ARGENTINA

Recent trends

In the last decade, Argentina has made efforts to enhance digital access and use for all. Internet users, active mobile broadband and fixed broadband subscriptions increased. The country has progressed in the digital transformation of government, ranking among the most advanced countries in Latin America and the Caribbean (LAC) in terms of open government data policies, according to the Organisation for Economic Co-operation and Development (OECD) OURdata Index.

In terms of promoting an inclusive digital society, challenges remain, including the number of computers available to students. Trust in online privacy and e-commerce safety have increased in the past decade but remain below LAC averages. In terms of enabling digital innovation, both the share of information and communications technology (ICT) service imports and high-technology exports as a share of total manufactured exports fell in the period 2008-18.

National strategies and international co-operation for digital transformation

The digital agenda (DA) *Agenda Digital Argentina*, which is in line with the United Nations 2030 Agenda for Sustainable Development, is the basis for governing the digital transformation of the country. The DA aims to take advantage of digital technologies to achieve the full digital inclusion of all citizens, improve economic productivity and competitiveness, and put the state at the service of citizens. It will continue to be revised under the government that assumed power in December 2019.

Among initiatives to promote the digital transformation, the *Aprender Conectados* (Learn connected) programme encourages innovation in education and digital alphabetisation, offering digital education, programming and robotics classes in kindergarten and primary and secondary education. *Programa País Digital* (Digital nation programme) aims to modernise public administration, improve quality of services, and promote transparency, digital inclusion and innovation, in co-ordination with municipal governments. *Puntos Digitales* (Digital points) continue to work within the framework, providing connectivity, training and access to new information and communications technologies. In 2019, Argentina launched the Cybersecurity National Strategy to provide safe cyberspace for individuals and public and private organisations, and renewed the regime that promotes the knowledge-based economy. Argentina also launched the Plan Industry 4.0, involving various ministries, to enhance the industrial sector's competitiveness through adoption of digital technologies. To combat the coronavirus (Covid-19), the government launched the Coronavirus Argentina app *Cuidar* for citizens to self-assess symptoms. Additionally, the Ministry of Public Innovation, along with the Ministry of Health and Facebook, launched a chatbot to provide official information and updates (CAF, 2020).

In terms of international co-operation, the Argentine Fund for International Cooperation (FO.AR) is responsible for South-South, triangular and multilateral initiatives. Through FO.AR, Argentina co-operated with Panama on a project to develop photogrammetry and digital mapping techniques and processes.

The Ministry of Science, Technology and Productive Innovation held the 11th Joint Steering Committee on co-operation on science and technology between the European Union (EU) and Argentina in 2019. They agreed to continue developing common principles and the framework conditions needed to create a level playing field in order to co-operate on research and innovation. Argentina and the EU also co-operate on developing the digital economy, holding an initial meeting in 2018, with a second expected in 2020. Argentina and the EU are co-operating on the International Digital Cooperation project on data protection and data flows to enable the development of a safe and right-based international digital sphere. Argentina and the EU also co-operate with Colombia on a project financed by *Adelante* to group and digitalise biometric data. There is also a regional project on digitisation and data protection under the Partnership Instrument, which will update the legislative and regulatory framework, striving for more alignment with the EU.

