Broadband Deployment in the Caribbean

From strategy to operations: The end-to-end approach to broadband deployment in the Caribbean

Jelmer Gulmans
July 25th, 2018

Almost all Caribbean telcos require **faster** and **more** fixed broadband connections for **lower OPEX**.

Faster

To support rapid growth of:
- High-quality Video
- Cloud services
- eServices
- Smart homes

To support regular speed increases that reduce pressure to decrease prices.

More

To connect the unconnected consumers and businesses in remote areas.
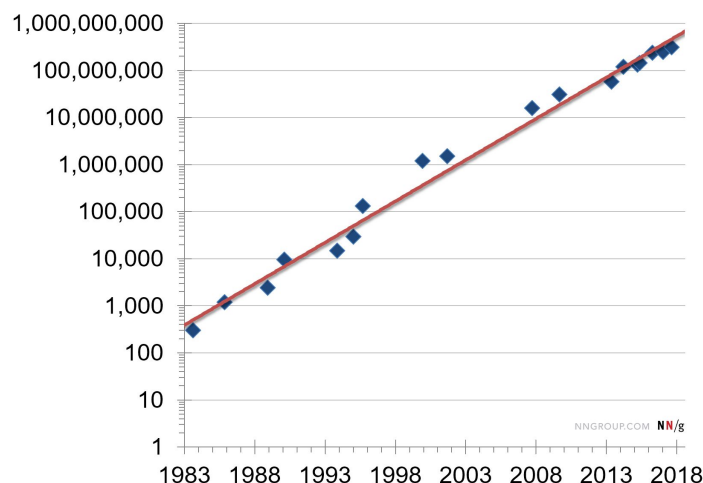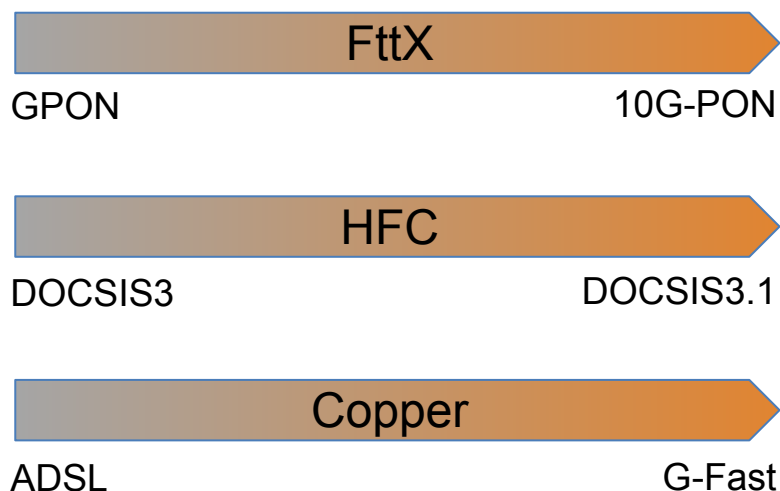
Lower OPEX

To replace outdated copper infrastructures that require regular preventative and corrective maintenance for high costs.

Broadband networks need to be future-proof to support the evolution towards Gigabit networks.

Nielsen's law – exponential growth of data usage

1,000,000,000	
100,000,000	
10,000,000	
1,000,000	
100,000	
10,000	
1,000	
100	
10	
1	

1983 1988 1993 1998 2003 2008 2013 2018

NNGROUP.COM NN/g

(R)evolution towards Gigabit capable networks

FttX

GPON   10G-PON

HFC

DOCSIS3   DOCSIS3.1

Copper

ADSL   G-Fast

The June 2018 Ookla Speedtest Global index shows there is a long way to go for the Caribbean.

Speedtest Global Index
June 2018
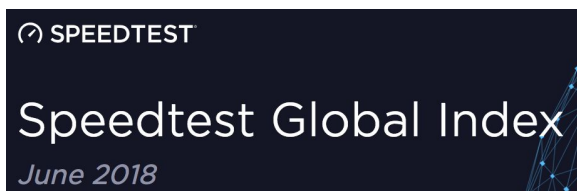
Global Average

⬇ **Download** Mbps
46.25

⬆ **Upload** Mbps
22.47

#	Country	Speeds (Mbit)
1	Singapore	181
2	Hong Kong	151
3	Iceland	149

Regional Broadband speeds (Mbps)

Country	
Barbados (24)	
Trinidad & Tobago (43)	
Puerto Rico (50)	
Panama (52)	
The Bahamas (74)	
Curacao (72)	
Jamaica (76)	
Dominican Republic (97)	
Belize (107)	
Costa Rica (111)	
El Salvador (116)	
Suriname (121)	
Honduras (125)	
Nicaragua (128)	

