro Nacional de Competitividad) (CNC) facilitated as part of the National Competitive Forum (Foro Nacional para la Competitividad), as well as special working groups and a study commissioned by AIG to CNC. However, the OECD peer review team found little evidence of making space for actively involving citizens in establishing either the needs, or contributing to the ongoing design and development of the services they need to access. The notable exception was the citizen survey commissioned by the National Competitiveness Center (CNC) (Centro Nacional de Competitividad) in identifying the priorities for simplification.

Partly this is due to the way in which the priorities for transformation are being set. With Panama heavily
influenced by external indicators and benchmarks focused on the needs of business, or the challenges facing government, much of the activity necessarily responds to these challenges first. As a result, whilst there is an important recognition of the needs of the public, the ‘government to citizen’ dynamic is less well represented and certainly not influencing the priorities for the transformation of services.

This lack of decision making based on an understanding of the needs of citizens highlighted that government tends to be more reactive to needs that come up in the course of implementing its agreed direction rather than proactively focusing on what is important and strategically thinking about how best to deliver the transformation of Panama’s public services in general.

Several stakeholders interviewed during the peer review mission to Panama on November 2018 recognised that awareness of some of the services and transformation which the Panamanian government has achieved is low amongst the public. One of the benefits of increasing the involvement of citizens is generating the momentum for adoption but equally important is capturing an understanding of the needs to which these existing services have been responding. Building a user-driven and user-centred culture within Panama will ensure that the government’s efforts to transform services are well received by the public and can promote public trust.

The nationwide Infoplazas network not only provides an important route to accessing services for citizens throughout the country, but could offer the ideal setting in which to involve local communities and citizens in the discovery of needs and development of solutions to their problems. The Inter-American Development Bank is currently supporting a programme of work using the Infoplazas network to help increase awareness of Panama en Linea and train people in its usage. This is an important initiative and supports the view of the OECD peer review team that the Infoplazas network should be seen as a valuable piece of existing infrastructure to further support digital literacy, entrepreneurship and other cross-government agendas.

There are opportunities for the Panamanian government to develop partnerships with the private and knowledge sectors both in the country and across international borders. Several of the world’s leading technology companies recruit remote workers in Panama and the ambition to become a logistical hub
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for the region’s humanitarian aid sector reflects the opportunities of international organisations being based in the country. Further supporting the ambition to see Panama become a global ‘Digital Hub’ is its advanced internet connectivity infrastructure, which includes six fibre optic submarine cables. In this sense, Panama should consider developing programmes that attract foreign digital, data and technology companies to base themselves in the Country.

EMERGING TECHNOLOGIES AND INNOVATION

As the digital government agenda in Panama matures, what was once ‘innovative’ becomes more of a mainstream activity. For the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) this presents a challenge in balancing the need for a focus on operational excellence and continuous improvement of government services with the horizon-scanning role of stimulating and supporting innovation. The plans to build a modern headquarters for AIG as a Center of Excellence for Digital Government and Innovation at the Ciudad del Saber (City of Knowledge) and an ongoing openness to further its role in government innovation through a multi-stakeholder approach partnering with academic and private sectors indicates that there is a solid foundation for handling that challenge and contributing to the wider digital ecosystem of the country.

Emerging technologies such as distributed ledgers or artificial intelligence were mentioned in a handful of instances. This, correctly, reflects the current focus of the Panamanian public sector on delivering the fundamentals of digital transformation before being seduced by the promise of the future. Nevertheless, the OECD peer review team did not find a coordinated, or strategic view on the role of innovation in the transformation of how Panama delivers services rather than implements technology.

As the National Authority for Government Innovation (AIG) (Autoridad Nacional para la Innovación Gubernamental) matures its approach to innovation there are some important sectors to work with. The Panama Canal is fundamental to the economy of the Country and the sea, land and air logistics cluster of which it is part is exploring emerging technologies in conjunction with their international partners. An important development is the soon to be implemented Platform for the Integration of the Logistic and Trade Systems in Panama (Plataforma Tecnológica para la Integración de los Sistemas de Logística y Comercio Exterior de Panamá - PORTCEL). Digital transformation of trade means that shipping companies, freight forwarders and those importing and exporting goods will increasingly demand higher quality, and more efficient, interactions as they cross borders and clear customs. The importance of Panama to global trade provides an important opportunity for Panama to develop expertise, stimulate innovation and incubate new businesses.

Building public private partnerships with this sector, and others, led by the Logistics Cabinet (Gabinete Logístico) could provide the necessary funding and expertise to explore other areas of transformation with emerging technology that may otherwise be impossible. Equally, the role of multi-lateral funding organisations in championing and supporting experimentation with emerging technologies could be a useful area to pursue in encouraging an innovative approach to the delivery of public services in Panama, and beyond.

Existing, and somewhat outdated or conflicting, legal frameworks are often not conducive to responding to the changing priorities of a society because they are specifically tailored towards particular industries, technologies, processes or analogue systems available at its time of conception. Nevertheless, the regulator should be encouraged in its efforts to regulate services, rather than specific technologies. This focus on the outcome, rather than on technologies can also set an important precedent for the way in which Panama is able to respond to future technological opportunities.

CROSS-BORDER SERVICES

There is no visibility in strongly promoting Panama’s digital, data and technological competencies abroad. Several areas within Panama’s economy and society offer interesting opportunities to stimulate start-ups and model transformed delivery of service whether in trade, tourism or other services based on its already
established base of multinationals and its privileged connectivity. Such lessons could be shared regionally and internationally.

