Intergovernmental Group of Experts on E-commerce and the Digital Economy

Session 3: National and international policies and support measures to address challenges of the developing countries in the digital economy

Sebastian Rovira
Economic Affairs Officer
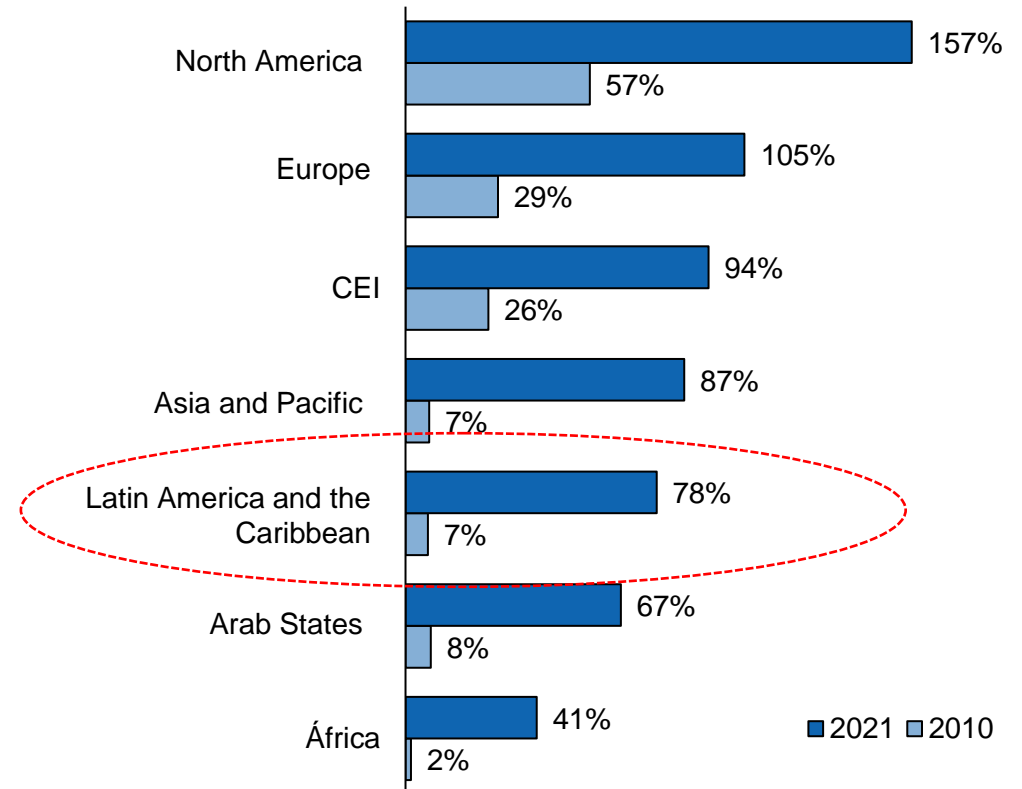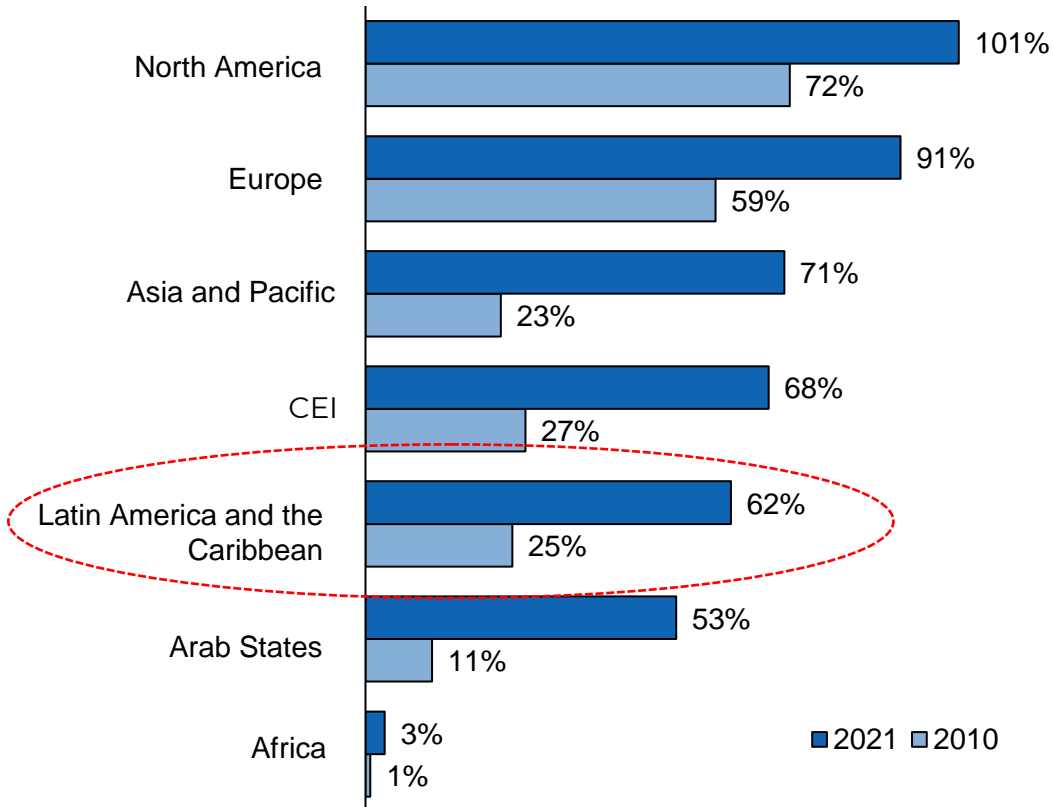Innovation and New Technology Unit, ECLAC
May 2023

