Diagram I.1

Dimensions of digital development and the effects on society, the production sector and the State

Risks

Greater inequality Reduced competitiveness Economic concentration Institutional crisis Geopolitical polarization

Society

New models of communication and interaction
New models of consumption

Production sector

New management models New business models New production models Industrial restructuring

State

Digital government Citizen participation

Telecommunications and information technology pillar

Digital infrastructure Telecommunications services Software and systems Information technology services Multifunctional devices Network and service coverage
High data transmission speeds and low latency
Access to information technology services and software
Affordability of devices and services

Digital economy

Digital goods and services
Applications and digital platforms:
marketplaces, social networks,
video streaming
Digital content and media
Sharing economy

Information and knowledge
Online goods and services
Access to public services
Consumption on demand
and customization
Data privacy and security

Innovation and entrepreneurship Market access
Efficiency in management, marketing and distribution
Data as a strategic asset
Cybersecurity and data privacy

Digital government
Digital innovation in the State
Digital tax efficiency
Digital citizenship and
citizen participation
Open data and transparency
Cybersecurity and data privac

The digitalized economy

E-business
E-commerce
Industry 4.0
Agricultural technology
(agritech), financial technology
(fintech), automotive technology
(autotech), etc.
The smart according

Smart products
Products as services
Informed and customized
consumption
Premium on responsible
consumption

Premium on responsible consumption
Data privacy and security
New jobs, new skills

Industrial reconfiguration
Automation and robotics
Sophisticated production
Digital transformation
of production (data-based
productivity)
Cybersecurity and data privacy

State digital innovation
Governance of public services
(education, health,
justice, security)
Governance for digital
transformation (cybersecurity,
competition, tax, trade, etc.)

Welfare and sustainability

Productivity and sustainability

Efficiency, effectiveness and sustainability

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

The digital transformation of the production sector is taking the form of new management, business and production models that are facilitating innovation and the introduction of new markets and disrupting traditional industries. The expansion of the industrial Internet, smart systems, virtual value chains and artificial intelligence in production processes is speeding up innovation and generating productivity gains, with positive effects on economic growth. In addition, all this is driving the transformation of traditional industries through automotive technology (autotech), agricultural technology (agritech) and financial technology (fintech), among others. In particular, smart production models can bring increased competitiveness with a smaller environmental footprint, as companies are using digital tools to map and reduce their footprint in order to assess their impact on climate change and modify their production processes.

A similar process ought to take place in the public management models of State bodies, in order to meet citizens' demands and improve government action. The adoption of these technologies by such institutions would increase the efficiency and effectiveness of provision for services such as health care, education and transport. It would also improve citizen participation in democratic processes, increase transparency in government operations and facilitate more sustainable practices. In particular, smart city solutions are transformative because of their potential social, economic and environmental impact, especially in a region where 80% of the population is concentrated in cities.