Although Panama is interested in the comparison of its performance against its neighbours this has not yet extended to exploring how the country thinks about services that cross the border. This gap is particularly noticeable in the approach to immigration services. Whilst this is not perhaps a service that would be a priority when seen through the eyes of Panamanian citizens, the process by which someone receives permission to work impacts on several hundred people a day and generates significant internal effort. The twelve step process takes one to two months to complete and can only be initiated, in person, once they are physically in the country.

Panama is clearly a leader in the regional discussion on digital transformation with their presiding of the Latin America and Caribbean e-Government Network (Red GEALC) and hosting the V Ministerial Meeting of the Red GEALC in 2018 a demonstrable success. This role affords the country an opportunity to help define and shape a cross-border strategy for the central-American region, focused on creating opportunities for non-Panamanian customers (citizens, companies and other governments) to do business, travel or exchange information in Panama. Such an approach should also champion how Panamanian citizens and businesses can be digitally active abroad.

Adopting a standards based approach to these activities would mean that these benefits were not limited to the Central American region. As seen in the recent Free Trade Agreement between the European Union and Japan, having a clear and effective approach to data protection has allowed for a mutual recognition of those regimes and the opening up of particular industries to trade that might otherwise have been limited. As Panama deploys its “Digital Hub” strategy, develops its own data protection frameworks, builds advanced data and interconnectivity infrastructure, and expands its digital economy, the opportunity for Panama to provide services across borders could be truly global.
CONTINUOUS IMPROVEMENT

The OECD peer review team found it encouraging that the 311 Citizen Contact Center collects satisfaction feedback on all its interactions with citizens and publishes a monthly, per agency, report on the volume of reports and performance in terms of case closures. It was also positively observed that some institutions are proactively requesting this data. Nevertheless, there was limited evidence of a strategic overview from the government as a whole as to how it might apply performance related insights to improve services. So that such insights are not dependent on ad hoc requests or needs, it would be powerful to make additional information more openly available, initially within government and perhaps later to the public as well.

The Panamanian government should also consider exploring how additional performance information could be made publicly available to provide a visible focus to questions of how citizens, businesses and visitors to Panama experience interactions with the government. Such transparency should not be about highlighting poor performance that could generate broader civic criticism but as an aid to ensure that this data provides for empowered teams to apply the insights in support of evolving an improved service.

The Government of Panama is moving away from exclusively using external indices to establish their priorities and is beginning to develop its own, context specific understanding of performance with the National e-Government Indicators (Indicadores Nacionales de Gobierno Electrónico) (INAGOB) and the 10 dimensions for digital transformation in government. This existing work on a measurement framework for digital government provides a solid baseline but a culture of performance needs to exist within service teams and organisations to establish a more granular understanding of how services are experienced and the outcomes they produce.

It should not be considered sufficient just to measure and publish this data, any of those measurements should be considered in light of how the insight can be applied to improve services or government. Therefore, the measurement approach should develop from the pure collection of statistics and become something that can hold people to account. As a consequence, the performance framework should not only consider the user’s experience but the efficiency, impact and return on investment of investment as well.

Performance of this nature should not be focused only on technology and return on the financial investment. One of the issues that was raised during the OECD fact-finding mission to Panama in November 2018 was the handling of Environmental Impact Assessments. The transition to cloud computing and the application of digital and data to the way in which the Panamanian government operates could also provide environmental benefits. In this regard, Panama should create and adopt an environmentally friendly policy for all public sector investment and management of procedures.
References


OECD (2017), Creating a Citizen-Driven Environment through good ICT Governance – The Digital Transformation of the Public Sector: Helping Governments respond to the needs of Networked Societies.
Tourism is an important sector of the economy, which includes the beaches in the Caribbean side (Rocas del Toro).


OPTIC (2018), Observatorio Panameño de Tecnologías de Información y Comunicación – Synthesis report shared with the OECD peer review team comparing the positioning of Panama in several indicators at international level.

This series analyses trends in digital government policies and practices across OECD and partner countries. The reports provide advice on the use of digital technologies to make governments more agile, innovative, transparent and inclusive.

Norway has long used technology to streamline processes within the public sector and bring the government closer to citizens and businesses. Now the country is going further, seeking to transform its public sector through the full assimilation of digital technologies. The goal is to make it more efficient, collaborative, user- and data-driven, and better able to respond to the changing needs and expectations of citizens and businesses. This review analyses the efforts under way and provides policy advice to support the Norwegian government in implementing digital government.

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Open Government Data report
Enhancing Policy Maturity for Sustainable Impact
This report provides an overview of the state of open data policies across OECD member and partner countries, based on data collected through the OECD Open Government Data survey (2013, 2014, 2016/17), country reviews and comparative analysis. The report analyses open data policies using an analytical framework that is in line with the OECD OUR data Index and the International Open Data Charter. It assesses governments' efforts to enhance the availability, accessibility and re-use of open government data. It makes the case that beyond countries' commitment to open up good quality government data, the creation of public value requires engaging user communities from the entire ecosystem, such as journalists, civil society organisations, entrepreneurs, major tech private companies and academia. The report also underlines how open data policies are elements of broader digital transformations, and how public sector data policies require interaction with other public sector agendas such as open government, innovation, employment, integrity, public budgeting, sustainable development, urban mobility and transport. It stresses the relevance of measuring open data impacts in order to support the business case for open government data.

ISBN 978-92-64-30583-0
Consult this publication online at https://doi.org/10.1787/9789264305847-en.
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