DIGITAL TRANSFORMATIONS CHALLENGES IN LATIN AMERICA AND THE CARIBBEAN

DESPITE THE ADVANCES, THERE ARE STILL CHALLENGES IN TERMS OF CONNECTIVITY

Fixed broadband subscriptions as a percentage of households

Region	2021	2010
North America	101%	72%
Europe	91%	59%
Asia and Pacific	71%	23%
CEI	68%	27%
Latin America and the Caribbean	62%	25%
Arab States	53%	11%
Africa	3%	1%

Mobile broadband suscriptions as a percentage of population

Region	2021	2010
North America	157%	57%
Europe	105%	29%
CEI	94%	26%
Asia and Pacific	87%	7%
Latin America and the Caribbean	78%	7%
Arab States	67%	8%
África	41%	2%

Source: ECLAC, based on ITU World Telecomunications Database

LACK OF DIGITAL SKILLS FOR THE DIGITAL WORLD

Basic digital skills
(% of population)

Send and receive emails with attachments

Jamaica 16%, Ecuador 23%, Brasil 26%, Perú 29%, Colombia 32%, México 32%, Cuba 34%, Germany 80%, Sweden 81%, Irland 86%, Denmark 88%, Korea 92%
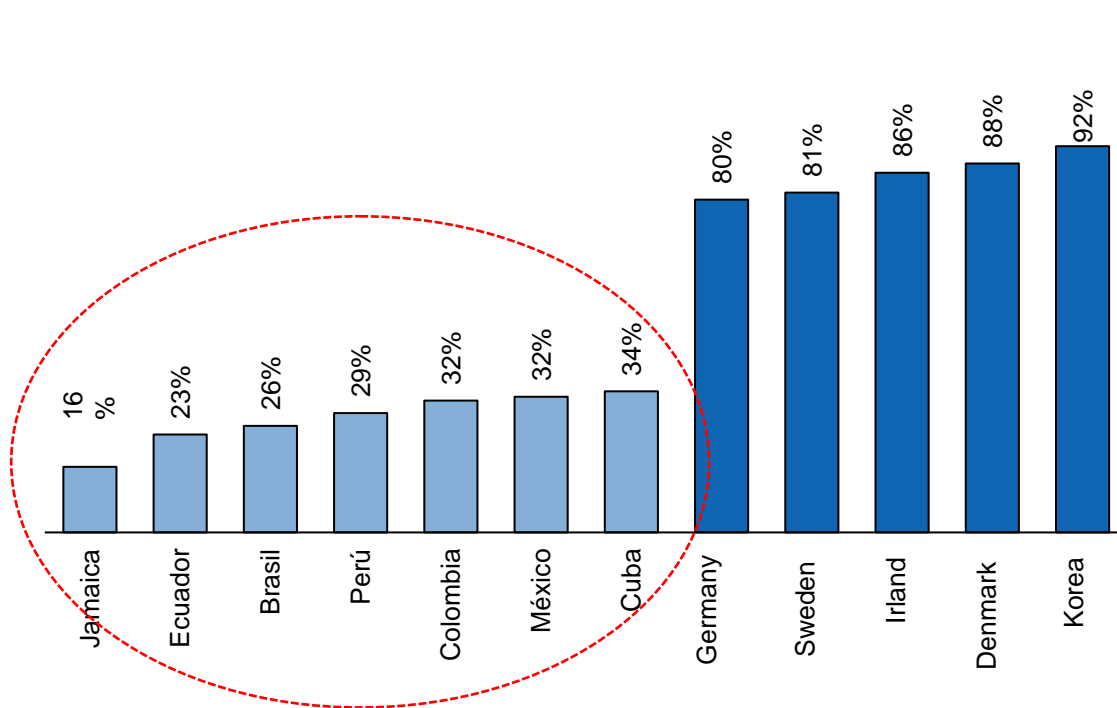
Medium level digital skills
(% of population)

Search, download, and configure apps and software

Jamaica 7%, Perú 11%, Cuba 11%, Ecuador 14%, Colombia 15%, México 18%, Brasil 19%, Chile 26%, Estonia 50%, Irland 57%, Finland 64%, Denmark 65%, Korea 84%

Source: ITU-based ECLAC
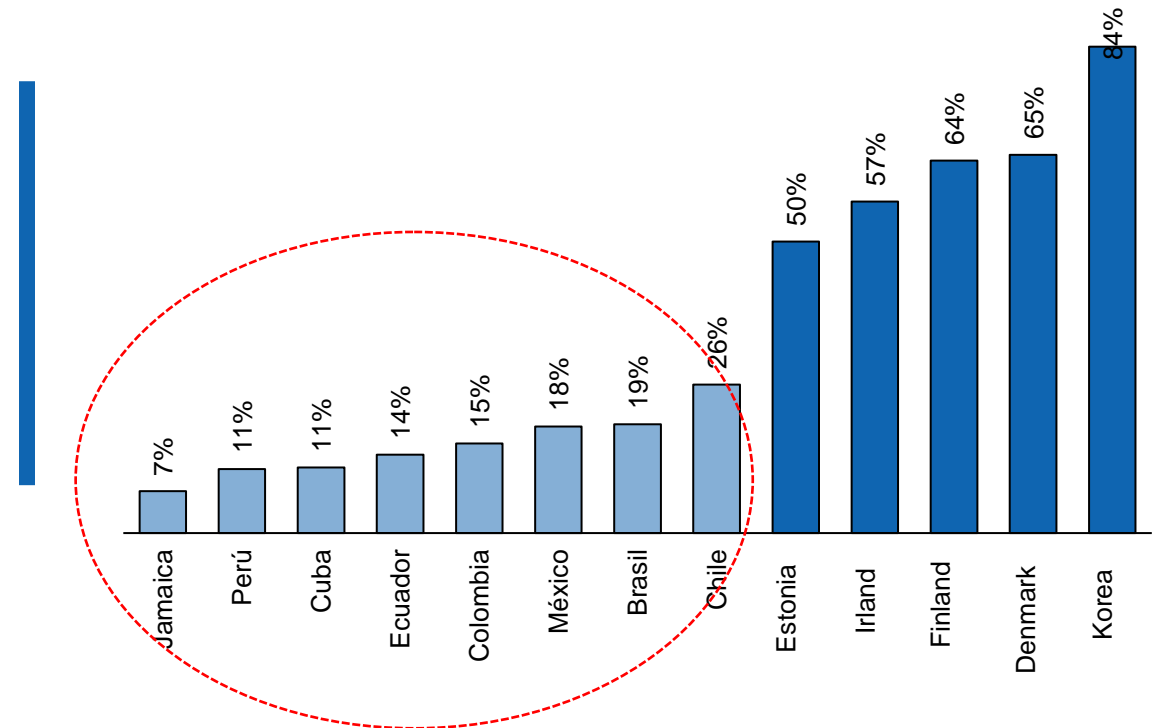
THE GAP BETWEEN OECD AND LAC IN THE DIGITAL ECONOMY HAS GROWN BETWEEN 2010 AND 2021

