Community Webcast: Winning Strategies for Deploying Virtualized Networks

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Agenda

1. INDUSTRY OVERVIEW
2. OPERATIONAL CHALLENGES
3. STRATEGIES FOR SUCCESS IN THE SDN/NFV SPACE

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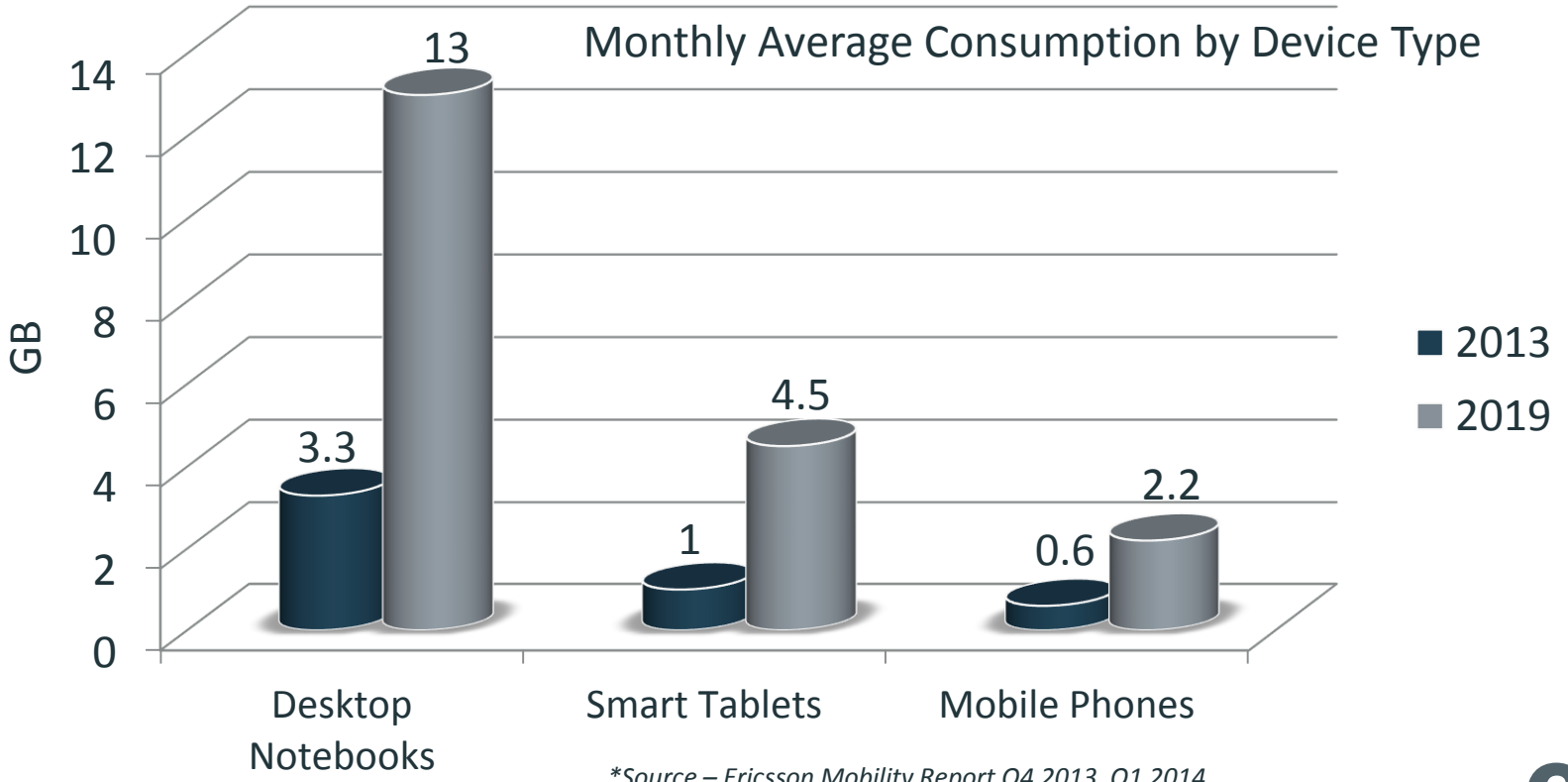
Application Economy = Exponential Data Growth

Mobile data traffic in Q1 2014 exceeded total mobile data traffic in 2011 globally



*Source – Ericsson Mobility Report Q4 2013, Q1 2014

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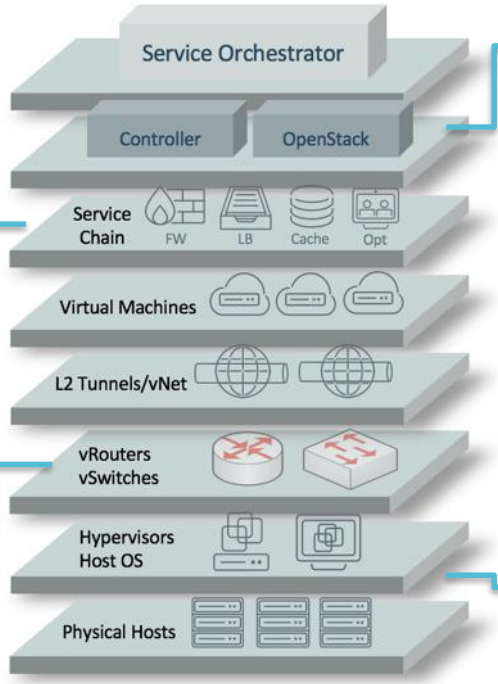
Challenges
lead to
Opportunity
Adapt to dynamic consumer & business behavior
Enabling customer premise services
Assure End to End Quality of services
With SDN, NFV and Dynamic Service Chaining
Scale, integrate , automate and zero touch

