



Regional Imperatives for Digital Transformation Post Covid-19

Sustainable Digital Transformation – The Importance of a Very High Availability
Supporting Environment

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1 **Cloud Carib:** Who We Are & What We Do

CLIENT FOCUS

- Vendor Applications G2B, G2C, G2G

CLOUD CARIB FOCUS

- Automated On-Demand Allocation of Resources
- DR and Business Continuity Management
- Cyber Security at all Levels
- SLA KPI
- 24/7 Pro-Active Management
- C3 (Command, Control, Communicate) Operation
- Elastic Environment Growth Strategy
- Implementation of International Operational Standards
- Multiple OS/DB/Application Support

Sustainable Digital Transformation – The Importance
of a Very High Availability Supporting Environment



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Cloud Carib: Who We Are & What We Do

- Processing **over 3,000,000,000** in financial transactions annually!
- Over **10,000 assets under management** within Latin America and the Caribbean
- VMware has approximately **4500 partners** worldwide with only **300 Cloud Verified Service Providers** – placing Cloud Carib in the **top 2% worldwide**
- Veeam's award places Cloud Carib within the **top 1% of service providers** within Latin America and the Caribbean
- The only **24x7 Command and Control Centre (C3)** dedicated to managed cloud services within the Caribbean
- Service backed by **industry leading Service Level Agreements (SLAs)** with guarantees beyond any other provider in Latin America and the Caribbean
- The regional leader for **Full Stack Service Management** spanning: Data Centre Services, Security and Business Continuity Services, and Mobility and Productivity Offerings
- Latin America and the Caribbean's only **white glove service guarantee**



Trusted by the region's most astute governments, financial services, and security conscious organisations



As a Managed Service Provider

Cloud Carib is
Technology & Vendor
AGNOSTIC



4 Cloud Carib: Our Data Centres



OUR PRESENCE IN THE REGION

**Geographically Diverse Pool
of Data Centres in the Region**



5 Innovation



***Centre of
Excellence***

- Dedicated facility to promote cutting edge ICT in the Caribbean Region
- State-of-the art infrastructure for small conferences/workshops, etc.
- Available to Caribbean governments and regional organizations as well as commercial ICT vendors
- Cloud Carib wants to maximize its usage to promote strategies for ICT sustainability and resilience in the region



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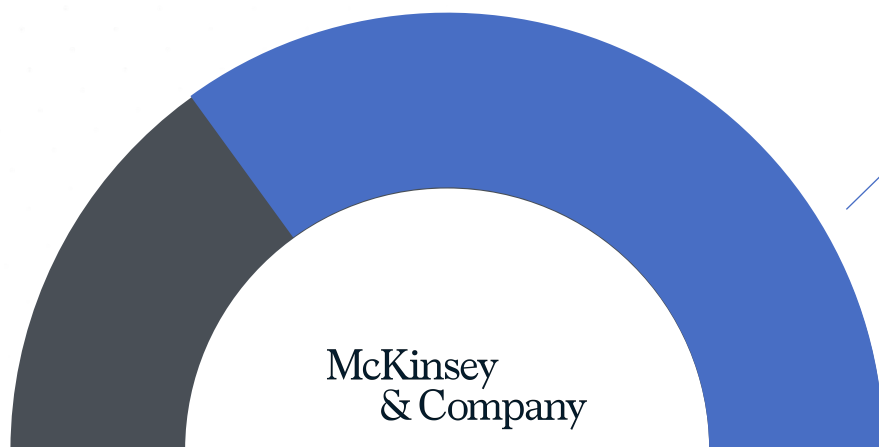


6 What Is Digital Transformation?

“Digital transformation can refer to anything from **IT modernization** (for example, cloud computing), to digital optimization, to the invention of new digital business models.

The term is widely used in **public-sector organizations** to refer to modest initiatives such as putting services online or legacy modernization. Thus, the term is more like “digitization” than “digital business transformation.”