Digital Ecosystem Index, Digital Economy Component
(index)

2010

	OCDE	LAC
Index	44.3	15.7
Digitization of production	39.5	23.8
Weight digital industries	48.8	19.1
Innovation	37	7.8
Development of digital industries	51.9	12

2021

	OCDE	LAC
Index	56.6	21.9
Digitization of production	58.5	32.6
Weight digital industries	59.7	21.1
Innovation	46.7	11.4
Development of digital industries	61.3	22.5
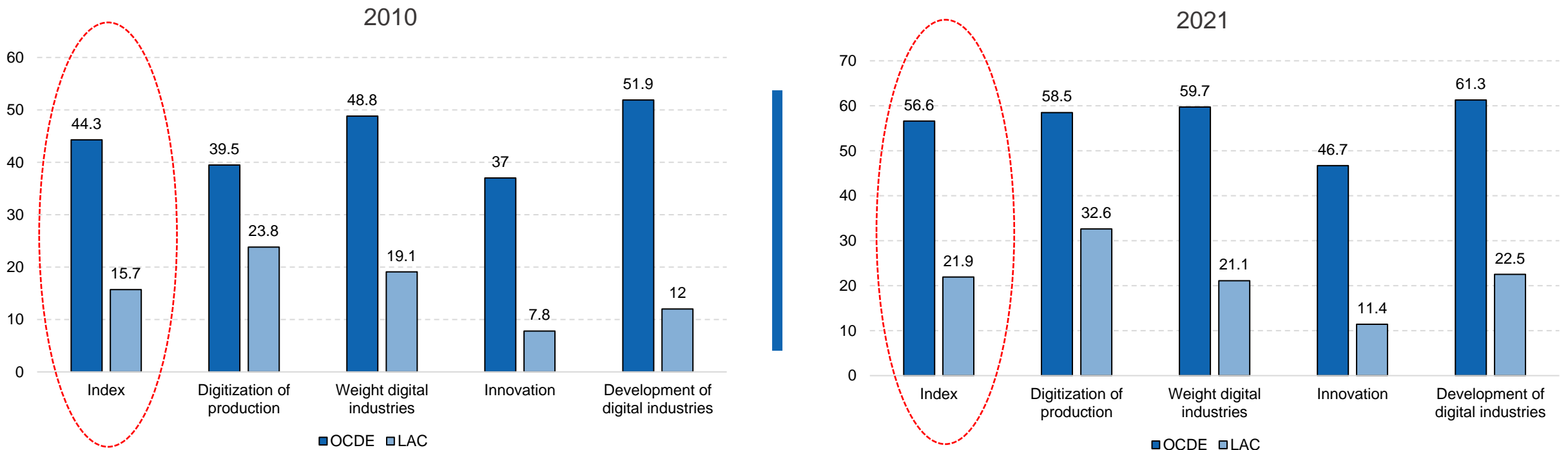
- The most pronounced differences are in the components of development of digital industries (local websites, export of ICT goods and services) and weight of digital industries (Per capita expenditure on telecommunications, media and entertainment).

