Digital Government Review of Colombia
Towards a citizen-driven public sector

Key findings

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1. Background

The OECD Digital Government Review of Colombia 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 15 years in a number of OECD member and partner countries.

The Review is being conducted using the OECD Recommendation of the Council on Digital Government Strategies (2014) as a framework of reference. It was adhered to by Colombia and contains twelve key recommendations grouped in three main pillars (Figure 1).

The aim of the review is to assist the Colombian Government in its efforts to realise 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 an era of peace in Colombia.

The review is structured along four thematic axes, as portrayed in Figure 2.

The discoveries and findings expressed here are further explored, analysed and explained in the full OECD Digital Government Review of Colombia, to be published in 2018.

### Figure 1. OECD Recommendation on Digital Government Strategies

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### Figure 2. Thematic axes

**Non-OECD members:** Colombia, Costa Rica, Egypt, Kazakhstan, Lithuania, Morocco, Peru, Romania, Russia

2. Effective organisational and governance frameworks

THE STRATEGIC CHANGE: FROM ONLINE GOVERNMENT TO DIGITAL GOVERNMENT

The Online Government Strategy as a starting point
Solid foundations have been laid through the Online Government Strategy\(^1\) implementation efforts.

The Ministry of Information and Communications Technologies (MinTIC) has defined and implemented very good approaches for e-government development in government institutions at the national and territorial (i.e. governorates and municipalities) levels. Such initiatives were mostly focused on the governorates and departmental capitals and to a lesser extent to the smaller municipal governments, resulting in an implementation gap between the national and departmental governments on the one hand and municipalities on the other. Obtaining a cross-cutting strategy across all levels and sectors of government constitutes one of the biggest challenges to move from an e-government to a digital government agenda.

MinTIC’s role vis-à-vis the territorial entities has been mainly the one of counsellor and communicator, defining and giving instructions on policy guidelines and standards. It has also provided specific tools and support mechanisms to territorial institutions, such as web platforms, the open data platform, face-to-face workshops and webinars. However, opportunities exist to provide greater support to territorial institutions for the improvement of their capacities, structures and infrastructure so that these institutions can implement the strategy defined at the territorial level with greater ease. For this reason, it is important for MinTIC to keep providing the existing support mechanisms for territorial institutions, while investing in other shared infrastructures and the training of personnel. This is likely to foster a successful implementation of the Digital Government Strategy across the whole public sector.

MinTIC can articulate with territorial governments and has been able to put mechanisms in place to support the implementation of the strategy at the territorial level, for instance through ICT Managers (Gestores TIC), ICT Advisors (Asesores TIC) and other mechanisms.

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It is essential for the central level of government to consider context-specific needs, as well as needs at the institutional level to enable defining an IT strategy as well as an IT infrastructure strategy aligned and coordinated with the former that address particular needs of each institution.

Important investments have been made, both by the public and private sector, for deploying ICT infrastructure throughout the country. In the future, some municipal governments may face severe challenges to ensure the sustainability of the current connectivity, mainly, due to their lack of financial resources or capacity to develop business models allowing them to exploit the potential of the deployed infrastructure.

With the exception of MinTICs leadership, there is no clear understanding among government representatives about the digital government concept and the deep transformations that the shift towards digital government entails.

Given the relevance of the required transformations in government (e.g. in terms of the design of policies and services, of transforming the existing institutional culture focused on e-government to one focused on digital government, of engagement and interactions with non-institutional actors), there is a need to:

- clearly define the strategic priorities for a digital government agenda;
- establish an effective institutional setup and governance mechanisms to foster horizontality, co-ordination and integration, and a whole-of-government and systems thinking approach to develop a fully interoperable administration;
- define policy levers to facilitate the coordination and implementation of the various initiatives.

**Defining a digital government strategy and aligning goals**

There is a need to define a digital government strategy setting goals and priorities for the whole executive branch of the state.

There is a need to raise awareness among government leaders about the core ideas underlying the digital government strategy. The awareness raised among the leaders across the government will also contribute to better align the strategic goals defined by different sectors and levels of government with the national digital government strategy, so to facilitate the co-ordinated implementation and follow-up of various initiatives.