Gartner Information Technology Glossary

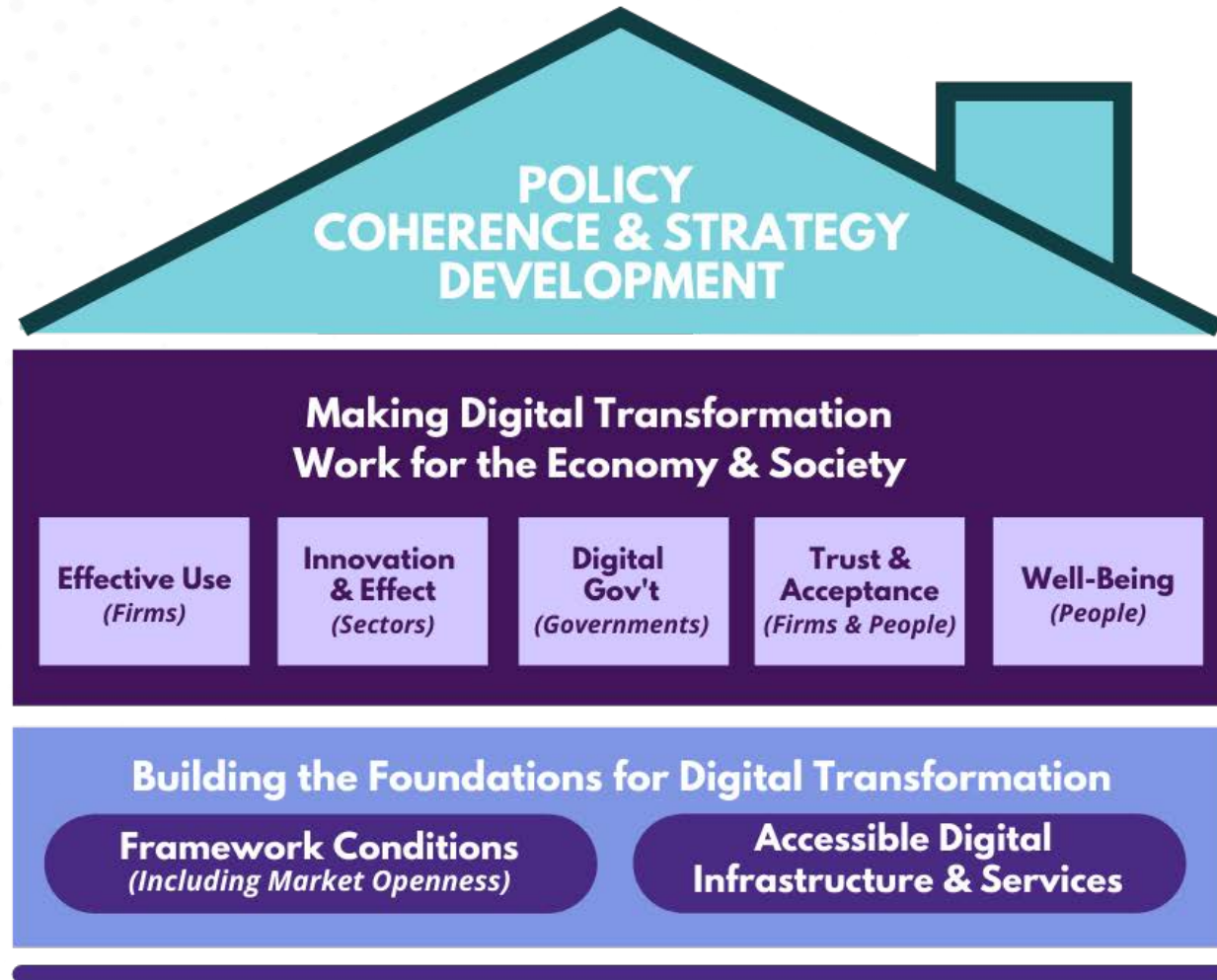


70% of complex,
large-scale
change programs
don't reach their stated goals.

*Creating a performance infrastructure
can help ensure that it won't*

McKinsey: The 'how' of transformation [2016](#)

7 What Level of Digital Transformation Is Required?



- Ensuring **infrastructure & access** for all
(UN Sustainable Development Goals, No. 9)
- A society that will rely on the knowledge of their **citizens to drive the innovation**, entrepreneurship and dynamism of that society's economy
(Source: Towards knowledge societies: UNESCO world report)
- **Modest initiatives** such as putting services online or legacy modernization.

8 Why Infrastructure is Critical

*“it is essential that G20 economies continually **invest in the development of digital infrastructures** to meet existing and future demand. They provide the foundation for many new services, applications and business models.*

*They are also **crucial in underpinning and enabling the digital innovations** that are transforming production, including in the context of Industrie 4.0.”*

OECD: key-issues-for-digital-transformation-in-the-g20 - 2017

Without effective roads, bridges, and tunnels commerce and citizens suffer

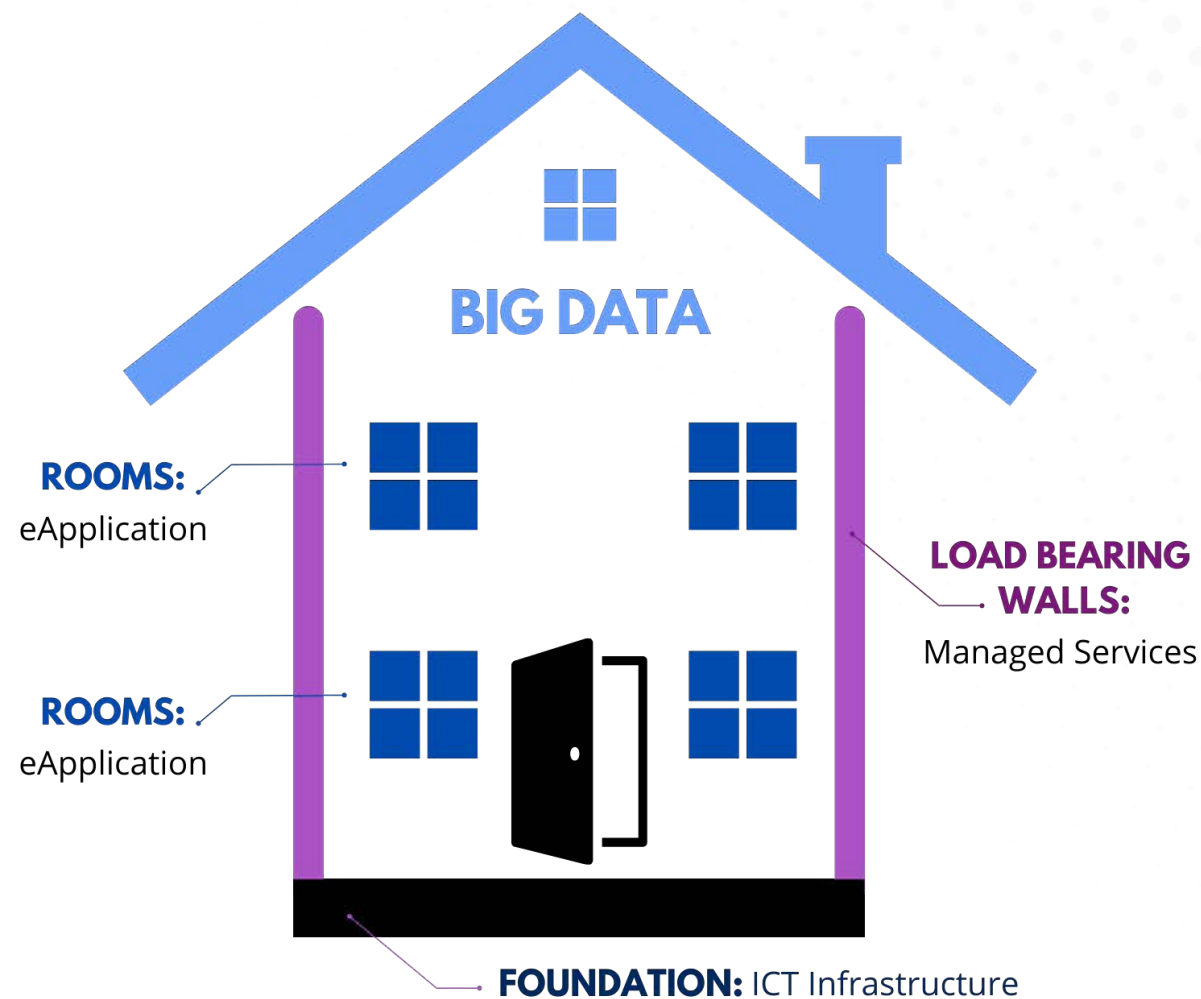
9 Digital Transformation Is Like Building A House