Source: R. Katz (2022), Measuring the Digital Ecosystem and Economy of Latin America

AT THE SECTOR LEVEL, THERE ARE ALSO GAPS IN DIGITIZATION BETWEEN LAC AND MORE ADVANCED COUNTRIES

Percentage of direct intermediate digital inputs by economic sector in Latin America versus advanced countries
(In percentages)
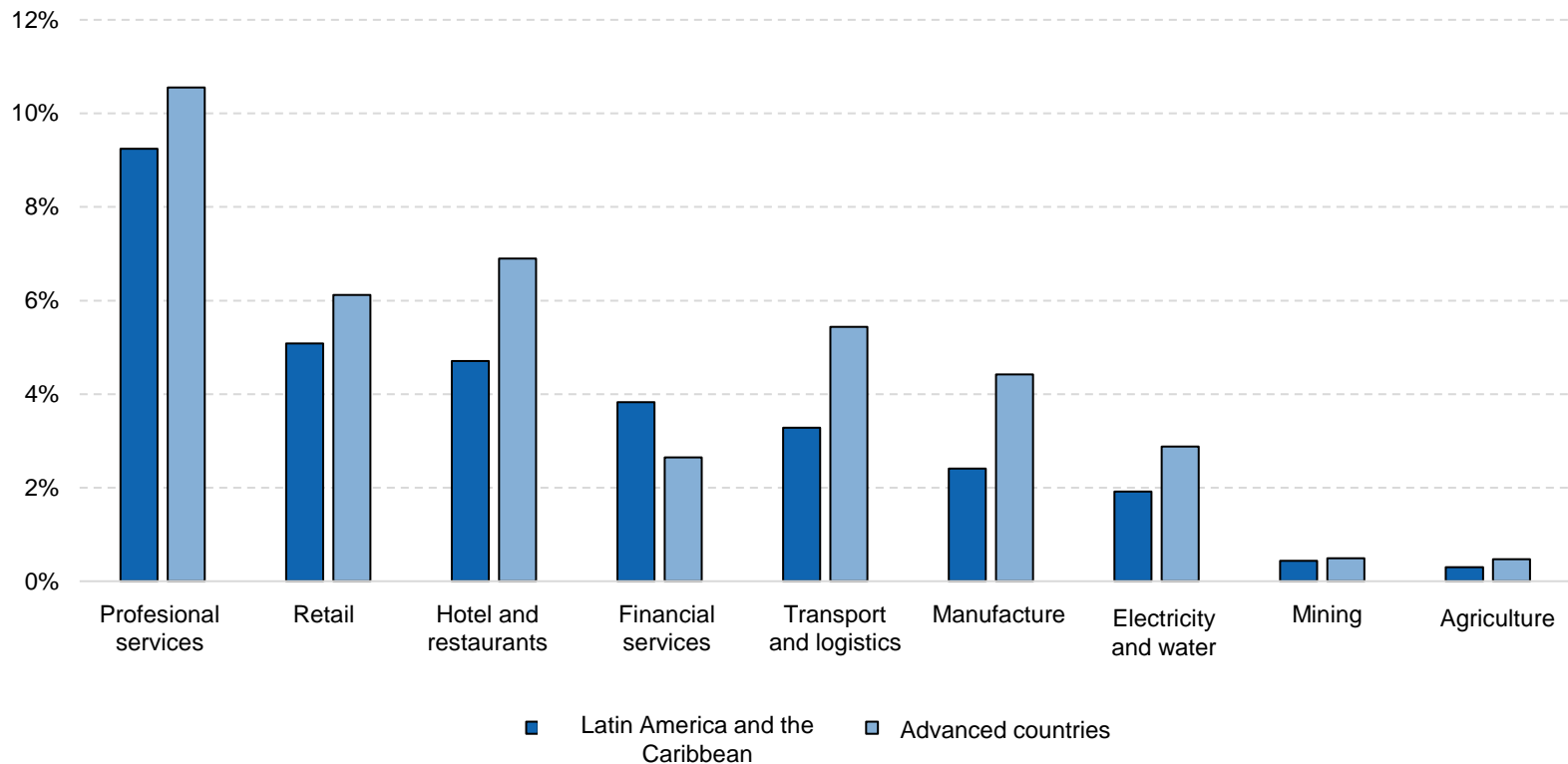
- **Agriculture, mining, and manufacturing, three priority sectors in terms of contribution to Latin American gross product, have a lower level of direct digitalization.**

