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The Caribbean ICT Eco-system: preparing for the digital economy

CANTO JULY 23RD, 2018

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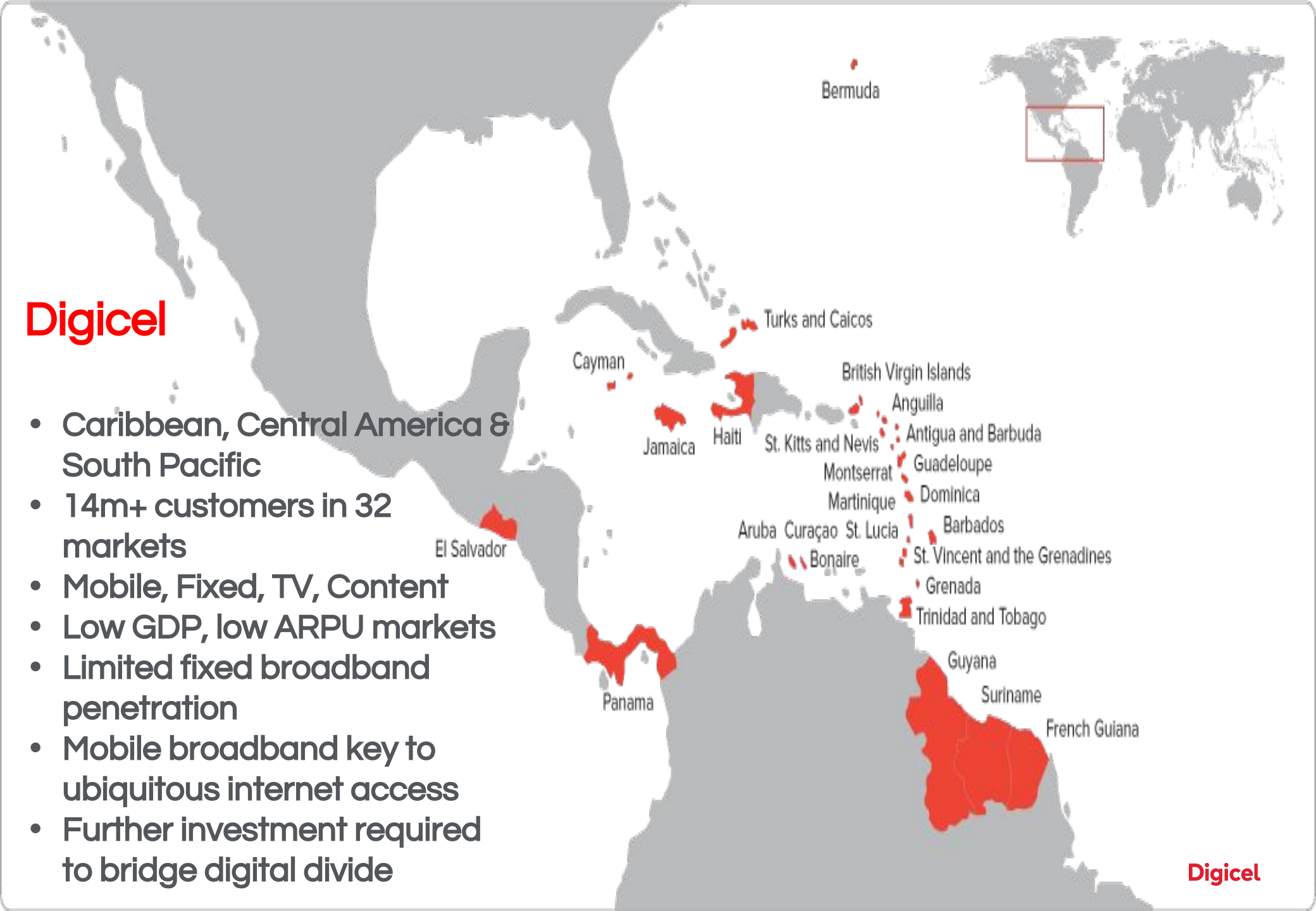
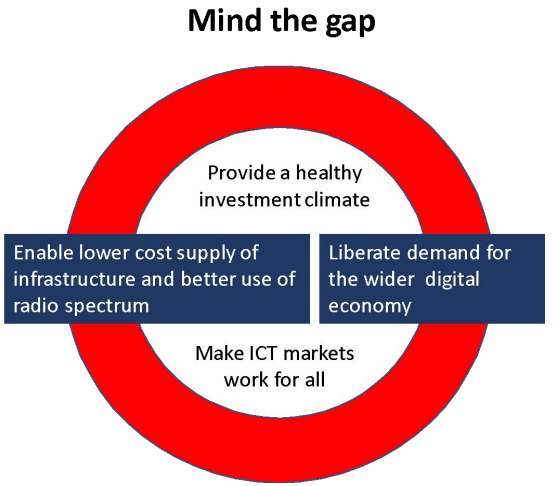
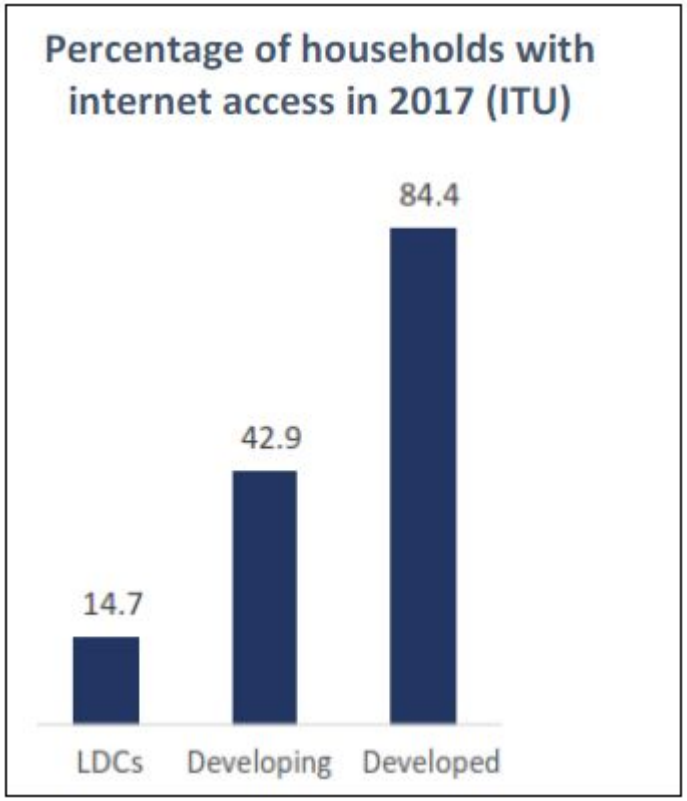
- Caribbean, Central America & South Pacific
- 14m+ customers in 32 markets
- Mobile, Fixed, TV, Content
- Low GDP, low ARPU markets
- Limited fixed broadband penetration
- Mobile broadband key to ubiquitous internet access
- Further investment required to bridge digital divide