|	Digital indicators - Argentina[1]					
Enhancing access	**Argentina**		**LAC[2]**		**OECD[3]**	
	2008	**2018**	**2008**	**2018**	**2008**	**2018**
Fixed broadband subscriptions (per 100 inhabitants)[4]	7.8	19.1	4.1	13.9	22.2	32.5
	2010	**2017**	**2010**	**2017**	**2010**	**2017**
Active mobile-broadband subscriptions (per 100 inhabitants)[4]	4.9	80.7	5.4	66.8	37.7	97.3
	2015	**2018**	**2015**	**2018**	**2015**	**2018**
Proportion of population covered by at least 3G network[5]	90.0	95.0	86.1	94.6	98.2	98.8
	2008	**2017**	**2008**	**2017**	**2008**	**2007**
Fixed broadband speed (in Mbit/s)[4]	2.5	3.0	0.58	5.1	2.2	27.7
Strengthening their effective use	**Argentina**		**LAC[2]**		**OECD[3]**	
	2008	**2018**	**2008**	**2018**	**2008**	**2018**
E-Government Development Index (EGDI)[6]	0.58	0.73	0.52	0.65	0.72	0.82
	2008	**2017**	**2008**	**2017**	**2008**	**2017**
Share of Internet users (% of population)[4]	28.1	74.3	25.3	62.9	65.0	83.4
	2015	**2019**	**2015**	**2019**	**2015**	**2019**
UNCTAD B2C E-Commerce Index[7]	51.9	50.0	46.4	51.5	73.3	85.0
	2017		**2017**		**2017**	
Share of individuals engaging in online shopping[8]	19.2		14.8		N/A	
Enabling digital innovation	**Argentina**		**LAC**		**OECD**	
	2008	**2018**	**2008**	**2018**	**2008**	**2018**
High-technology exports (% of manufactured exports)[9]	9.4	5.3	9.3	8.6	16.3	15.1
Share of ICT service imports, as % of total trade in services[7]	5.46	5.15	3.1	3.9	4.6	6.7
	2012	**2016**	**2012**	**2016**	**2012**	**2016**
ICT patent applications filed under the Patent Cooperation Treaty (per million people)[10]	0.19	0.21	0.14	0.34	30.9	38.2
	2006	**2016**	**2006**	**2016**	**2006**	**2016**
R&D expenditures, as % of GDP[11]	0.45	0.53	0.35	0.42	1.7	1.9
	2019		**2019**		**2019**	
OECD OURdata Index[12]	0.53		0.43		0.61	
Ensuring quality jobs for all	**Argentina**		**LAC**		**OECD**	
	2006-15		**2006-15**		**2006-15**	
Contributions to changes in total employment, by digital intensity of sectors, 2006-16[13]	N/A		6.9		4.8	
	2018		**2018**		**2018**	
Share of informal employment to total employment[14]	48.1		54.9		N/A	
	2007	**2017**	**2007**	**2017**	**2007**	**2017**
Tertiary gross enrolment rate (%)[9]	66.4	90.0	37.5	60.5	66.6	73.8
	2015		**2015**		**2015**	
Tertiary graduates by field (%) - Education[11]	21.1		16.4		10.3	
Tertiary graduates by field (%) - Health[11]	20.7		14.7		14.3	
Tertiary graduates by field (%) - Engineering[11]	5.5		12.8		14.5	
Promoting an inclusive digital society	**Argentina**		**LAC**		**OECD**	
	2015	**2016**	**2015**	**2016**	**2015**	**2016**
E-waste generated, kilograms per inhabitant[15]	8.2	8.4	6.9	7.2	17.4	17.7
	2015	**2018**	**2015**	**2018**	**2015**	**2018**
Number of students per computer[16]	N/A	2.1	2.4	1.6	1.8	1.1
	2018		**2018**		**2018**	
Percentage of women scoring at Level 2 or 3 in problem solving in technology-rich environments[17]	N/A		7.7		27.7	
Strengthening trust	**Argentina**		**LAC**		**OECD**	
	2020		**2020**		**2020**	
CAF GovTech Index[18]	4.2		4.4		N/A	
	2016	**2018**	**2016**	**2018**	**2016**	**2018**
Global Cybersecurity Index (ITU)[19]	0.41	0.41	0.36	0.43	0.55	0.78
	2018	**2019**	**2018**	**2019**	**2018**	**2019**
E-commerce safety (%)[20]	48.8	58.7	72.0	63.1	61.7	58.6
Trust in online privacy (%)[20]	40.0	42.0	52.8	54.9	41.7	46.0
Fostering market openness	**Argentina**		**LAC**		**OECD**	
	2015	**2019**	**2015**	**2019**	**2015**	**2019**
OECD Digital Services Trade Restrictiveness Index[13]	0.36	0.30	0.24	0.24	0.13	0.15
	2018		**2018**		**2018**	
OECD FDI RRI[13]	0.03		0.07		0.06	

Sources, footnotes and technical details can be found at the end of the country notes.

Technical notes

1. The table as best as possible follows the seven key areas identified in the OECD Going Digital project: 1) enhancing access to digital technologies; 2) strengthening their effective use; 3) enabling digital innovation; 4) ensuring quality jobs for all; 5) promoting an inclusive digital society; 6) strengthening trust; and 7) fostering market openness (OECD, 2019a). Indicators are chosen depending on data availability for LAC countries. Potential bias exists from the way components have been aggregated on index indicators.

