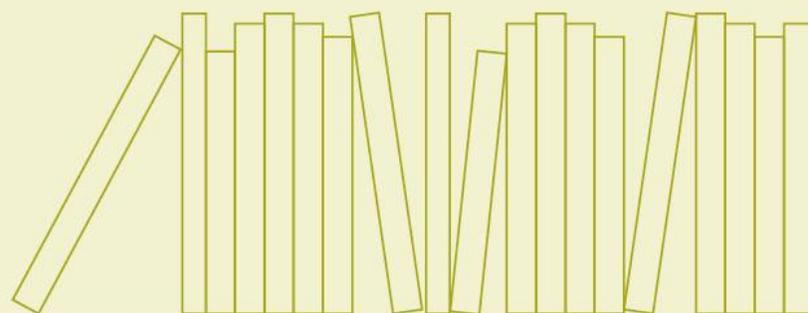


Economic Commission for Latin America and the Caribbean

ECLAC SUBREGIONAL HEADQUARTERS FOR THE CARIBBEAN



Report of the seminar on defining Caribbean investment in ICT-related development programmes: investing in Caribbean innovation ecosystems



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Economic Commission for Latin America and the Caribbean
Subregional Headquarters for the Caribbean

Seminar on defining Caribbean investment
in ICT-related development programmes:
investing in Caribbean innovation ecosystems

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Virtual seminar, 16 December 2021

**REPORT OF THE SEMINAR ON DEFINING CARIBBEAN INVESTMENT
IN ICT-RELATED DEVELOPMENT PROGRAMMES:
INVESTING IN CARIBBEAN INNOVATION ECOSYSTEMS**

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A. ATTENDANCE AND ORGANIZATION OF WORK

1. Place and date of the meeting

1. The Economic Commission for Latin American and the Caribbean (ECLAC) subregional headquarters for the Caribbean convened a seminar on defining Caribbean investment in ICT-related development programmes: investing in Caribbean innovation ecosystems. The event was held virtually on 16 December 2021 from 9 a.m. to 11 a.m. The programme of the seminar, which is enclosed in this report, can be found at annex II.

2. Attendance¹

2. There were 12 persons (7 females) present at this seminar. Participants included government officials from the information and communications technology sector (Dominica and Aruba), as well as representatives from the following regional organizations and non-profit organizations: Caribbean Telecommunications Union (CTU), Organisation of Eastern Caribbean States (OECS), APEX - Caribbean Agency for Justice Solutions, Caribbean Network Operators Group (CaribNOG) and Connected Caribbean. Other participants included consultants and private sector organizations.

3. Agenda

1. Welcome and opening of the seminar
2. Seminar presentation: Financing Caribbean innovation
3. Discussion
4. Closing remarks and vote of thanks

B. REPORTING ON THE PROCEEDINGS OF THE SEMINAR

1. Welcome and opening of the seminar

3. The Chief of the Caribbean Knowledge Management Centre (CKMC) welcomed participants and expressed his appreciation to them for their attendance. He introduced the Director of ECLAC subregional headquarters for the Caribbean, who delivered the opening remarks.

4. Within the context of the fourth industrial revolution, the Director emphasized the pivotal role that access to communication systems played in the information and communications technology (ICT) innovation ecosystem, the digital transformation of Caribbean small island developing States (SIDS), and the need for continued institutional collaboration.

5. The importance of the connectivity infrastructure was highlighted, which was particularly evident during the unprecedented limitations on face-to-face interaction imposed by COVID-19 over the past 21 months, dramatically demonstrating to all, the value of access to high-quality communication services.

¹ See annex I for a full list of participants.

6. Further, she advised that full digital transformation was hinged upon “access to adequate telecommunications and Internet services” and this seminar offered the opportunity to examine this urgent issue, whereby Caribbean SIDS can explore the development of robust connectivity infrastructure that support their advancement towards achieving the sustainable development goals (SDGs). The need for equitable and inclusive service delivery is at the core of the Secretary-General’s “Roadmap for Digital Cooperation”, which asserts that “a safe, inclusive and equitable digital future” is vital for advancement and peace. The Director also called for “stronger collaboration between governments and relevant stakeholders” and between policymakers and investors “to create an improved enabling environment for investment that will improve digital inclusion, and promote and facilitate opportunities for economic growth, innovation, and competitiveness”.

7. In closing, the Director also drew attention to ECLAC’s “Digital Agenda for Latin America and the Caribbean (eLAC2022)”, a mechanism that promotes policy design, capacity-building and political dialogue on the challenges and opportunities related to digital transformation, which provided the overarching context under which the seminar was convened.