Sustainability and successful digital transformation is based on three fundamental elements

1. Good Architecture
2. Solid Foundation and
3. Consistent Fit-for-Purpose Supporting Infrastructure

“A central building block is the digital enterprise architecture, which is the whole-of-government approach to support government ecosystems.

It is **the critical component** that translates transformation needs into specific functional and technical requirements that can lead to the deployment of transformation digital services.” *ITU : Digital transformation and the role of enterprise architecture*



10 What Is Required for Digital Transformation?



Secure Network Architecture

- Multi-tenant highly available secure design that supports Government, Quasi-Government and SOE
- Robust, well designed and **well-maintained** network architecture using **best practice ISO standards**
- Designed to reduce cost and complexity by leveraging **national carrier's core networks**
- Commercial agreement supported by **Service Level Agreement with clearly stated KPIs**



Secure and Highly Available Data Centers, Compute, and Communications

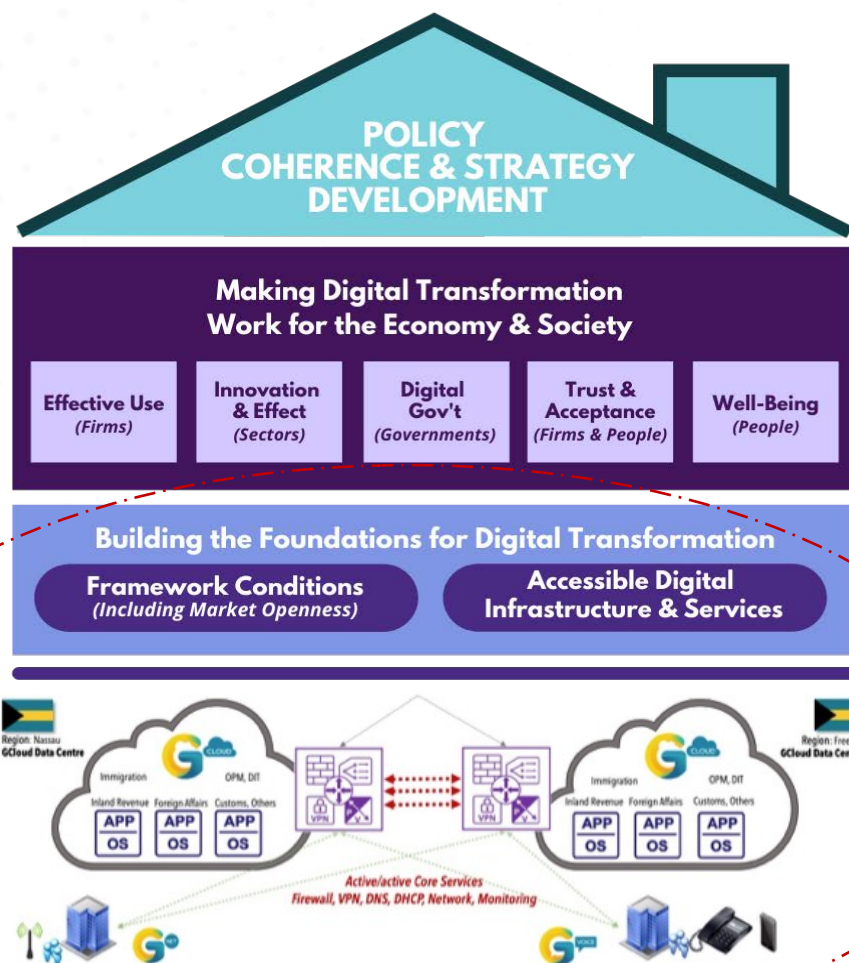
- Multi-tenant **secure design based on recognized industry standards** (e.g. Uptime Tier Classification) enables Government, Quasi-Government and SOE to consume ICT as a service
- Delivering ICT as an **ISO/ITIL backed service** increases adoption of government private clouds
- Deployed **Unified Communications (VOIP) services** dramatically reduce cost and increase productivity
- Commercial agreement supported by Service Level Agreement with clearly stated KPIs