0 10 20 30 40 50 60 70
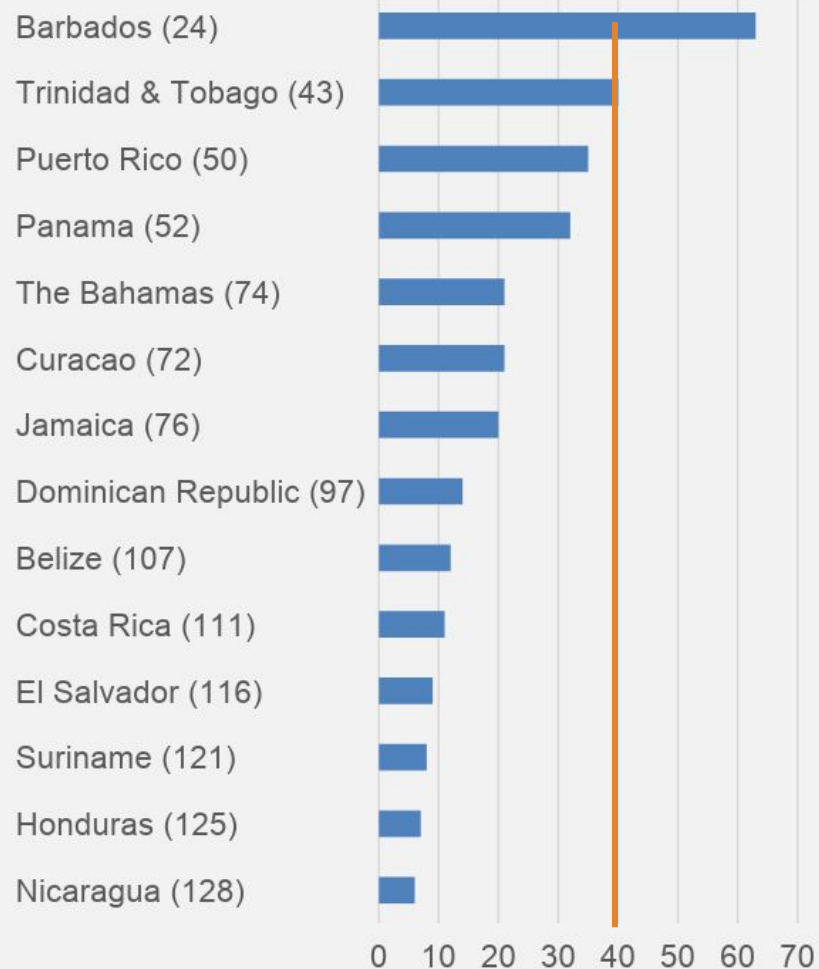
Succesful broadband deployment requires an end-to-end approach.

End-to-end management (incl. stakeholder management)

1. Strategy and business case
2. Financing
3. Architecture
4. Proposition
5. Survey
6. Design
7. Procurement
8. Deployment
9. Migration and new sales
10. Hand-over

People and organization development
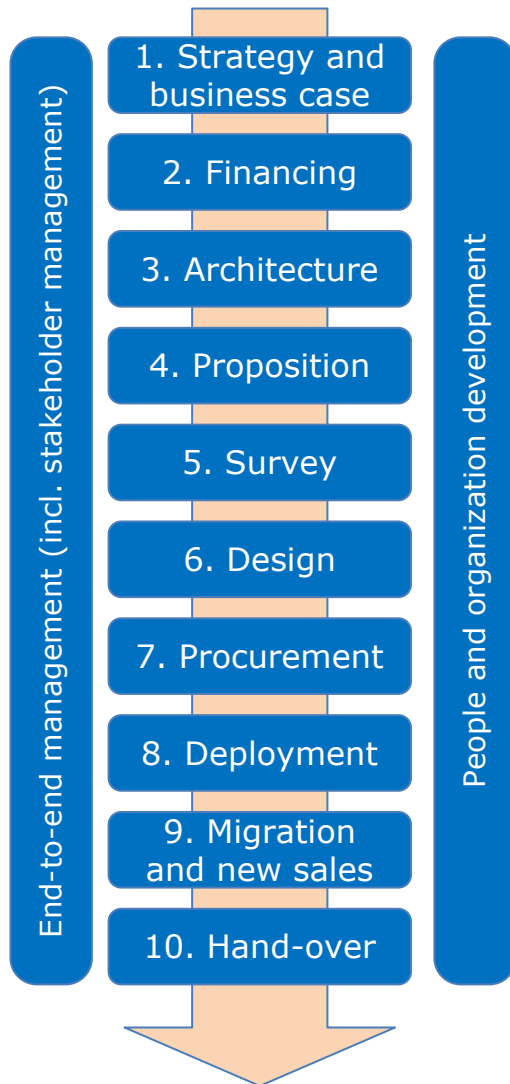
The end-to-end approach should incorporate best practices in each of the steps.

End-to-end management (incl. stakeholder management)

People and organization / development

1. Strategy and business case
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The strategy needs to include the detailed definition of "deployment areas" and the priority of these.