2. Seminar presentation: financing Caribbean innovation

8. The Chief of the Caribbean Knowledge Management Centre (CKMC), ECLAC placed emphasis on the call for collaboration that was made by the Director of ECLAC. He emphasized that “there needs to be a collaborative experience...grounded in the issue of investment.” He also noted that financing was at the heart of this question of investment, as consideration is given to advancing the ICT ecosystem in the subregion. He introduced two presenters, as esteemed influencers and prominent change-makers, given their contributions to this area of ICT policymaking in the Caribbean: Rodney Taylor, Secretary-General, Caribbean Telecommunications Union (CTU) and Bevil Wooding, ECLAC consultant and subject matter expert. They made substantive contributions to the subtopic, “Financing Caribbean innovation: considerations for regional action”.

Presenter 1: Rodney Taylor, Secretary-General, Caribbean Telecommunications Union (CTU)

9. The overall theme of the Secretary-General’s presentation was the policymaking context for fostering a Caribbean ICT-enabled innovation ecosystem. Within that context, he situated and aligned the financing of the ecosystem with Goal 9 of the SDGs, discussed the challenge of the digital innovation divide and inequalities in the ecosystem, highlighted skill set gaps which limited optimal advancement of ICT innovation in the Caribbean, and spotlighted existing investment initiatives.

10. The Secretary-General of the CTU shared that financing Caribbean innovation is aligned to Goal 9 of the SDGs: build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. He welcomed the importance that the United Nations had ascribed to this sustainable development goal and its relevance to the Caribbean subregion. In providing a historical context, he noted that little had changed since the previous industrial revolution, with the possible exception of the widening of the technological and digital divide between developed countries and developing countries, as it was the countries of the North that had taken advantage of the fourth industrial revolution. Notwithstanding the emergence of global tech giants, an important takeaway for Caribbean innovators was that change-makers must have an impact on ICT-enabled innovation. This can empower the competitiveness of the Caribbean within the global space, and thus required the creation of international opportunities for young persons and entrepreneurs in the Caribbean.

11. Several areas of importance in addressing the digital divide were outlined, including the digital innovation divide, ecosystem challenges and regional and national investment. COVID-19 revealed inefficiencies of the bureaucratic and paper-based structures of government services, where it even hindered

the delivery of such essential services. In contrast, Singapore had implemented “digital first solutions” over ten years ago, and in that regard, he recognized that innovation fosters collaboration among government, civil society and the private sector, considered an essential part of a thriving ICT sector.

12. The Secretary-General also drew attention to the inequalities in ecosystems within the digital innovation divide. He identified financing as a part of the innovation ecosystem and noted that there were inefficiencies in the use and allocation of resources. He noted that funding was available from various financial institutions, including the World Bank and the Inter-American Development Bank (IDB), as well as from national governments. Further, several Caribbean Governments now have innovation/ICT ministries, including, Trinidad and Tobago and Barbados.

13. He suggested that the academic system should review the degrees being offered by universities and skill sets being supported, since these will directly inform the readiness of youth to become active contributors to the new digital environments, including the metaverse, artificial intelligence (AI) and smart cities. In addition to underscoring the importance of understanding the skills that will drive the fourth industrial revolution, he showcased the overarching impact of ICT innovation on all sectors, including agriculture (smart farms, drones, security improvement, smart systems), energy (smart grids, solar energy), and tourism (Airbnb, Uber). The ubiquitous nature of ICT innovations also highlighted the need for governments to include ICT innovations in their national development plans.

14. He provided an overview of regional and national investment initiatives in Barbados and several Eastern Caribbean countries, including Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines. These include the Caribbean Digital Transformation Project (CARDTP) of the Organisation of Eastern Caribbean States (OECS); and phase two of the Caribbean Regional Communications Infrastructure Program (CARCIP) which were both funded by the World Bank at US\$ 94 million and US\$11.9 million, respectively; as well as the Public Sector Modernization Programme (PSMP) of Barbados, which was funded by the IDB at US\$ 40 million. He summarized that CARCIP focused on connectivity, as emphasized by the Director of ECLAC, given its pivotal role in ICT innovation. Connectivity, access to information, access to the cloud, access to infrastructure, and access to knowledge, were all noted as being critical.

15. Ultimately, he lamented the existence of challenges in the subregion, stating that although there had been “massive investment in digital ecosystems, many countries are unable to adapt to the fast-changing digital environment”. He further explained that to address the gap in data collection, the CTU established a research and analysis unit to understand its impact on countries. He then welcomed the opportunity to partner and collaborate with ECLAC in conducting research to support and inform ICT-enabled innovation policymaking in the subregion. He added that many CTU member States still lack national policies and strategies, as well as legislation that supports innovation. A vibrant, thriving and impactful ecosystem is yet to be seen. Other challenges identified were the lack of proper assessment of systemic issues and weak collaboration among the stakeholders.