2. LAC average is a simple average. Composition of countries depends on availability of country data. Each average includes as many LAC countries as possible.

3. OECD average is a simple average that includes all OECD member countries as of May 2020.

4. Data from ITU (2020), *World Telecommunication/ICT Indicators Database 2020* (database). Fixed broadband speed in Mbit/s refers to the advertised maximum theoretical download speed guaranteed to users associated with a fixed broadband Internet monthly subscription.

5. Data from UN Statistics Division, UN Global SDG Database (database). Data for 2015 and 2018 or latest available year.

6. Data from UN E-government Knowledgebase (2019), *Data Center* (database). The E-Government Development Index is a composite indicator that consists of three indexes (Online Service Index, Telecommunication Infrastructure Index and Human Capital Index), which are equally weighted. It ranges from 0 to 1, with 1 being the most developed.

7. Data from UNCTAD (2020), *UNCTADSTAT* (database). The UNCTAD B2C E-commerce Index measures an economy's preparedness to support online shopping. It ranges from 0 to 100, with 100 being the highest support.

8. Own calculations based on data from Latinobarómetro (2019), *Libros de Códigos por País/Año* (database). Data for 2017. Data from public opinion surveys using randomly selected, nationally representative samples.

9. Data from World Bank (2020a), *World Bank DataBank* (database).

10. Data from World Bank (2020b), *TCdata360*. Data for 2012 and 2016 or latest available year.

11. Data from UNESCO (2019), *UNESCO Institute for Statistics* (database). R&D Expenditures, as % of GDP data from 2006 and 2016 or latest available year.

12. Data from OECD (2020a), *OECD.Stat* (database); and OECD (2020b). The OECD OURdata Index assesses governments' efforts to implement open data in three critical areas: openness, usefulness and re-usability of government data. It ranges from 0 to 1, with 1 being the highest score.

13. Data from OECD (2020a), *OECD.Stat* (database). The OECD Digital Services Trade Restrictiveness Index identifies, catalogues and quantifies barriers that affect trade in digitally enabled services across 46 countries. It ranges from 0 to 1, with 1 being the most restrictive. The Foreign Direct Investment Regulatory Restrictiveness Index (FDI RRI) measures four types of statutory restrictions on foreign direct investment: 1) foreign equity restrictions; 2) screening and prior approval requirements; 3) rules for key personnel; and 4) other restrictions on the operation of foreign enterprises. The FDI RRI is a composite index, which ranges from 0 to 1, with 1 being the most restrictive.

14. Data from ILOSTAT, data from 2018 or latest available year.

15. Data from the Global E-waste Statistics Partnership.

16. OECD calculations based on OECD (2020c), *Programme for International Student Assessment* (database). Data for 2015 and 2018.

17. Data from the OECD (2019d), *Survey of Adult Skills (2018)*. Percentages for problem solving in technology-rich environments are computed so that the sum of percentages for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, at Level 1, at Level 2 and at Level 3.

18. Data from CAF (2020), *The GovTech Index 2020: Unlocking the Potential of GovTech Ecosystems in Latin America, Spain and Portugal*. The GovTech Index 2020 measures the maturity of the GovTech ecosystem. It is based on 28 indicators across 7 dimensions, which on aggregate form 3 equally weighted pillars: start-up industry, government policies and procurement systems.

19. The Global Cybersecurity Index measures countries' commitment to cybersecurity at a global level. It has five pillars: 1) legal measures; 2) technical measures; 3) organisational measures; 4) capacity building; and 5) co-operation. It ranges from 0 to 1, with 1 being the highest level of cybersecurity.

20. Data from The Economist Intelligence Unit (2019), *EIU Inclusive Internet Index* (database). Indicators present perceived e-commerce safety and trust in online privacy among randomly sampled individuals in selected countries. It ranges from 0% to 100%, with 100% indicating absolute confidence in e-commerce safety and trust in online privacy.

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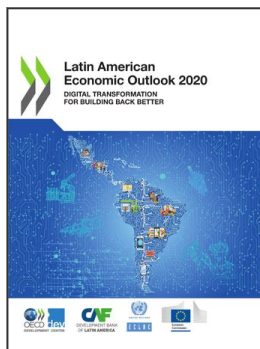
From:
Latin American Economic Outlook 2020
Digital Transformation for Building Back Better

Access the complete publication at:
https://doi.org/10.1787/e6e864fb-en