Policy and standards-based service management adhering to international standards, for example:

- PCI DSS (Payment Card Industry Data Security Standard) for financial services
- SSAE 16 replaced by 18 (Statement on Standards for Attestation Engagements) SOC Type 1 and 2
- ISO/IEC 27001 (Security)
- ISO 22301:2012 (Business Continuity)
- ISO/IEC 20000-1:2011 (Service Management) / ITIL is a framework

11 Cloud Carib's Vision for Digital Transformation?



**NATION-STATE, SUPPLY CHAIN,
AND INFORMATION THREATS**

Securing Infrastructure for National Development

The first building block for **digital transformation** is to ensure access for all. Security and Operations is imperative.

24x7 Service Desk (ITIL / ISO)	TOGAF (Certified)	Physical Security (CCTV) (Access Control)	Replication (Physical) (Virtual)	Backup (Physical) (Virtual)
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Analytics (Web)	Vulnerability (Assessment) (Scanning)	Application Performance Monitoring	Monitoring (SNMP) (Service)	DNS DHCP IPAM
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Information Rights Management (Data Loss Prevention)	Hardening (Physical) (Virtual) (Logical)	End Point Security	Hypervisor (ESXi) (Other)
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E2MS (ELK) (Shipping) (Rotation)	MFA	IAM (Vault)	SIEM	Asset Management and Patching
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12 Common Problem: Network (Roads, Bridges & Tunnels)

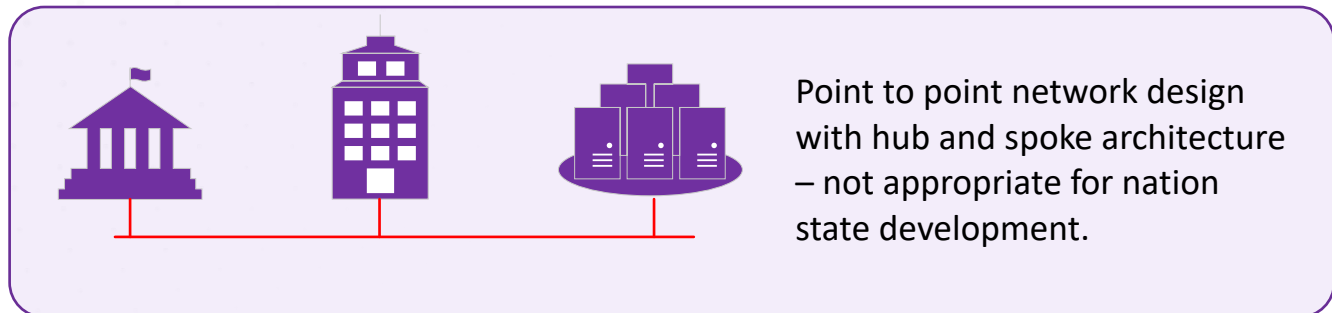
State Owned Enterprise (SOE)



Problem:

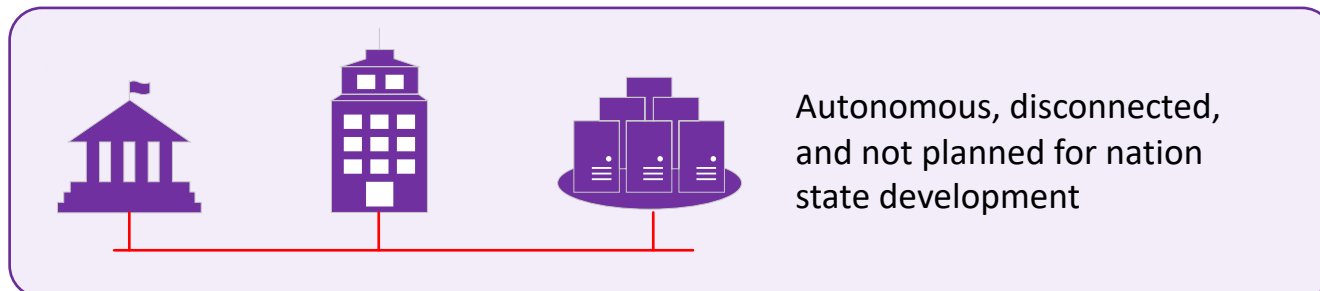
Without a policy change to encourage government wide adoption of a modern designed Government Network, with cybersecurity as a core principle the vision of ***digital transformation is placed at risk***

Government Ministry



“Any project not leveraging a modern secure designed network increases cost, complexity, and adds risk to digital transformation”

