9.2 Developing scalable and secure digital public infrastructure

Digital public infrastructure (DPI) refers to the common, foundational digital systems that enable the delivery of services in the digital age. Elements of DPI can be developed by the public or private sector, or co-developed to benefit the delivery and access to services across both sectors, and eventually across borders. DPI needs to be standards-based and re-usable.

The seven Latin American and Caribbean (LAC) countries surveyed have made mixed progress in establishing DPI at the central/federal government level in 2022. LAC countries outperform the OECD in key areas, including the adoption of interoperability frameworks (adopted by all LAC countries compared to 91% of OECD ones) and shared networks (adopted by six LAC countries, or 86%, compared to 82% of OECD countries), which are crucial for communication and data exchange across government agencies. Other elements of DPI are less widespread: four LAC countries (57%) have common digital payment solutions (similar to OECD countries at 55%). Furthermore, three of the seven LAC countries have digital tools to notify users during the process of accessing a service (43%) compared to 55% of OECD countries and only two each (29%) have implemented metadata management and base registry frameworks, compared to 61% and 64% of OECD countries respectively (Figure 9.3).

Digital identity is a core pillar of DPI, but systems in LAC countries do not provide wide enough access to public services or promote cross-sector interoperability**.** National digital identity systems only enable access to half or more online public services in four of the seven surveyed LAC countries (57%), compared to 73% of OECD countries (Online Figure F.6.1). Digital identity governance could be reinforced in LAC countries to secure the trusted use of digital identities across sectors. While six out of the seven surveyed LAC countries have a body or ministry responsible for digital identity, only in Brazil does the mandate cover both the public sector and the wider digital economy, which is the case in 64% of OECD countries (Figure 9.4). This indicates a critical opportunity for LAC countries to establish more robust and comprehensive digital identity frameworks, empowering users beyond simply accessing government services.

Other types of digital public infrastructure, such as cloud infrastructure, are relevant to enabling the digital transformation of governments at scale. Making this infrastructure available to public institutions enhances efficiency and scalability when digitalising government processes and services. Of the surveyed LAC countries, only Argentina has a dedicated cloud infrastructure strategy for the public sector, compared to 36% of OECD countries. However, four (57%) have included the adoption of cloud infrastructure within their national digital government strategies to enable scalable government services, compared to 24% of OECD countries (Figure 9.5). When looking at specific cloud solutions, LAC countries lag behind their OECD counterparts; only three each (43%) provide cloud computing (compared to 64% of OECD countries), platform as a service (67%) and software as a service initiative (61%) (Online Figure F.6.2). This shows the need for greater efforts to translate strategies into concrete solutions.

Methodology and definitions

Data were collected through the OECD Survey on Digital Government 2.0, which was designed to monitor the implementation of the OECD Recommendation of the Council on Digital Government Strategies and assess countries' progress towards a human-centric and whole-of-government digital transformation of public processes and services. The data will be used to compile the OECD Digital Government Index.

The data presented in this section correspond to an initial analysis of the information collected through the survey which was launched in November 2022. They contain responses from 33 OECD countries, including 4 LAC OECD countries (Chile, Colombia, Costa Rica, and Mexico), and 3 accession LAC countries (Argentina, Brazil and Peru). Survey respondents were senior officials in central and federal governments, who were leading and/or implementing digital government reforms, and who gathered data from different parts of the public sector as relevant.

Base registry frameworks are structured and standardised systems of trusted, authentic and authoritative sources of basic public information.

Metadata management is the organisation, control and administration of data describing the structure, content or use of some other data.

Further reading

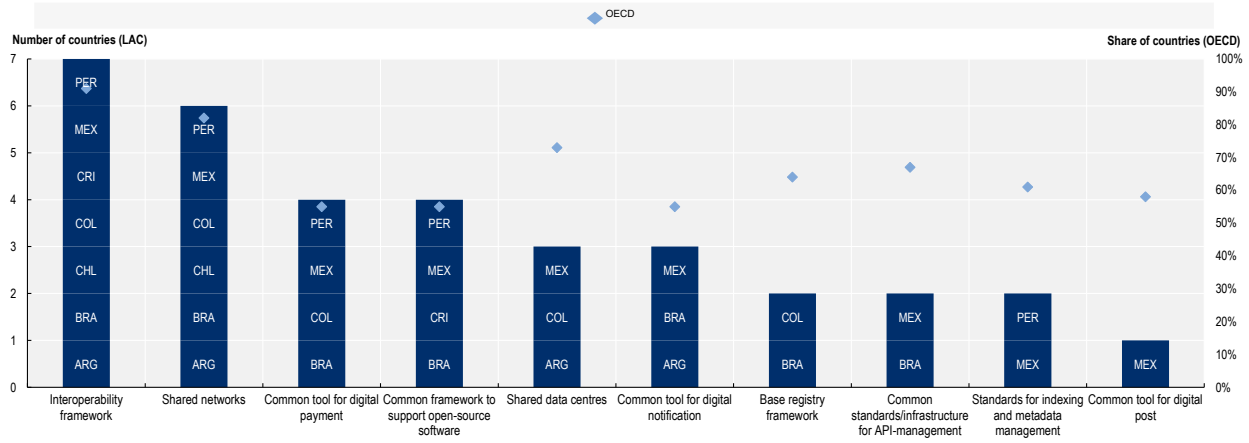
OECD (2023), "Recommendation of the Council on the Governance of Digital Identity", *OECD Legal Instruments*, OECD, Paris, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0491.