Presenter 2: Bevil Wooding, ECLAC consultant and subject matter expert

16. In his review of the strategic importance of financing innovation ecosystems, the ECLAC consultant contextualized his presentation around three themes: (i) the innovation imperative, (ii) prioritization for financing Caribbean innovation ecosystems and (iii) the pursuit of local innovation within the context of global awareness.

17. In setting the context for the innovation imperative, he defined digital transformation as “the integration of digital technology into all areas of a business, institution, or territory...for a purpose”. In addition, he observed that digital transformation is never considered in a vacuum, but instead should always

seek to transform and evolve a fundamental issue which delivers value. As an example, he suggested that transformation should have a beneficial outcome and always involve some form of cultural change. He recalled how governments in the subregion experienced trauma at the advent of the COVID-19 pandemic, when faced with the need to implement public health and safety measures, the digitization of public services, as well as the provision of support for online learning and for business continuity.

18. Financing innovation ecosystems was identified as one of the most fundamental requirements for enabling the digital economy. The last 21 months of the pandemic had served to highlight a number of the gaps in innovation in the Caribbean. He echoed the sentiments expressed by the Director of ECLAC, that there was urgent need for greater regional collaboration ... and greater adoption and utilization of technology as a means to Caribbean development. During his presentation he explored the gap between "ideation and enterprise creation", noting that while there was no shortage of great ideas in the region, there was a disturbing shortage of ideas that translated into new Caribbean enterprise in a sustainable way.

19. While noting that innovation required several supporting factors, including an enabling foundation that covers funding, skills, research and infrastructure, he observed that national development agendas and public policy should be tailored to foster and encourage indigenous innovation. That, together with his advocacy for academia, particularly at the tertiary-level, to more strongly focus on innovation and technology in their academic programmes, were seen as critical to shifting the entrepreneurial mindset to embrace ICT innovation. In turn, that collective push to advance ICT innovation could provide an effective response to the challenge of limited job opportunities for young persons in the Caribbean ICT ecosystem.

20. Finally, he observed that at the global level, tech pioneers were especially celebrated, to the exclusion of local innovators, and suggested that there may be the societal belief that ICT innovation did not occur in the Caribbean. To that end, there was a need to profile and celebrate tech pioneers and leaders to whom Caribbean society could relate, and thus inspire greater trust and confidence in Caribbean capacity and possibility. This was important for illustrating and showcasing that success could be acquired within the Caribbean ICT innovation space. In that regard, greater emphasis should be placed on the essentials, such as the generation of local content, creating value-added services, providing transaction support, and protecting local information and knowledge assets.

3. Discussion

21. The Discussion explored four critical themes for investing in Caribbean innovation ecosystems: (i) funding ICT and investment, (ii) indigenous ideation, (iii) entrepreneurial mindset, and (iv) strategic planning.

22. In the area of funding ICT and investment, there was general agreement among seminar participants with the view of the Secretary-General of the CTU that, within recent times, governments had been more deliberate and strategic in seeking funding for public sector modernization programmes, altogether supporting and nurturing the ecosystem. However, targeted and expanded investment funding required additional policy support from the government and banking sector. This lack of policy support was particularly evident given the lament by some participants regarding the lack of awareness of the need for investment in the ICT innovation ecosystem.

23. Indigenous Ideation in the Caribbean is complex. On one hand, participants observed that there was still a societal preference for foreign solutions over indigenous ones of equal or higher efficacy, with somewhat of a closed mindset for the development of ideas from Caribbean. In some instances, Caribbean entrepreneurs may experience more growth if they re-emerge from foreign countries. In that regard, the lack of appreciation for viable ideas in the subregion is an ongoing issue. On the other hand, the Caribbean Telecommunications Union reported developing a database of indigenous-Caribbean tech actors, noting, for example, Alan Emtage from Barbados, who wrote a piece of computer code which gave birth to Internet

search. Ultimately, there is the need for investment in the developing the perception of the value in indigenous talent and creativity.

24. However, notwithstanding Caribbean indigenous creativity, the issue of entrepreneurial mindset was seen as a critical enabler of the ICT innovation ecosystem. There is the need to engender entrepreneurial thinking among secondary and tertiary level students, encouraging a shift from traditional employment opportunities for earning an income. Moreover, that entrepreneurial mindset should also be coupled with a change in the concept of start-ups and small businesses, where the scope of the market was limited to the regional space. In particular, small business owners may not perceive themselves as viable business due to the small scale within which they operate. Caribbean ICT innovators can be supported through greater regional access and should reorient to competing on a regional and global scale, by seeking larger investment opportunities and thus pursuing greater returns on such investment.