The strategy and architecture might differ between deployment areas, given the difference in income levels, density, overhead/underground and existing infrastructure.

Simplification is key to provide clarity to customers upon new sales and migration and to operational inefficiencies.

Deployment of Homes Passed network should be a smooth running machine that accelerates to the optimum speed and eliminates all inefficiencies to decrease costs.

An in-home strategy is required to address the increasing complexity of the in-home connectivity.

Broadband should not stop at the front door! An in-home strategy is required to prevent this.
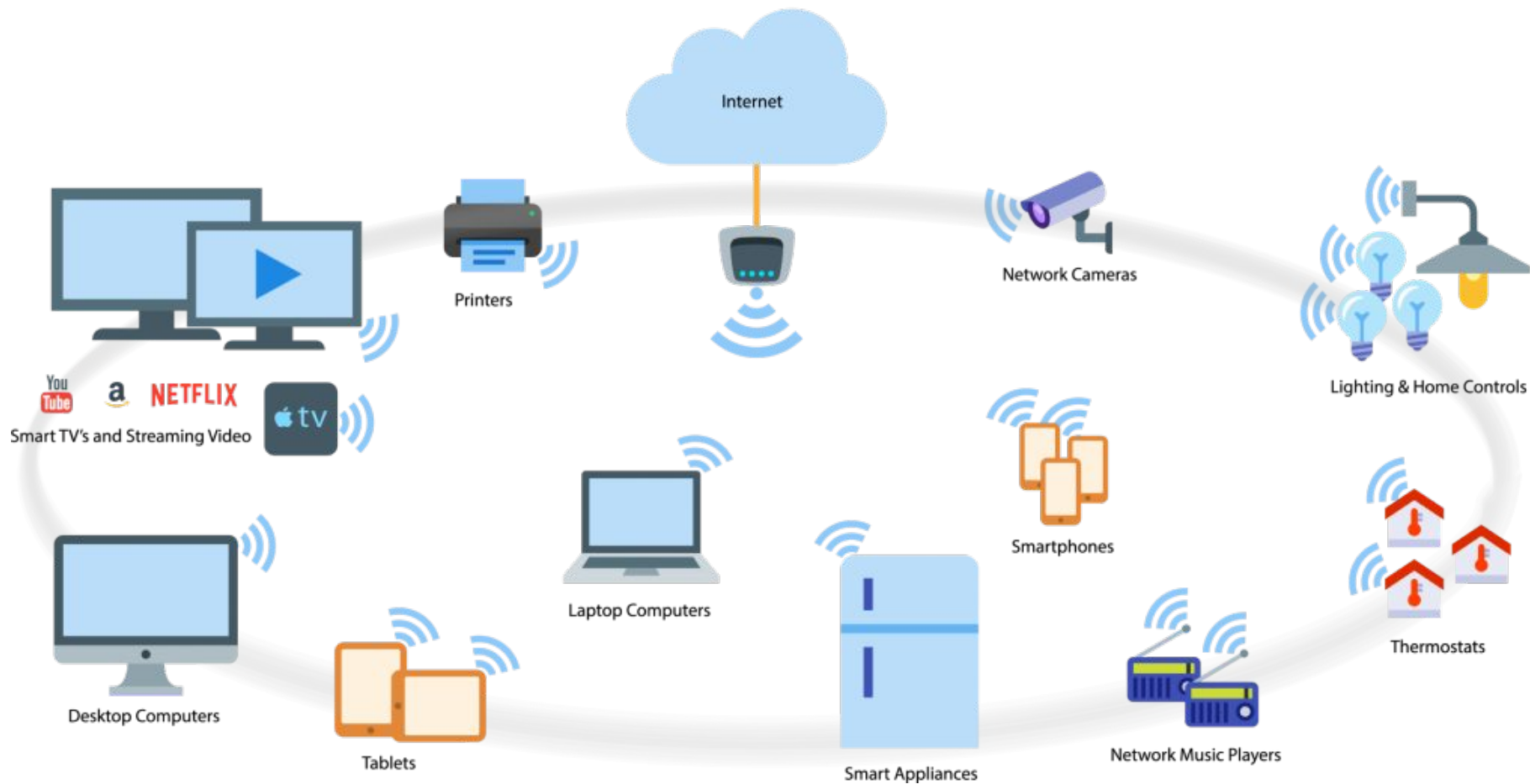
The strict demarcation is under pressure. Internet providers need to enter and "own" the home

Customer responsibility

- Demarcation at the cable entry.

- Advertised speed achieved when connected to modem with network cable.

- Customer needs to solve all in-home issues. Possibly with inferior/ mediocre solutions.

- Severe risk of customers having bad customer experience.

Provider-managed in-home experience

- Internet provider enters the home, possibly for a recurring premium.

- Multiple (meshed) APs provide WiFi coverage and capacity throughout the home.

- High-quality (4K) IPTV is supported on multiple TVs.

- Customer and provider can monitor and troubleshoot in-home experience.

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