The new digital government strategy should emphasise a citizen-driven approach, where beneficiaries are engaged in the design and implementation of projects and programmes. Such approach would replace a citizen-centred approach, which is based on what public institutions believe is best for citizens, businesses and other service recipients. In some instances, it would replace the even more traditional government-centred approach, where projects and programmes are designed and implemented based on government’s needs.

The national strategy should consider and prioritise important needs at the territorial level. For example, the strategy should define objectives and priorities targeting specific regions, groups of municipalities and departments with similar needs.

**Focusing on the delivery of public value**

Strategic objectives should focus on the delivery of public value through ICT-driven initiatives and not merely on the delivery of ICT products or services. Narrowing down the focus of the targeted objectives only to ICT products or services delivered, and not considering how such products and services will be adopted by the recipients decreases the potential value to be created by digital government initiatives.

A large number of initiatives in different areas have been implemented in parallel with a certain allocation of resources. In order to ensure their continuity, it would be important to prioritise those that ensure greater impact considering the beneficiaries and the benefits to be delivered.

**Adopting a communication strategy**

An adequate communication strategy on the actions and decisions fostering the evolution to digital government is a prerequisite for the successful implementation of the strategy.

In the same way that the relevance of communicating digital government strategy to the public administration
is presented, importance should be attached to communicating the value of the strategy towards citizens, so that the population takes ownership of it and, above all, supports it, becoming a key player in driving the country’s digitisation strategy through informed demand. In order for this communication to be effective, it is advisable to use the channels most used by citizens, such as social networks.

**Ensuring mechanisms for linking financial resources with policy goals**

The strategy needs to provide mechanisms for revealing unclear linkages between policy goals and budget, and other policy levers and mechanisms to ensure the availability of resources needed for the implementation of key initiatives linked to core objectives. The strategy should also demonstrate the fact that digital government initiatives can ensure savings in government spending as well as transparency in how financial resources are used.

**ESTABLISHING THE INSTITUTIONAL SET-UP AND GOVERNANCE FRAMEWORK**

**Defining a suitable institutional set-up**

Although the current overall institutional set-up was effective for the implementation of the Online Government Strategy, it appears inadequate to fully enact the shift to digital government. In particular, the current set-up exhibits excessive efforts from the MinTIC, and in particular the Digital Government Directorate, which has taken up responsibilities for both strategy design and implementation, rather than focusing on strategy design and coordination of implementation.

Building on the recent transformation of the Vice Ministry of IT into the Vice Ministry of Digital Economy through Decree 1414 of 2017, and the related organisational restructuring, additional efforts should be made to fully empower the head of Digital Government to steer coordinated, coherent and efficient implementation of the strategy across areas and sectors.

Strategies produced by individual directorates should be aligned and emanate from the digital government strategy, and be complemented by the plans of action to be implemented by the individual directorates. There is a duplication of efforts across sectors proceeding at different speeds and taking actions not aligned with the overall strategic approach.

A new governance structure (e.g. a new digital government agency) could provide the needed institutional set-up to ensure the proper implementation of the strategy. If established, it is essential to empower it with rock-solid foundations: a strong and sound legal basis, strong mandate with empowerment to act government-wide, needed resources, political support, clear governance of the agency, and in a context of overall institutional clarity with respect to key actors in the MinTIC.

**Defining a governance framework and formal coordination mechanisms**

There is an outstanding recognition from national and territorial authorities of MinTIC’s support; however, there is not enough formal coordination (e.g. mechanisms, bodies) among entities across the public sector.

- There are few institutional formal spaces for coordinating with and empowering the CIOs.
- There is no strategic alignment with MinTIC, but vertical and duplicated efforts,
- There are missed opportunities for synergies, and there are no benefits from economies of scale, growth in planned IT resources, and use of shared resources.

A governance framework is required to ensure a corporate governance approach for the implementation of the digital government strategy. Two possible structures include: a) a high level advisory council or committee to provide strategic directions and guidelines, comprising representatives of the national and territorial governments, private sector, academia and civil society; and b) a CIO council or committee to ensure government-wide implementation of the strategy, comprising the CIOs of different ministries and CIOs or IT leaders representing territorial governments. Regardless of the model adopted, this governance body must be empowered for the ongoing training of CIOs in practices of digital government and governance.