Legend: ■ Latin America and the Caribbean   ■ Advanced countries

Source: ECLAC (2022) based in Katz
Note: Latin America includes Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru. Advanced countries include the United States, Germany, the United Kingdom, Japan, France, Australia and South Korea.

POLICY, REGULATORY AND INSITUTIONAL CHALLENGES

DIGITAL TECHNOLOGIES CONDITIONS THE FRAGMENTATION OF PUBLIC POLICY

Areas of governance

National Digital Policy (PND, DNA, ADS, ADL)

| Telecommunications regulator | Data protection | Cybersecurity | Antitrust | Consumer protection | innovation | investment | agriculture | Health | education | finance | industry | energy | Local government |

Congress

Scope of public policies
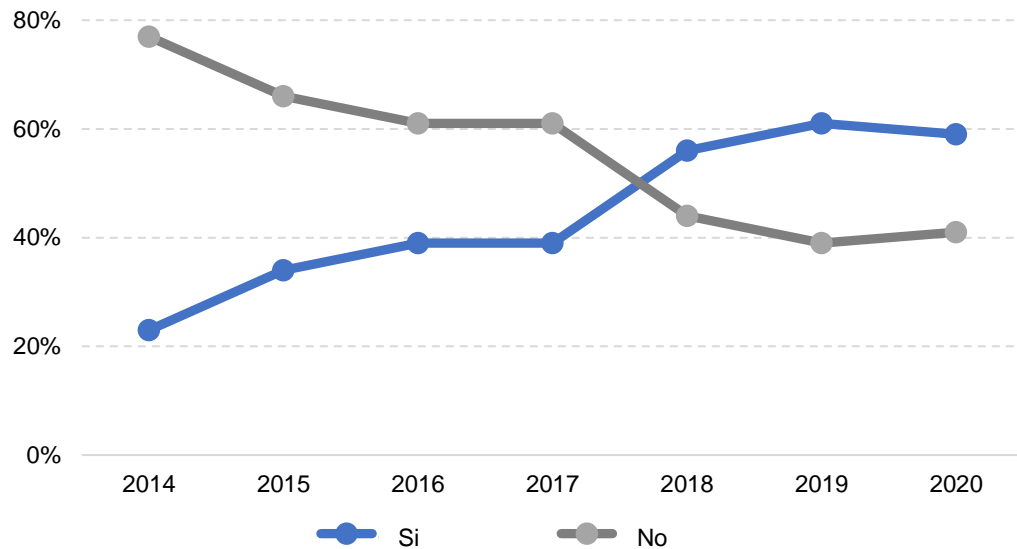
Telecommunications regulator
- Telecommunications and Internet Licenses
- Spectrum allocation and use
- Network coverage, infrastructure sharing, quality of service
- Wholesale prices
- FSU and use of back nets
- Open and interoperable standards, technology neutrality.
- Net neutrality, zero rating
-

Data protection / Cybersecurity
- Strengthen privacy and security policies.
- AI, encryption and anonymization rules
- Encrypted private networks
- Application and security monitoring

- Data breaches
- Protection and monitoring of cyberattacks
- Incident response. Resilience rules.
- Critical Infrastructure Protection

Antitrust
- Facilitation of deployment/sharing and control of infrastructure
- Concentration control
- Abuse of dominant position
- Restrictive agreements
- Merge control