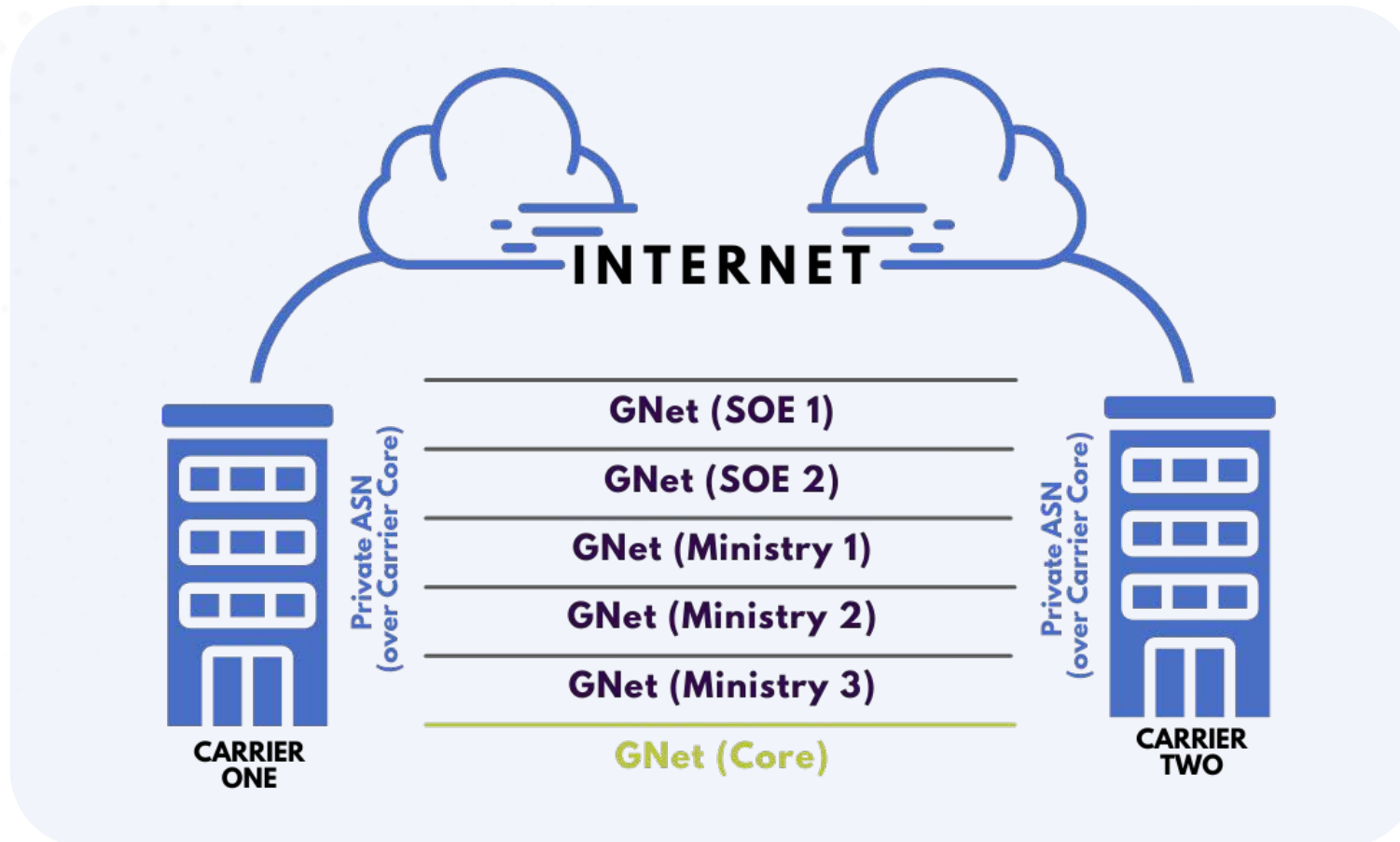
Other Ministry, SOE, and Quasi Government Entity



Tactical procurement without strategic consideration in network design and operations is proven to fail – no carrier, government, or private company has succeeded randomly mixing vendors and technologies

Without effective roads, bridges, and tunnels commerce and citizens suffer

13 Our Solution: Network (Roads, Bridges & Tunnels)



Solution:

Leveraging the Carriers' Core network secure modern Government Networks reduces cost, complexity, and underpins a national strategy for digital transformation

“Secure modern Government Networks provide a transport medium for communications across Ministries, SOE, and Departments in a secure, highly resilient design”

The developed GNet infrastructure provides open highways for high speed delivery of service

14 **Common Problem:** Private Cloud (Compute, Storage, Network)

State Owned Enterprise (SOE)



Autonomous, disconnected,
and not planned for nation
state development

Problem:

Without a policy change encouraging the creation of a **Government Private Cloud** to house compute, storage, and network resources, the cost of digital transformation increases as does the risk of program failure

Government Ministry



Autonomous, disconnected,
and not planned for nation
state development

“Any project not leveraging a Government Private Cloud increases cost, complexity, and adds risk to digital transformation”