Figure notes

Figure 9.5. National digital government strategies (NDGS) are directives/principles that central governments define to incorporate digital technologies as a priority for the public administration.

F.6.1 (Percentage of online services accessible with digital identity system(s), 2022) and F.6.2 (Cloud infrastructure initiatives available to all public sector institutions of the central/federal government, 2022) are available online in Annex F.

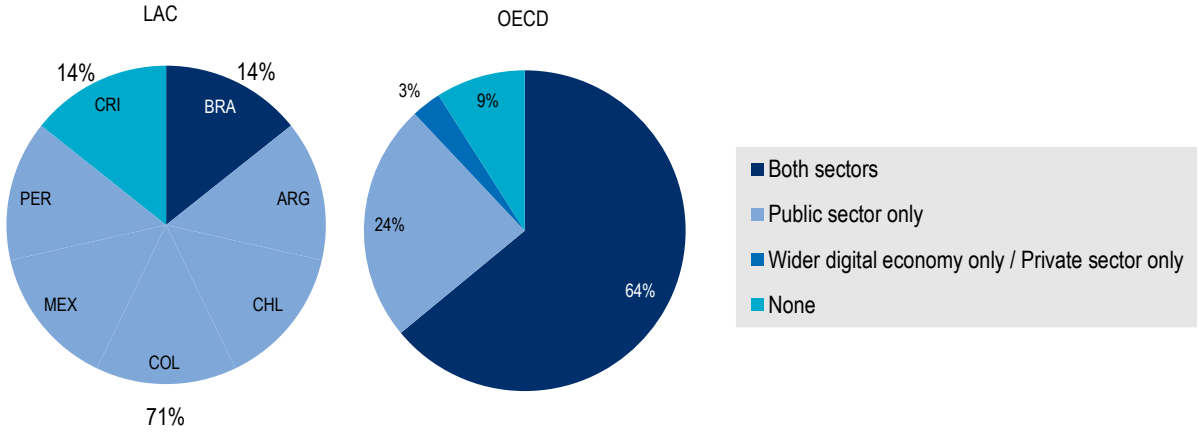
Figure 9.3. Digital public infrastructure in place at the central/federal government level, 2022



Source: OECD (2022), Survey on Digital Government 2.0.

StatLink https://stat.link/th9a52

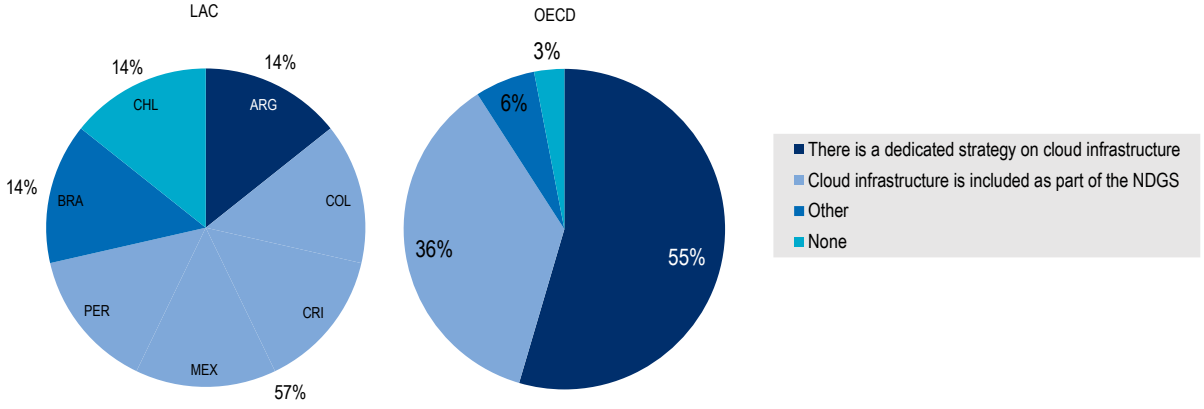
Figure 9.4. Scope of the mandate of the steering body or ministry for digital identity, 2022



Source: OECD (2022), Survey on Digital Government 2.0.

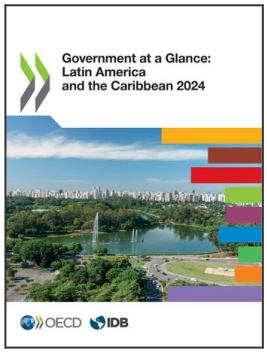
StatLink https://stat.link/sq3rn8

Figure 9.5. Strategic approach to cloud infrastructure in central/federal government, 2022



Source: OECD (2022), Survey on Digital Government 2.0.

StatLink https://stat.link/s9xb1h



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