Consumer protection
- Penalties and fines
- Quality of service, experience.
- Use and fair trade,
- B2B and B2C Claims, Dispute Resolution
- Consumer education

innovation / investment
- Facilitation of datacenters, permissions
- Tax exemptions
- Access to open data
- Single window
- Reduction of bureaucracy
- Government Innovation
- Funds for R&D, AI promotion, training.
- Entrepreneurship
-

agriculture / Health / education / finance / industry / energy
- Tax incentives, subsidies, innovation funds • Air or drone traffic control, licensing
- Job training programs, curriculum coordination, capacity building of officials •
- Incentives to create SMEs, access to venture capital
- Promotion of electronic commerce and payments
- Cloud services, patient records. Using big data for health
-

Local government
- Access-arrival to dorsal nets
- Use/sharing of local infrastructure, pipelines, and access to public infrastructure
- Positive silence policies, special regime small cells, transparency, permission for E2E fiber
- Investment in sensors/meters, adoption of open, scalable solutions
- Incentives for local SMEs/OTTs.
- Training
- Promotion of local content
-

REGULATORY AREAS IN THE DIGITAL ECONOMY

|	SCOPE	REGULATORY CHALLENGES
MARKET ACCESS	**Granting of permits and licences**	Challenging the market or creating the market? (market competition and market differentiation)
PROTECTION OF RIGHTS	**Protect the rights of workers, consumers, Authors**	Ensure the sustainability of protection systems or respond to new opportunities and demands?
COMPETITION	**Market efficiency**	What instruments should be applied? What is the competitive pressure of these markets? What markets should be regulated?, Definition of markets?
DATA	**Data access and protection**	What rules should apply to data access, portability and ownership? Is the policy on access and data portability a competition policy?
TAXATION	**Compliance with tax policy**	How should the consumption of digital goods be taxed? Should digital platform providers pay taxes in the country where they are located or where the revenue is generated?

Fuente: elaboración propia

THERE IS AN IMPORTANT DIFFUSION OF NATIONAL DIGITAL AGENDAS

World (129 countries): Global National ICT Policy or Master Plan (% of countries)

Si — No

Latin America and the Caribbean (16 countries): adoption of sectoral digital agendas, 2022 (12-75%)

Implementation — Update — Design

Source: ITU (2022), Data Hub, Digital strategies, and broadband plans
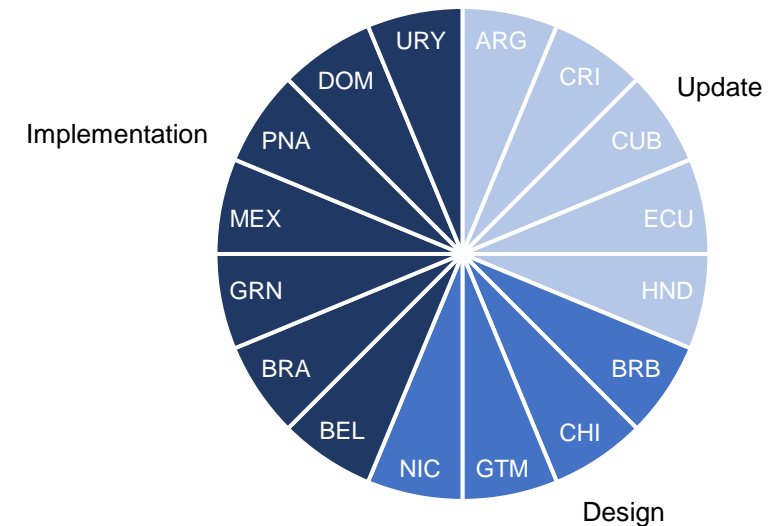
Source: ECLAC, survey carried out between June and August 2022 to representatives of governments and agencies in charge of digital policy