Other Ministry, SOE, and Quasi Government Entity



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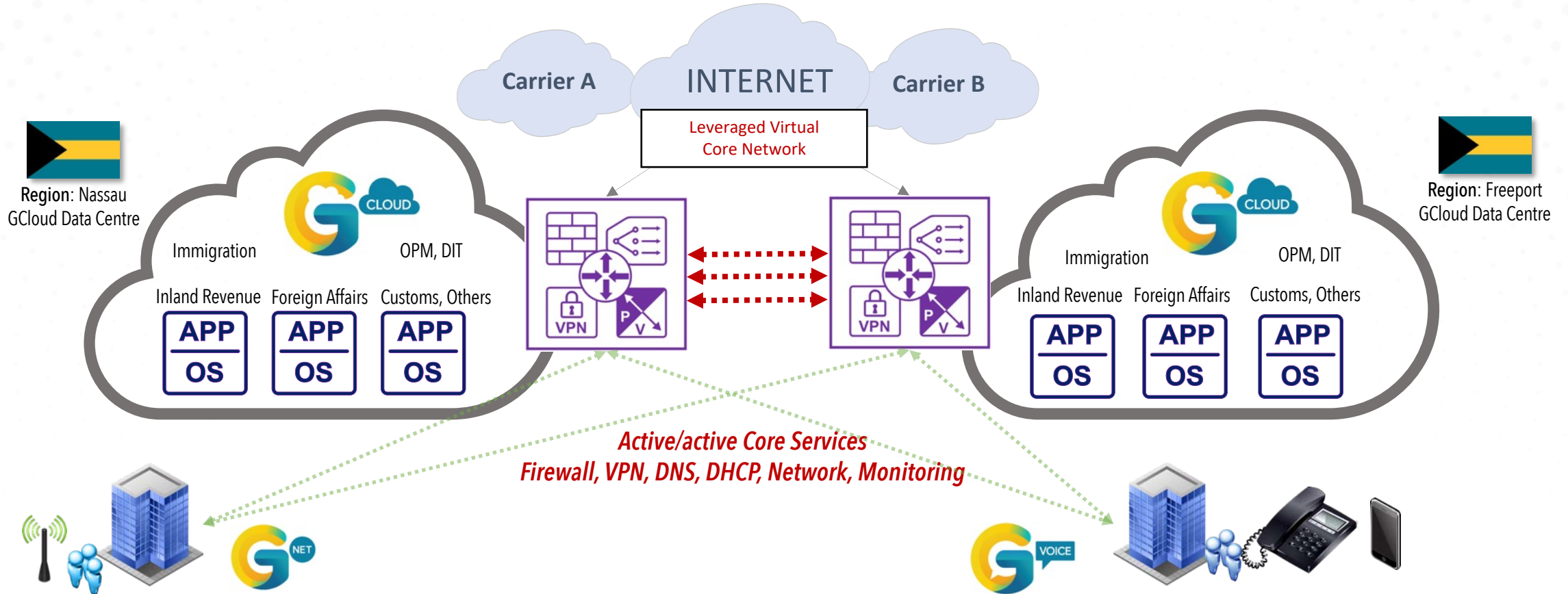
Tactical procurement for hardware and software assets for the provision of ICT is proven to fail – no carrier, government, or private company has succeeded randomly mixing vendors and technologies – this factor is a major reason for Cloud adoption

Resources are wasted when organisations fail to leverage scale

15

Case Studies:

Our Solution: Private Cloud (Compute, Storage, Network)



OVER 300+ sites connected today

Resiliency, Redundancy, Active-Active, Highly Available Service

Even during the worst Hurricane in our history, the Government's ICT Platform's availability was 100% throughout the storm – although tested, the teams and technology held firm and delivered! Since 2015 the GCloud has proven its resilience through 3 impacting hurricanes.

Providing transformational process design and technology innovation to regional governments, ministries, SOE and departments

