

## EXECUTIVE SUMMARY

The COVID-19 pandemic is unusual as it poses a challenge to the global socio-economic system. From the application of the first sanitary measures, anecdotal evidence began to accumulate underlining the importance of digital technologies to counteract isolation, help spread information about precautionary health measures, and facilitate the functioning of economic systems. The purpose of this study<sup>1</sup> by the Observatory CAF of the Digital Ecosystem is to offer an empirically-based estimate of the importance of digitalisation as a mitigating factor in the potential disruption caused by the pandemic, as well as to evaluate how Latin America is positioned to face this challenge.

Its conclusions are as follows:

- The econometric analysis of the economic impact of the SARS-CoV virus in 2003 shows that those countries with the largest broadband infrastructure were able to offset, at least partially, the negative effects of the pandemic: countries with a developed infrastructure were able to alleviate by 75% the economic losses associated with the SARS epidemic and the socio-economic impact of the sanitary measures which were taken to counter it (quarantine, social distancing, interruption of air traffic, use of protective masks, etc.). This order of effect must be considered when thinking of the significantly greater impact of COVID-19.
- Considering that Latin America is still developing its digital ecosystem, it is worth asking if the region has an adequate level of development to mitigate, at least in part, the effects of the pandemic.
- As is happening globally, Latin American networks are being affected by the exponential increase in traffic. In March, a decrease in fixed broadband speeds was identified in Chile (-3%) and Ecuador (-19.6%), combined with an increase in latency in Brazil (11.7%), Chile (19.0%), Ecuador (11.8%) and Mexico (7.4%) (source: Ookla/Speedtest). According to models developed by *Telecom Advisory Services* fixed broadband speed has an impact on GDP of 0.73% when speed increases by 100%; if the decreases registered in March continue, the negative economic impact could become significant.
- Mass transitioning to teleworking is saturating the capacity of Wi-Fi routers at home, driven by an increase in work in the cloud (80% increase in data upload traffic) and the use of video conferencing. This factor also contributes to the decrease in network speed.
- The digitalisation of Latin American households indicates increasing connectivity and internet use, projected at 78.78% in 2020 despite the fact that, in some countries, percentages are much lower (Bolivia: 58.34%, El Salvador: 45.02%; Honduras: 39.33%). Additionally, the rural/urban dichotomy indicates a significant level of digital marginalisation. This indicates that the digital divide represents an obstacle for important sectors of the population that would rely on access to the internet to receive health information, download educational content during school closures, or purchase goods electronically.

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<sup>1</sup> *The State of Digitization in Latin America facing the Pandemic*

- Additionally, the digital divide is heightened by the fact that most Latin American households have adopted the internet to use only as communication tools and social networks. A composite index of digital household resilience (calculated as the use of the internet to download health apps, educational apps, carry out e-commerce operations and the use of fintech) shows that the weighted average for Latin America is 30.70 (on a scale from 1 to 100), while OECD countries reach 53.78. The difference between countries within the region is significant: on the one hand, we find Chile with an index of 41.78 and on the other extreme, Bolivia with 6.23. In other words, internet rates per se do not indicate a high degree of digital resilience in the Latin American household.
- Shortcomings are noted not just in terms of technological adoption but in the assimilation of technology in processes of production, particularly supply chains. Although the percentage of companies with internet access exceeds 85% in all countries, the percentage of companies that use electronic banking varies between 34.20% in Peru and 95.39% in Colombia, while the percentage of those that acquire consumer goods through the internet ranges from 15.20% in Peru to 66.00% in Brazil. The shortcomings in the supply chain are most obvious when different parts in the logistics chain are analysed (for example, low digitalisation of land transport, lack of common standards for inter-organisational communication). This results in a major weakness in dealing with disruptions in the supply chain caused by the pandemic.
- COVID-19 adds to the disruption in the labour market by the proportion of the workforce that can transition to telework. An analysis of the CASEN survey for Chile, where probabilities are assigned to transition to telework among the 7,830,950 workers in the labour force, indicates that 20.56% of workers must continue to attend their workplaces (health workers, security forces, transport and food chain workers, etc.) while only 23% can work from home with digital technology. This determines that, in the current conditions in Chile, 4,419,530 workers are in the precarious position of not being able to attend the workplace and not being able to transition to telework. Of these, 1,615,099 have, at most, a level of basic education; of the same group, 1,590,041 belong to the 1st or 2nd income quintile. Given the similarity in the structure of the workforce in Latin American nations, the statistics for Chile will not be significantly different from those of other countries.
- The resilience of the state apparatus to the pandemic is based on its ability to continue operating in terms of administrative processes, as well as to continue delivering public services. The calculation of a composite index of resilience of the State apparatus indicates that, due to the years of work in the development of electronic government, certain nations in the region seem to be better positioned to face disruption: in particular, Chile, Uruguay, Mexico, Brazil and Argentina.

In short, recognising that digitalisation can play a fundamental role in mitigating the effects of the pandemic, it is important that governments, the private sector, and Latin American civil society form an agreement for collaboration and joint work that allows, in the short term, the identification of those work areas to improve the performance of certain components of the digital ecosystem. Among some of the initiatives, the following are recommended:

- Accelerate the deployment of more radio-base stations for mobile broadband, eliminating any permit requirements for the deployment of antennas.

- Assign additional spectrum to mobile operators on a temporary basis.
- Require video streaming service providers to reduce the volume of traffic they generate from lowering the technical standards of contents.
- Examine the need to increase the portion of unlicensed spectrum in the upper 5GHz and 6 GHz bands to resolve bottlenecks in Wi-Fi routers.
- Promote innovation in the development of platforms to overcome shortcomings in supply chains. For example, stimulate the development of technology companies to provide a more efficient relationship between logistics providers and transportation services.
- Stimulate the production sector to innovate in the restructuring of processes in order to increase the percentage of the population that can work from home.
- Accentuate the education and training of those social sectors most vulnerable to unemployment.