REINFORCE THE ORIENTATION OF DIGITAL POLICIES TOWARDS EMERGING AND PRODUCTIVE ISSUES
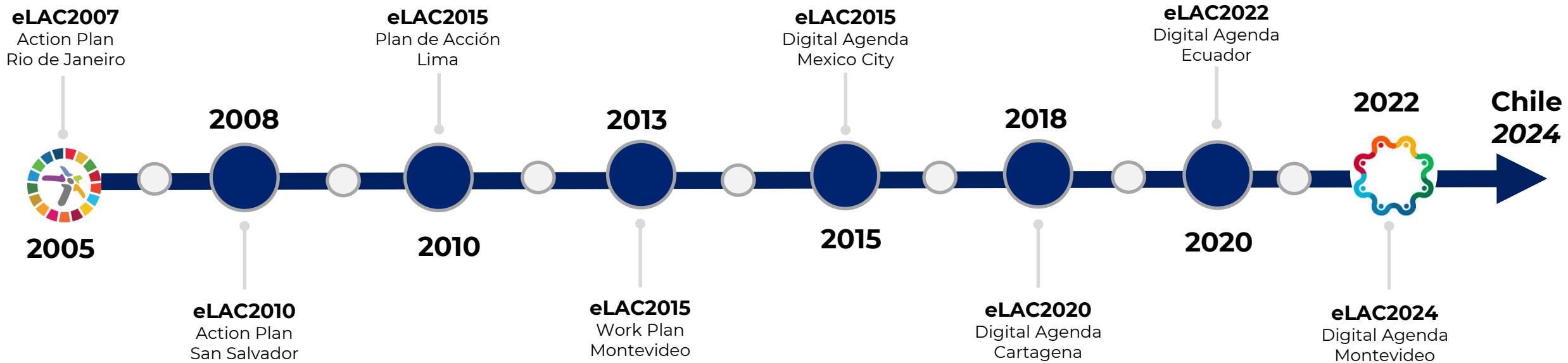
Digital policy intensity map

	Argentina	Brasil	Mexico	Chile	Colombia	Peru	Costa Rica	Ecuador	Uruguay	Jamaica	Trinidad y Tobago
Areas of intervention (average)											
Digital infrastructure											
Digital Government											
Internet Governance											
Emerging technologies											
Productive digital transformation											
Digital Health											
Digital education											
Institutional factors (average)											
Promotion of gender equity											
Budget											
Evaluation mechanisms											
Coordination											

Promotion of digital innovation
Digitization SMEs
Industry 4.0
Digital skills
electronic commerce

Explicit budgeting
Definition of indicators and evaluation mechanism

DIGITAL AGENDA FOR LATIN AMERICA AND THE CARIBBEAN eLAC2024

Digital Cooperation Process
Digital Agenda for LAC (eLAC)

A 17-year process

eLAC2007
Action Plan
Rio de Janeiro

eLAC2015
Plan de Acción
Lima

eLAC2015
Digital Agenda
Mexico City

eLAC2022
Digital Agenda
Ecuador

2008

2013

2018

2022

**Chile
2024**

2005

2010

2015

2020

eLAC2010
Action Plan
San Salvador

eLAC2015
Work Plan
Montevideo

eLAC2020
Digital Agenda
Cartagena

eLAC2024
Digital Agenda
Montevideo

- In the last ministerial conference, the Digital Agenda for LAC towards 2024 was approved. The agenda brings together a set of 31 digital policy objectives. The Montevideo Declaration "Building together in the digital age" was also approved
- The conference was attended by 13 Member states from LAC countries and 30 organizations from the private sector

Agenda Digital eLAC2024
31 objectives in 4 strategic pillars

A. THE FOUNDATION FOR A DIGITAL AGE FOR ALL

– Universal and meaningful infrastructure and connectivity
-Digital skills
-Governance, security and enabling environment

B. PRODUCTIVE AND SUSTAINABLE DIGITAL TRANSFORMATION

-Digital economy, entrepreneurship and innovation

-Digitalization for sustainability

C. DIGITAL TRANSFORMATION FOR WELL-BEING

-Digital inclusion for equal opportunities
-Public innovation and digital transformation of the State

D. NEW DIGITAL PARTNERSHIPS FOR PROSPERITY

-Regional cooperation and digital integration