



DIGITAL TRANSFORMATION AS A COPING STRATEGY TO DEAL WITH THE FALLOUT FROM THE PANDEMIC IN THE CARIBBEAN

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Caribbean economies have been disrupted by the pandemic and the fallout from the war in Ukraine. Therefore, in the short to medium-term, there is need for policies to deal with post-pandemic recovery, including strengthened health and safety protocols, social protection measures and managed economic reopening to stimulate growth and employment.

To deal with the hike in food, energy and fertilizer prices and disruption of supply chains from the war in Ukraine, policy makers will need to deploy strategies to access alternative supplies, manage food stocks and to provide temporary assistance for the most vulnerable.

Both the pandemic and the war have highlighted the need for policies to support changes in economic structures in the areas of work, production and trade, to allow for global competitiveness. Digital transformation, and even disruption in key areas, can help the subregion make the transition in greater productivity, efficiency and competitiveness. Digital transformation entails the strategies, processes and concrete actions to transform an economy and society from an “industrial age characterized by analogue technologies, to an age of knowledge and creativity characterized by digital technologies and digital business innovation” (Francione, 2022).

This article examines some key strategies and practical actions that Caribbean countries can take to accelerate digital transformation. The focus is on those areas that could help in repositioning the regional economy and society to compete globally.

I. ECONOMIC FOUNDATIONS: DIGITAL TRANSFORMATION FOR ECONOMIC REPOSITIONING POST-COVID-19.

The pandemic has made ‘business as usual’ approaches to development obsolete (McKinsey Global, 2022). Revamped policy strategies and projects

after the pandemic should focus on driving sustainable and equitable growth, as a basis for creating decent jobs in an environmentally sustainable manner. This is no easy feat for economies that have been battered by a decline in real output, job losses and a spike in public debt, owing to the pandemic. Therefore, digital transformation as a key adjustment strategy must be informed by a sound vision of what sectors, activities and projects have the highest benefit-cost ratios for the subregion.

Digital transformation of Caribbean economies entails two processes: the production of new digital products and services, particularly for export; and the use of digital technologies and processes to revitalize and transform traditional sectors, such as tourism, agriculture and light manufacturing. Given the critical role of digital disruption in the competitiveness of economies, it is essential that countries undertake a scoping exercise to determine which new digital services might provide the greatest competitive advantage for the subregion.

The first economic component of digital transformation is the use of digital technologies and processes to enhance the productivity and service quality of traditional sectors. Digitalized value chains are radically reshaping tourism and other traditional productive sectors, such as agriculture, manufacturing, education and public services, among others. In the mainstay tourism sector, the pandemic has accelerated the use of digital platform technologies, including contactless bookings, improved use of big data and data analytics to evaluate pandemic-induced changes in visitor

preferences for destinations and activities. This has been called ‘forced digitalization’ by Nick Hall, CEO of Digital Tourism Think Tank (Digital Tourism Think Tank, 2021). However, digitalization must now become the norm in the Caribbean tourism industry, by a vision that views these changes not as an add-on, but a fundamental pillar of their competitive strategy.

The Caribbean Tourism Organization has developed a ‘Digital Tourism Toolkit’, that provides a roadmap for tourism businesses and governments to optimize the use of digital platforms. The Toolkit focuses on increasing the number and spending of tourists, through a strong and credible digital presence and improving the guest experience, by increasing the number of outdoor activities that allow social distancing. The Toolkit promotes investment in technologies that are expected to become the norm in tourism, including guest message networks and platforms, online staff communication tools, contactless booking and payments and online ordering of food and beverages.

Nevertheless, as the subregion mainstreams artificial intelligence, big data analytics, machine learning and other frontier digital technologies in tourism and other activities, it is essential to focus on retraining and upskilling the workforce to prevent automation from significantly reducing the demand for labour. The Internet of Things (IoT) refers to “the interconnection of physical devices, vehicles, machines, buildings and other items with computers and other devices over the internet” (Hyseni, 2022). The IoT can assist in improving the efficiency of service delivery in many

sectors in the Caribbean. In tourism it can facilitate smart luggage tracking to reduce lost luggage and mobile keys are already used to inform guests at hotels when their rooms are ready (CANTO, 2017). In the music industry the IoT can be used to facilitate remote collaboration, that allows producers to record bands in different studios (Pathak, 2020).

The subregion also needs to better leverage digital technologies and processes to upgrade its agriculture and agro-processing sectors (FAO, 2021). Digital agriculture provides a path to solving problems in agriculture, including productivity assessment and management, optimal use of inputs such as water and fertilizers by the use of smart sensors. These processes are supported by big data analysis, climate-smart solutions, such as the use of geographic information systems (GIS) to map hazard prone areas, and research and development for drought-resistant varieties of crops (UNECLAC, 2021). Vital technologies such as Cloud GIS and digital early warning systems could help to reduce disaster risk in agriculture and other sectors.

Globally, manufacturing has long been the forerunner in adopting new technologies. However, due to financial, human capital and technology constraints, Caribbean manufacturing has not often been proactive in adopting new, productivity-enhancing technologies. The pandemic should be a wake-up call for the subregion's manufacturers. In addition, producers now have the opportunity to make calculated investments in digital supply chain management to reduce the time to delivery of inputs, industry 4.0 platforms, including flexible industrial control systems, personalized and customized products and the use of artificial intelligence to cut marketing and advertising costs (I-Scoop.Eu, 2022).

The second major driver of digital transformation in the Caribbean is the provision of digital products and services. These could provide a path for the Caribbean to optimize investment and catalyze knowledge-based production and trade. According to the WTO (2022), year-on-year growth in services was 25 per cent in the third quarter of 2021,

despite the effects of the pandemic. This growth was mainly driven by digital services. The subregion needs to invest in areas, such as digital designs, that could enhance its cultural products and services. Also, e-commerce is ripe for increased investment, but this requires improved payment platforms, data protection and cybersecurity systems to boost confidence of businesses and consumers (Ram, 2021).

II. SOCIO-POLITICAL ASPECTS OF DIGITAL TRANSFORMATION

Alongside the economic approaches, key socio-political problems can be addressed by digitalization. The pandemic was a major driver of the use of digital platforms to provide learning for children in the subregion. However, this trend exposed the existence of significant inequality, as poorer households without adequate access to broadband internet, computers or mobile devices, were inadequately served. The post-pandemic period offers an opportunity to mainstream the best aspects of digital learning into the subregion's education system. For example, online classes should continue to be used to improve the skills of students who are challenged in key Science, Technology, Engineering, Arts and Math (STEAM) training areas, which are critical for their ability to function in a knowledge economy.

E-government has not progressed well in the Caribbean, owing to inadequate legislation, policies and back-tracking with changes of governments. The subregion now has an opportunity to mainstream e-government as a core aspect of its governmental operations to improve service efficiency and reduce costs.

CONCLUSION

The pandemic has led to a forced digitalization in the Caribbean as in some other regions. However, all indications suggest that there is no return to business as usual. Therefore, the subregion has a limited window of opportunity to make the necessary investments in technology,

human capital, systems and institutions to reap the benefits of the digital revolution. Digital transformation should not be seen only as a cost, but as a vital public good with a high rate of return. Innovative technologies such as the internet of things and machine learning provide opportunities for boosting efficiency gains in tourism, the music industry and other sectors. At the same time, there is also a need to search for new niches in key digital products and services such as digital designs, customized data solutions, digital cultural products and disaster solutions, that could advance the subregion's development. ■

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