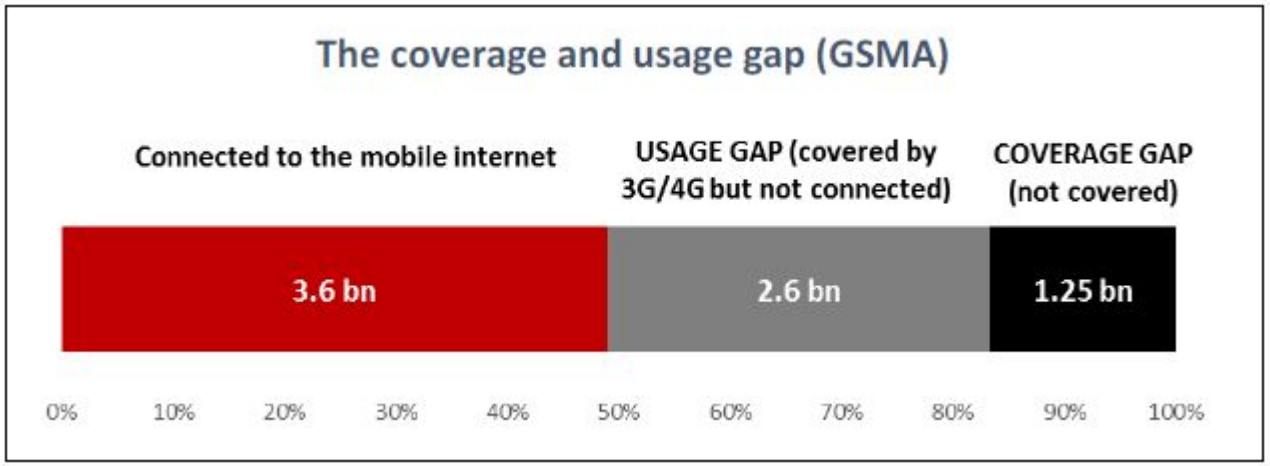


How to pay for broadband networks?

- Need to address how all actors who benefit commercially from the use of networks contribute to the cost of these.
- Governments will need to widen the tax base to require contributions from overseas providers of digital services that generate revenues in their jurisdictions.
- USF contributions - "Pay of Play" model could recognise investments in network infrastructure by Digital economy players and require contributions from actors who prefer to "pay".
- Beware "Flights of Fancy" - if a solution is not practical or economic in a high GDP economy it won't work in the







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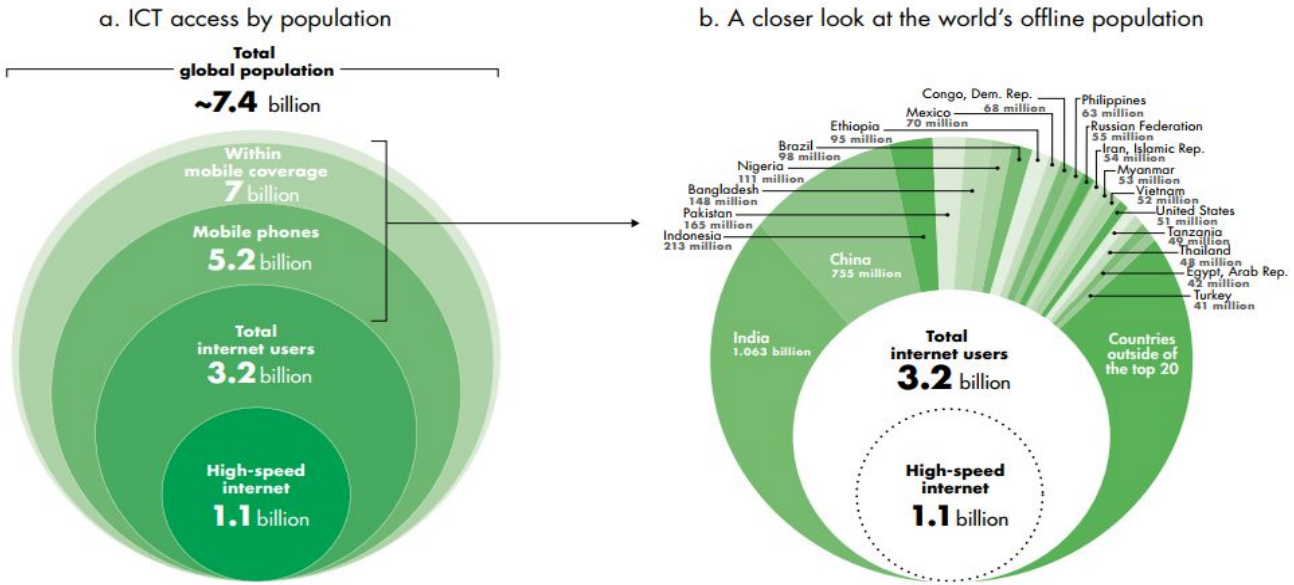
CARCIP countries will join the top 15% of the global population with high-speed internet