16 Case Studies:

Bahamas GCloud, GNet & GVoice Initiatives



24 x 7 x 365
Command and
Control Centre



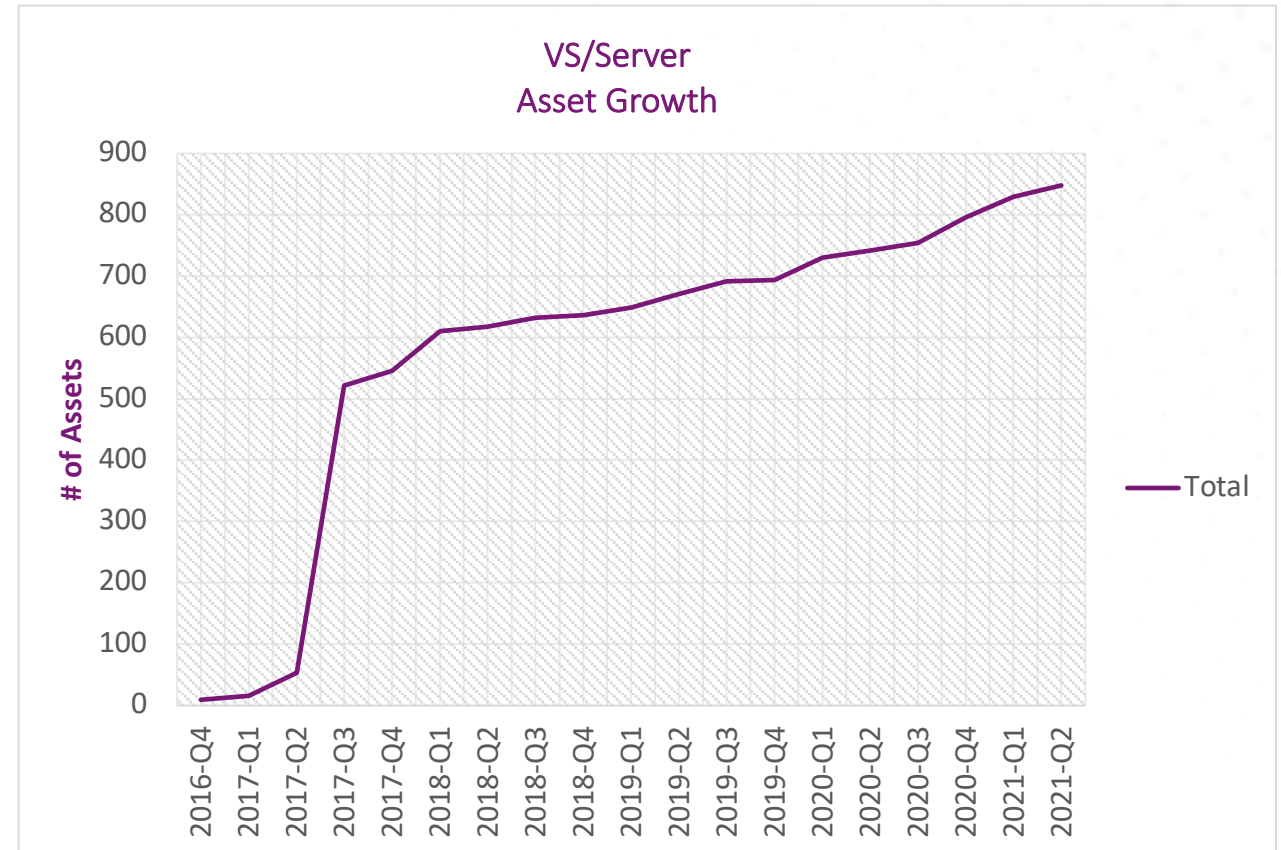
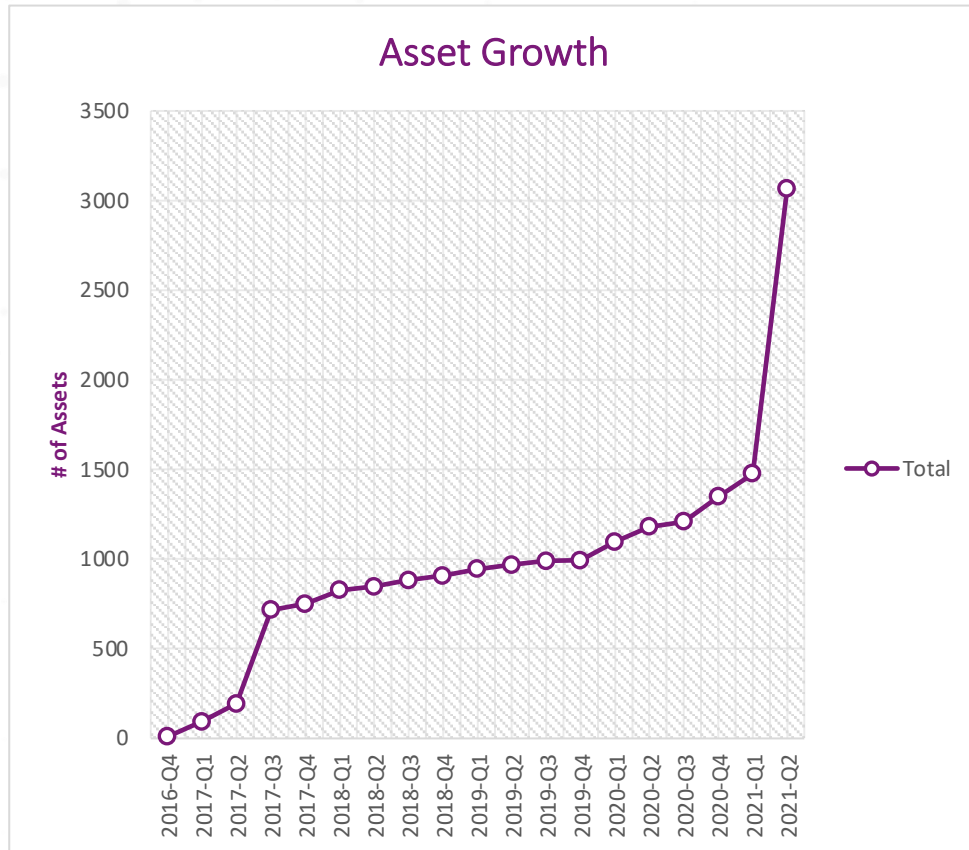
The only 24x7 Command and Control Centre (C3) dedicated to managed cloud services within the Caribbean.

Service backed by industry leading Service Level Agreements (SLA) with guarantees beyond any other provider in Latin America and the Caribbean.

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18 Case Studies: Growth



19 Case Studies: Example Applications

- Value Added Tax (VAT)
- Business License
- Electronic Single Window for Trade
- Driver Licenses
- Property Tax
- Border Management
- Passport
- Visa, Work Permits
- Unified Communication Platform
- International Tax Information Exchange Platform