The current set-up also lacks an institutional formal space (e.g. Advisory Council) to facilitate and promote the dialogue and engagement with the whole digital government ecosystem, including representatives of the private sector, academia, civil society and the legislative branch of government. Such space is essential to ensure...
a user- and demand-driven, inclusive and participatory approach to the strategy development and implementation.

Collaboration across government entities, and with the broad ecosystem of digital government actors, needs to be instilled as part of civil service culture.

DEFINING A SUPPORTIVE POLICY FRAMEWORK

**Adopting a whole-of-government approach**

A “whole-of-government” approach is needed, leveraged by the digital government strategy and related policies. It is advisable to sensitise managers and show examples of good practices in the digital government relationship with management and institutional performance policies within the framework of the integrated planning and management model that is led by the DAFP, in particular, demonstrating how digital government policy leverages the implementation of other policies, avoiding duplication of effort in entities and ensuring that digital government is not limited to the use of ICT in the State.

Proactive measures and mechanisms should be implemented for removing politics related to the ownership of information and resources. Change management practices should be adopted for replacing the culture of ownership and for promoting the concept of “whole-of-government” resources.

**New budgetary structures and mechanisms for the commissioning of ICTs**

Additional mechanisms are required to further strengthen a “whole-of-government approach” to the management and purchase of ICT resources. Initiatives such as the increased use of price framework agreements for the commissioning of ICT goods and services, such as the recent purchase of public and private cloud services should be expanded. The lack of a government-wide ICT procurement strategy offers great flexibility for ministries, but it has many drawbacks:

- ministries with low capacity do not have support to make purchases efficiently;
- no one can get an overall view of what the government is buying;
- the bargaining power of the government weakens;
- there is a high dependence on IT providers, who in some cases take advantage of their privileged situation vis-à-vis government institutions.

The centralised framework provided by Colombia Compra Eficiente could be strengthened and a central coordination of government IT procurement could lead to efficiency gains and cost savings.

An appropriate approval process is required for ICT projects to ensure that investments are efficient and in line with the overall strategic objectives of digital government, as well as to ensure quality control and adherence to standards at all levels throughout the government.

Reforms are required on budgetary structures and mechanisms to ensure that part of the agency IT budget can be allocated to ICT investment projects, as well as to create financial mechanisms that can function as policy instruments (levers) to facilitate the allocation of budget for strategic projects.

**Focusing on effective measurement and incentive systems**

Current efforts to revise the measurement framework and instruments linked to the Online Government Strategy should be leveraged to support the shift towards digital government. By developing a sound logic model for the Digital Government Strategy and clear metrics for each stage, insight can be gained on how the Strategy leads to public impact. This will also facilitate the development of an incentives system rewarding the fulfilment of strategic goals instead of the adherence to norms.

An incentives system specifically designed for public servants would allow staff to be more motivated and committed to the digitisation process.
3. Fostering a more transparent, participatory and collaborative state

RECONFIGURING THE GOVERNMENT-CITIZEN RELATIONSHIP IN THE POST-CONFLICT ERA

Considering the post-conflict context that the country is entering, a guiding principle for this new model of governance should be the recovery of trust and legitimacy, entailing a reconfiguration of the relationship between citizens and the state.

Digital government can be a key enabler in approaching citizens as the main axis of the public effort to fortify a context of public trust, while redefining the role of government.

BUILDING FOUNDATIONS FOR ACTIVE CITIZENSHIP

From citizen-centred transparency to citizen-driven participation and collaboration

In order to realise the much needed engagement of Colombians in the restructuring of the country in an era of peace while overcoming the challenge of low public trust, efforts should be focused on concrete value creation for the population, leaving room for citizens to define what value it is they want to create.

Adopting a new role for government by fostering a sustainable digital ecosystem

In order to move from local and short-term success stories of digitally enabled citizen participation to more widespread and long-term digital value creation, it is essential for the Colombian government to invest in activating and creating sustainable connections within the digital ecosystem. Most connections with stakeholders from academia, civil society and the private sector have thus far been established in an ad hoc and short-lived way following an e-government mindset.

