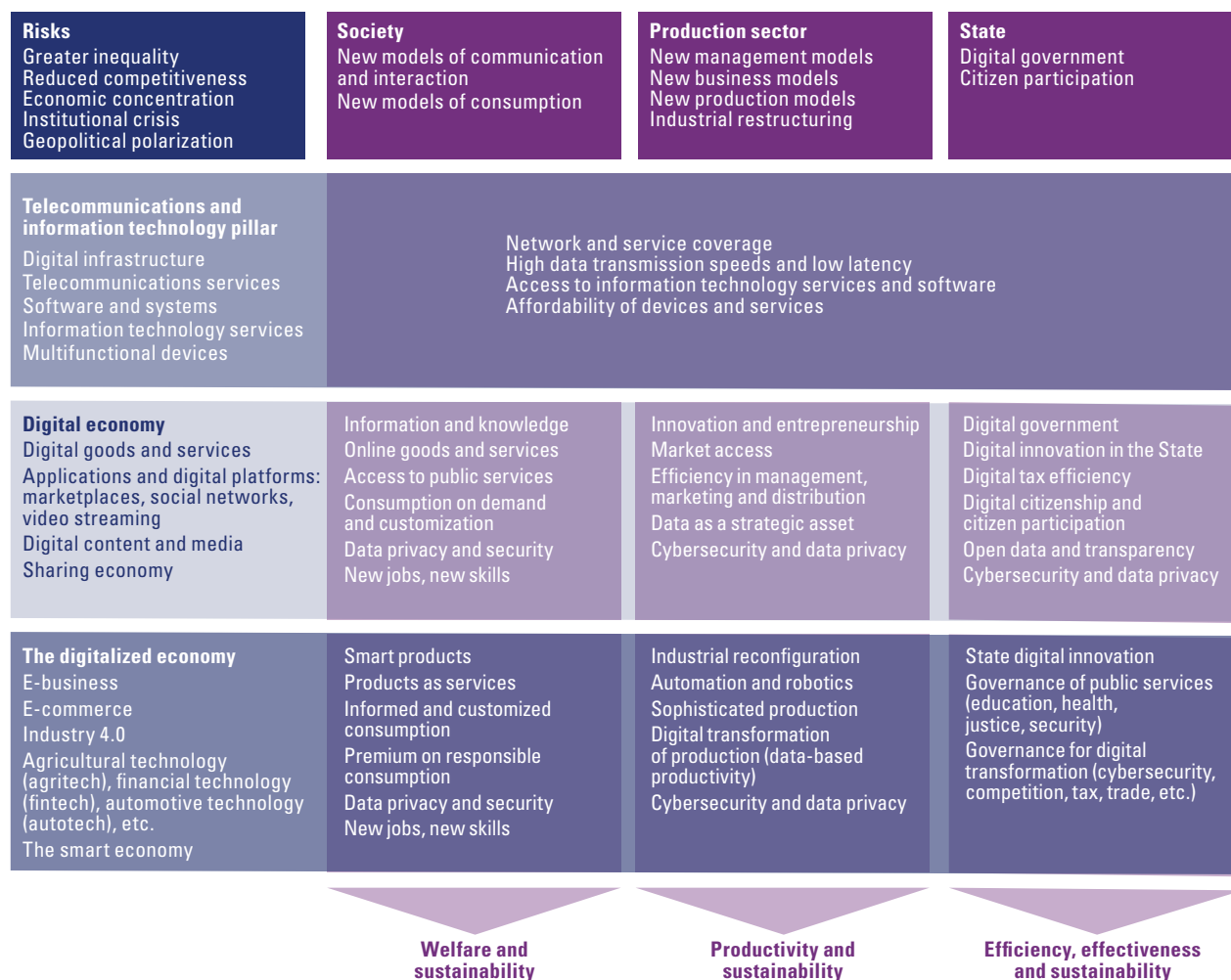


Diagram I.1

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



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.