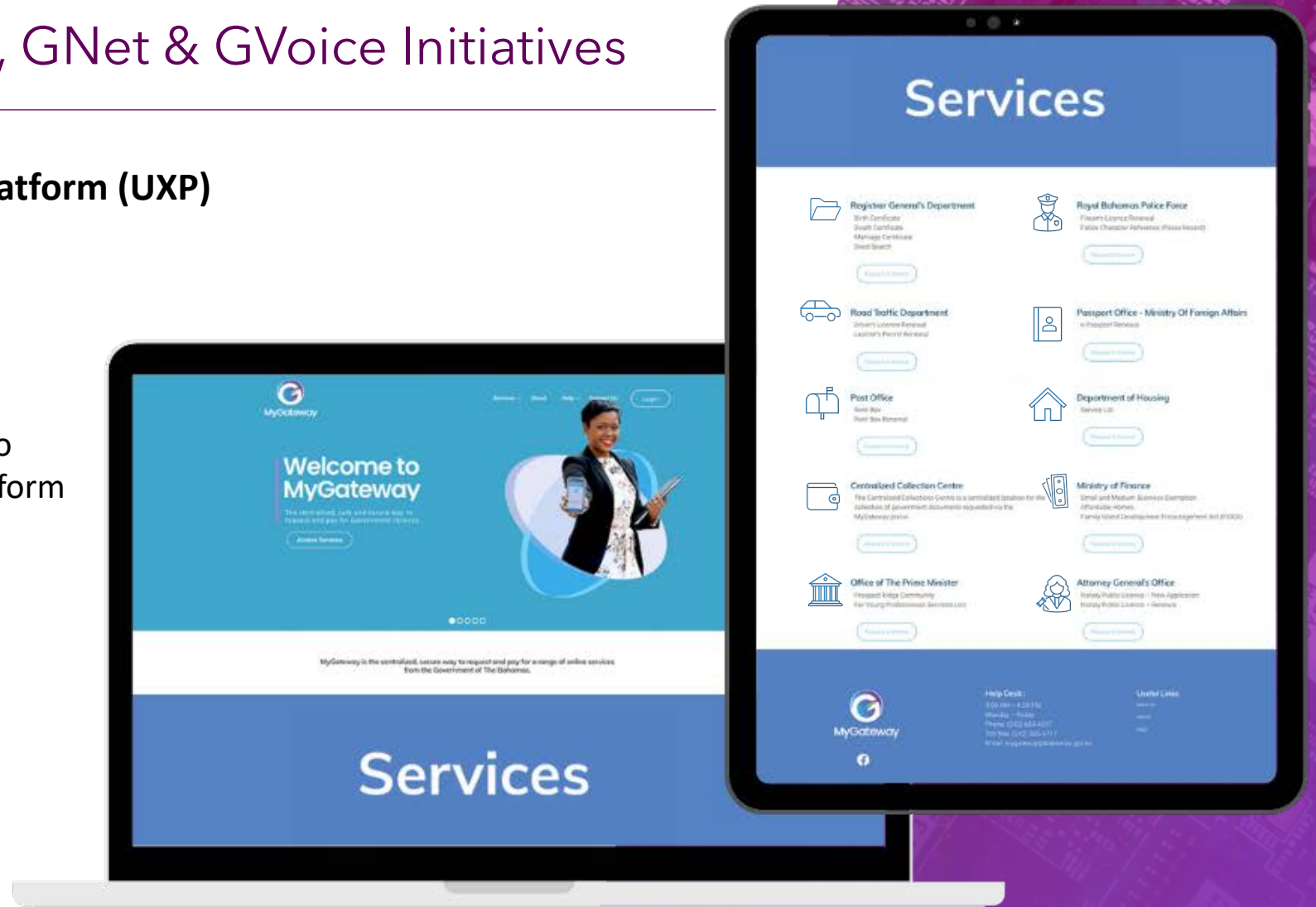
Currently, Cloud Carib
manages assets for
28 government entities

17 Case Studies:

Bahamas GCloud, GNet & GVoice Initiatives

Deployment of Unified eXchange Platform (UXP)

- An interoperability *backbone for major e-Government* operations
- Allows stakeholders to *link their information systems* and databases to the standardised communication platform
- Enables *seamless exchange* of data
- Scales across society, promoting the *set-up of a digital society*
- Facilitates the creation of *integrated public sector services*
- Complies with *privacy regulations*



20 Solutions Summary

CLIENT FOCUS

- Vendor Applications G2B, G2C, G2G

CLOUD CARIB FOCUS

- Automated On-Demand Allocation of Resources
- DR and Business Continuity Management
- Cyber Security at all Levels
- SLA KPI
- 24/7 Pro-Active Management
- C3 (Command, Control, Communicate) Operation
- Elastic Environment Growth Strategy
- Implementation of International Operational Standards
- Multiple OS/DB/Application Support

21 Industry Awards

- 2020** • Ranked **28 worldwide** among Top MSPs on Channel Futures MSP 501 list
- Veeam Impact Partner of the Year Award for North of Latin America
- Small Business Awards Best Managed Cloud Services Provider in the Caribbean
- 2019** • VMware Cloud Verified Badge
- Channel Futures Talkin' Cloud 100 Change Agent Award
- Ranked 33 worldwide among elite managed service providers on Channel Futures MSP 501 list
- 2018** • Recognized as a Change Agent for a Cloud Service Provider
- Ranked 160 worldwide in 12th Annual Channel Futures MSP 501
- 2017** • Oracle's Top Public Sector Partner for revenue generation
- Ranked 42 among Channel Futures Talkin' Cloud **world's Top 100** cloud services providers
- Cisco Collaboration Partner of the Year for the region
- 2016** • Recognized as a Top 100 Solution Providers by Talkin' Cloud
- Veeam Impact Partner of the Year Award for the Caribbean
- 2014** • First Caribbean Cloud Service Provider with VMware vCloud Powered certification
- 2013** • First Certified Citrix Solution Advisor and Citrix Cloud Provider in The Bahamas
- First in LATAM/Caribbean Certified with VMware's Cloud (IaaS) Competency

INDUSTRY AWARDS



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21 Our Award-Winning Team



THANK YOU



Cloud Carib

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