Open Government Data for social engagement and economic value creation

Over the past years, Colombia has managed to significantly increase the number of open data sets on the Open Data Portal of the Colombian State2 and has also invested in increasing the accessibility of the datasets. Whilst these efforts should be continued and expanded, Colombia has most to gain by investing activities aimed at fostering the reuse of OGD, building on several excellent examples already present in the country, such as hackathons for entrepreneurs as organised by the Digital Public Innovation Centre and the promotion of data journalism in Tamalemeque. It is also important to consult potential open data users to assess their needs in terms of data they would like to use.

Such examples should be used to make reuse an integral part of every institution’s OGD policy, allowing for scaling up of the economic, social and governance impact of OGD. In this context, it is important to remember that open data users cannot exclusively be found outside of government, but that the public institutions themselves are both producers and users of open data. Therefore, it is essential to develop a policy aimed at the strategic use of data within the public sector that takes into account open data as an important source.

Demonstrating the impact of citizen engagement

A key element to help regain the public’s trust is reinforcing the government’s ability to demonstrate the results of public participation exercises. Showing the Colombian citizens that they are listened to and being taken seriously, and participation efforts aren’t made for nothing. This is not only about making these participation processes and results more transparent by following up with the participants, but also about changing the way in which these results are measured as well as the government’s overall approach towards monitoring and evaluation.

2. https://www.datos.gov.co
4. A data-driven public sector for citizen-driven results

DATA FUELLING THE DIGITAL TRANSFORMATION

If the right institutional conditions are in place, data can become an integral part of efforts to reap the opportunities of realising a more transparent, participatory and collaborative government and realising citizen-driven and efficient service delivery. Colombia already possesses several promising elements for the creation of a data-driven public sector, but requires further strengthening of the foundations laid in guidelines for the use of open data and for information management in the public sector. It can do so by focusing on strengthening the governance, institutional culture, and capacities to solidify the knowledge and expertise available in universities, the private sector and some parts of the public sector.

The use of data analytics is far from wide-spread practice for the Colombian government. As explained in more detail in the next sections, the Colombian government can focus its efforts in several domains to boost the strategic use of data.

FROM PROMISING INNOVATIONS TO FOUNDATIONS FOR DATA SHARING AND REUSE THROUGHOUT THE COLOMBIAN PUBLIC SECTOR

Moving from a closed-by-default to an open- and access-by-default policy
Public institutions in Colombia don’t share data by default and the current arrangements for data governance do not stimulate them to do so, leaving opportunities for value.
creation untapped. Especially, when involving sensitive data, which can be retraced to individuals, it turns out to be a long and complicated process for public organisations to realise a government-to-government (G2G) data sharing agreement.

If Colombia wants to foster a data-driven culture across the public sector, where producing, sharing and using data becomes part of the routine of public organisations, it is essential to consider embedding the principles of open-by-default and access-by-default in the national data policy. Concretely this would mean that all data produced by public institutions should be released as open data and if this is not possible (e.g. in the case of sensitive information), it should be accessible to other public institutions, unless higher interests prevent this.

Realising such policy would require aligning the efforts undertaken by the National Planning Department on developing a national data policy (CONPES on data mining) with the Open Data policy of the MinTIC and establishing clear responsibilities on the policy implementation. Furthermore, the guidelines on the exchange of micro-data (sensitive data) as developed by DANE could be scaled up to develop implementation guidelines for the access-by-default policy beyond the realm of statistical data.

It is important to consider an adaptation of the regulatory framework, not only focused at legally enabling proactive access to data, but also setting requirements and standards for the interoperability of data systems. Establishing the adequate normative basis, i.e. a law enabling easier sharing of data, microdata and information among institutions within the public sector will help overcome barriers to data exchange and reuse.

**Fostering data reuse: making DDPS an integral part of other key strategies**

- Digital government is not about data and technology per se, but about enabling governments to do a better job in addressing real problems and producing value for its citizens;

- Investing in ICTs can have a considerable Return on Investment, both in the financial and non-financial sense;

- The Excellence Route provides a key opportunity to connect the theme of data management and reuse to other priorities following a citizen-driven approach.

**Ensuring capacities for data management and reuse throughout the whole public sector**

A more open approach to data management also opens the doors for less advanced institutions, such as the smaller municipalities to come out of isolation and join forces with other stakeholders on both data management and setting up programmes for the reuse.
As the implementation of a digital government policy seeks to be coherent in its context, in Colombia an adaptive approach in the different sectors and levels of the State is required, taking into account the capacities, technological maturity level and adequacy of the IT infrastructure of individual institutions.