25. In that regard, a mitigating factor to leveraging larger investment opportunities was a deficiency in strategic conceptualization and planning within the entrepreneurship and small business sector. Many business owners may not consider the full cost requirements involved in developing a business idea, such as market research, branding, intellectual property protection, marketing and cybersecurity. Entrepreneurs not equipped with business plans, that they subsequently found were required when they sought funding from banks, reinforce already high levels of risk aversion, especially for ICT innovation start-ups given the novelty of their business concepts. In many instances, start-up businesses lacked funding because of their inability to harness strategic planning tools and unprepared skilling to leverage larger funding opportunities.

4. Closing remarks and vote of thanks

26. The Chief of CKMC ECLAC expressed his appreciation to the lead panellists, the Director of ECLAC, all participants, as well as to his ECLAC colleagues. He reaffirmed that the seminar provided an opportunity to vision change in the Caribbean subregion. He welcomed the call for collaboration between the CTU and ECLAC to conduct policy research.

Annex I**LIST OF PARTICIPANTS****A. Member States****DOMINICA**

- Bennette Thomas, Director - Telecommunications and Technology, c/o Ministry of Economic Affairs, Planning, Resilience, Sustainable Development, Telecommunications and Broadcasting, email: thomasb@dominica.gov.dm / directortelecoms@dominica.gov.dm

B. Associate Members**ARUBA**

- Gerald Kock, Advisor to the Minister, Ministry of Economic Affairs, Communication and Sustainable Development, email: gerald.kock@gobierno.aw

C. Organizations**Caribbean Telecommunications Union (CTU)**

- Junior McIntyre, Director, Research and Analysis, email: junior.mcintyre@ctu.int
- Annalee C. Babb, consultant, email: acbkci@gmail.com

Organisation of Eastern Caribbean States

- Rhea Yaw Ching, Special Advisor - ICT/EDU, email: rhea.yawching@oecs.int

D. Non-profit organizations**APEX - Caribbean Agency for Justice Solutions**

- Deborah Thurton, Chief Operating Officer, APEX – The Caribbean Agency for Justice Solutions, Belmopan, Belize, email: coo@apexjustice.org

Caribbean Network Operators Group (CaribNOG)

- Claire C. Craig, Research Coordinator, Caribbean Network Operators Group, Mt. Lambert, Trinidad and Tobago, email: claire.craig@caribnog.org

Connected Caribbean

- Sabrina Adewumi, Programme Coordinator, Connected Caribbean, Washington, D.C., United States of America, email: info@connectedcaribbean.org

E. Other participants

- Lerone Brathwaite, Independent Regional consultant, Port of Spain, Trinidad and Tobago, email: leronebrathwaite@gmail.com
- Kevin Khelawan, Chief Operating Officer, Teleios Systems, Port of Spain, Trinidad and Tobago, email: kevin.khelawan@teleios-systems.com

- Michelle Stephens, Chief Strategy Officer, Caribbean Strategy, Gros Islet, Saint Lucia, email: michelle@caribbeanstrategy.com
- Camille Wooding, Managing Director, TSG Consulting Limited, St. Joseph, Trinidad and Tobago, email: camille.wooding@tsgconnect.com

F. Facilitators

- Rodney Taylor, Secretary-General, Caribbean Telecommunications Union, email: rodney.taylor@ctu.int
- Bevil Wooding, subject matter expert and collaborative partner, email: bevil.wooding@viridion.org

G. Secretariat

ECLAC subregional headquarters for the Caribbean

- Diane Quarless, Director, email: diane.quarless@eclac.org
- Dillon Alleyne, Deputy Director, email: dillon.alleyne@eclac.org
- Dale Alexander, Chief, Caribbean Knowledge Management Centre (CKMC), email: dale.alexander@eclac.org
- Johann Brathwaite, Programme Management Officer, Programme Support Unit, email: johann.brathwaite@eclac.org
- Lika Døhl Diouf, Associate Programme Management Officer, Caribbean Knowledge Management Centre (CKMC), email: lika.diouf@eclac.org

Annex II**PROGRAMME**

- 0900 – 0910 hrs **Welcome and opening of the seminar**
- Welcome
Dale Alexander, Chief, Caribbean Knowledge Management Centre (CKMC), ECLAC subregional headquarters for the Caribbean
 - Opening of the Seminar
Diane Quarless, Director, ECLAC subregional headquarters for the Caribbean
- 0910 – 1000 hrs **Seminar presentation: Financing Caribbean Innovation**
- Considerations for Regional Action I
Rodney Taylor, Secretary-General, Caribbean Telecommunications Union
 - Considerations for Regional Action II
Bevil Wooding, ECLAC consultant
- 1000 – 1020 hrs **Discussion**
- 1020 – 1030 hrs **Closing remarks and vote of thanks**
- Dale Alexander, Chief, Caribbean Knowledge Management Centre (CKMC), ECLAC subregional headquarters for the Caribbean



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