- Networks capable of scaling speeds up to 10Gb, 100x faster than today
- Connecting100% of government buildings and schools within 9 months
- Ownership of the fibre GWAN infrastructure handed to governments creating nationally owned assets



Sources: World Bank 2015; Meeker 2015; ITU 2015; GSMA, https://gsmaintelligence.com/; UN Population Division 2014. Data at http://bit.do/WDR2016-FigO_5.

Note: High-speed internet (broadband) includes the total number of fixed-line broadband subscriptions (such as DSL, cable modems, fiber optics), and the total number of 4G/LTE mobile subscriptions, minus a correcting factor to allow for those who have both types of access. 4G = fourth generation; DSL = digital subscriber line; ICT = information and communication technology; LTE = Long Term Evolution.

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Plum Report

- Commissioned by Digicel and Cable & Wireless Communications
- David Lewin – Author of 2005 Report by Ovum and Indepen on application of EU Framework in Cyprus, Malta and Luxembourg
- Key differences between the Caribbean and the EU are that Caribbean nations tend to be much smaller – generally with populations far less than 1 million, and face a number of geographical challenges – being islands often with mountainous terrain.
- The costs and burden of a regulatory framework similar to the EU framework in "microstates" are likely to be excessive.
- Recommends a preference for ex-post regulation and capping regulatory costs and USF contributions in order to free up cash for investment in networks
- Cannot look at Telecoms in isolation: Horizontal economy wide approach required and other forms of regulatory reform are required also to facilitate the digital economy

October 2017

plum insight

Effective regulation of telecommunications in the island states of the Caribbean

Grant Forsyth and David Lewin

How should be island states of the Caribbean regulate their telecommunications sectors so as to serve their best long-term interests? To answer this question policymakers need to take account of the problems raised by the small-scale of these islands nations. Many have a population of 100,000 or less and, as such, are clearly 'microstates'.

The telecommunications sector is characterised by substantial fixed costs and significant economies of scale. In a macrostate, with a population of several million or more, this usually does not matter because the main operators function at a point well above minimum economic scale. But in a microstate, such as an island state of the Caribbean, the main operators usually operate at a point well below minimum economic scale as illustrated in Figure 1. We estimate that the minimum economic scale for a mobile network is above 2 million customers and for a fixed network slightly lower. But in both cases this is well above the size of a Caribbean island market.

The problem of minimum economic scale

Efficient telecommunications regulation in microstates

These economy of scale effects impact on how a a telecommunications market functions in a microstate and has important implications for how that market should be regulated. Specifically:

- efficient prices (both wholesale and retail) are higher in microstates. So regulators need to avoid setting prices by benchmarking macrostate prices. This would lead to prices below actual cost, few investment incentives, inefficient entry (in the case of

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What are the correct frameworks to enable the digital economy?

- Mismatch between policies of securing digital infrastructure rollout and developing a legal and regulatory framework for a digital economy.

- A “regulatory reset” to underpin the digital economy to update economy wide frameworks and legislation?

- Regulatory frameworks for the digital economy will necessitate a move away from sector specific regulation towards horizontal economy wide rules that apply to all service providers: important components being competition law, consumer protection and privacy/data protection rules.

- Enabling the digital economy requires a wider approach – e.g. update contract laws, property laws, enable digital identity, banking rules should permit mobile wallet, e-transactions, etc.

- Governments will need to widen the tax base to require contributions from overseas providers of digital services that generate revenues in their jurisdictions.

- Rules to address new challenges required: fake news, political interference, responsibility for content.

- Appropriate to develop a Caribbean response that reflects regional priorities - connecting the unconnected and ensuring that the region can be an active player in the digital economy.

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- Regional collaboration to identify best practices and to coordinate approaches - CTU/CICC


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