There is a need to define a broad, coherent strategy representing the main national goals, while considering the different views and specific regional needs across the country, and to have a shared understanding of the type of initiatives to be implemented among government officials across government levels and sectors.

Given the cultural and geo-political diversity characterising the various regions in Colombia, there is a need to define regional strategies addressing the specificities of each ecosystem.

There is a risk of disconnecting the progressive approach of the MinTIC from the pressing needs of the local context, possibly resulting into a discrepancy between the strong political will and implementation of forward looking paths at the national level.

It would be desirable that basic concerns at the territorial level are addressed and prioritised through strategic objectives of national government strategies, to ensure a minimum level of country-wide readiness for the digital transformation.

Overcoming hindrances at the operational level
Public institutions use much of their IT budget for recurring expenses, for example, software licences, and only 20 per cent is used for investments on ICT projects. Government institutions should consider a more appropriate redistribution of their IT budget, mainly in view of the investments needed for digital government projects.

Given the regulatory framework and related policies, many public institutions at the national or territorial level dedicate most of their resources to the implementation of the Online Government Strategy, and they are not focusing on providing support to enact the strategic shift towards digital government. Government CIOs and IT leaders need to have a broad vision of their institutional and territorial context and work closely with the institutional leadership in order to focus on delivering public value through IT initiatives.

In some territories and rural areas, including those in the proximity to Bogotá, connectivity and accessibility are still an issue for local communities and authorities. Resources should be dedicated to strengthen the efforts related to the current programme on access to infrastructure and to be strategic in promoting the territories and cities who are ready for benefitting from access to digital technologies.

BUILDING THE NECESSARY HUMAN AND INSTITUTIONAL CAPACITIES

Ensuring adequate leadership capacity
The definition of a holistic capacity-building strategy is required to underpin the implementation of digital government initiatives. The strategy needs to consider the various stakeholders – citizens, civil servants, government leaders, politicians, policy-makers, and other social actors, and the skills required for each of them, to collectively achieve the vision defined for Colombia 10 years from now.

It would be possible for public leaders and middle managers to be key catalysts of the change towards digital government if they are adequately accompanied in embracing the idea of the transversal role of digital technologies for the transformation of government.

Local CIOs and IT leaders have a very operational profile and they lack strategic thinking.

Developing digital capacities of citizens and civil servants
Citizens should be equipped with digital literacy and digital capacities for being able to fully engage with government in developing solutions contributing to the
sustainable development of their communities. Trained and empowered citizens could participate in the design and development of government services, as well as collaborate in the formulation of policies, projects and other types of initiatives that impact them directly.

Public institutions should develop the needed digital capacities among their civil servants so to ensure that they can contribute to building interoperable systems and share data across organisational borders and country regions.

MinTIC developed an effective programme for the adoption of the Online Government Strategy by public institutions. However, such efforts totally rely on the “shoulders” of the MinTIC, and there was little capacity built among civil servants locally.

**Developing organisational capacities**
There are untapped opportunities for creating networks for sharing good practices and experiences between municipalities. Such networks can contribute to embedding a more collaborative culture in public institutions, which in turn would facilitate the execution of joint inter-institutional projects, as well as knowledge management by local governments.

**Standardising IT management tools and reusing software infrastructure**
A centralised actor, the MinTIC or the new Agency to be created, should define and provide standards for IT governance, accessibility, website design, project and programme management practices and tools, and other common standards and IT tools to be uniformly adopted across the whole government and at the same time adapted to the different ecosystems.

Important savings could be gained by public institutions, if a common software infrastructure is created and provided centrally, and reused across the whole of government.

**Strengthening capacities through legal and regulatory frameworks**
Public institutions face difficulties to retaining qualified IT staff due to non-competitive salaries, and lack of incentives for recognising their achievements and contributions. MinTIC is encouraged to explore in collaboration with the Administrative Department of Public Function (DAFP) new policies and regulations so that government institutions can benefit from their capacity-building efforts and can anchor a qualified and very much needed IT workforce in the public sector. Current arrangements only enable the building of capacities among civil servants, while most IT staff are contractors.

**Bibliography**