Unraveling The New Stack

How do I keep track of the relationship between these layers when it is constantly transforming

How do I relate stack performance to the health of the service chain

Where is a weak performance spot in this stack and what do I monitor to stay on top of it



How do I rebuild the stack when each layer comes from different systems

How is the performance of this stack relate to the performance of the older part of my network

How is the overlay using these resources? Are these CAPEX resources optimized

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SDN/NFV Use Cases

vCPE - *Working with a North American CSP who is deploying a vCPE service for their Enterprise Business Services. Key challenges involve how to integrate discovery workflow in a hybrid SNMP and NFV environment*

SD Data Center - *Working with a large Tech Enterprise to gain visibility into their deployed SDDC. Key challenges involve providing visibility into self-serviced usage and production/non-production population*

SDN Core - *Working with a Mega North American CSP on providing performance monitoring of their SDN controlled core networks with specific interest in understanding the systems performance and impact on infrastructure*

SD WAN - *Working with a North American customer in providing performance analytics on the application routing aspect of SD WAN*

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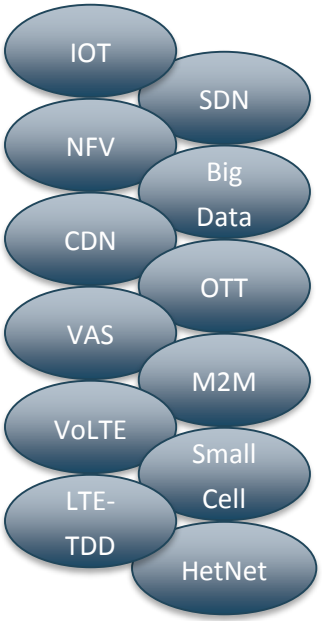
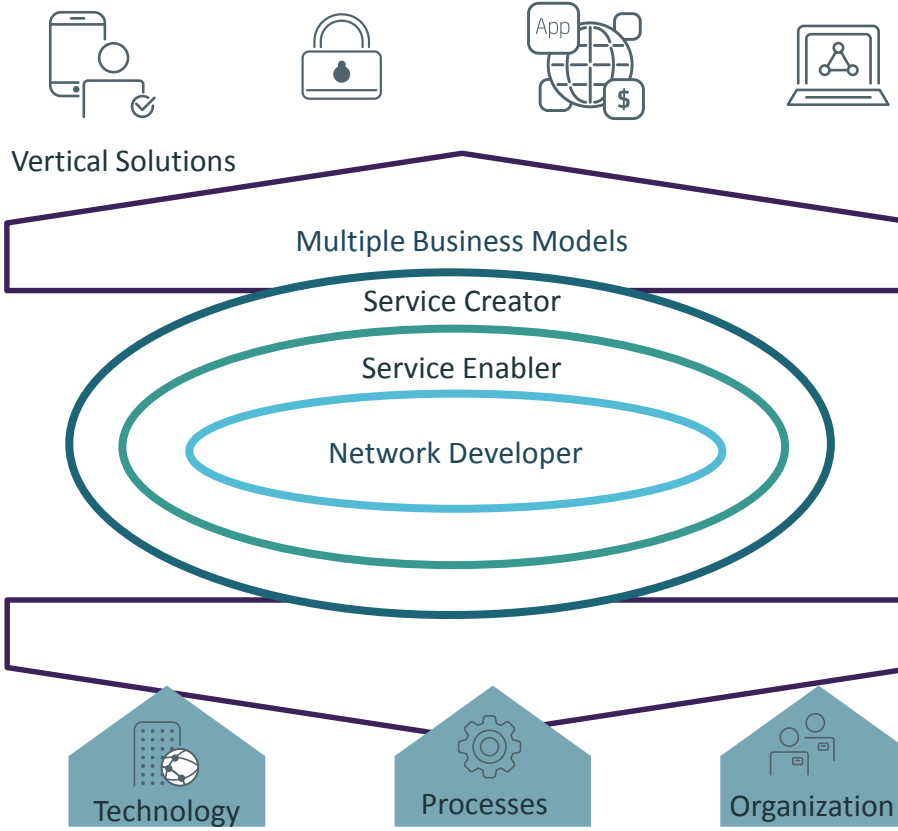
Agile Operations Today: from Monitoring to Creation of Value Added Services

Network teams have to deal with a constant flow of new technologies, innovation & change…..





While at the same time adhering to standard process frameworks to reduce risk, control costs and increase accountability

- eTOM
- FCAPS
- ITIL
- ISO 20000
- COBIT

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Monitoring Complex Networks - Guiding Principles

Understanding end user needs
Mature from basic element management to creating value added services

Inputs & Outputs
Monitoring as an integral part of ongoing design & update processes (change, config, release)
Data Model Understanding

Network Visibility & Performance
No blind spots!

Zero Touch Monitoring Updates
Driven from configuration repositories. Detect and updates monitoring based on network changes.

Leverage existing investments – underlying EMS, configuration repositories

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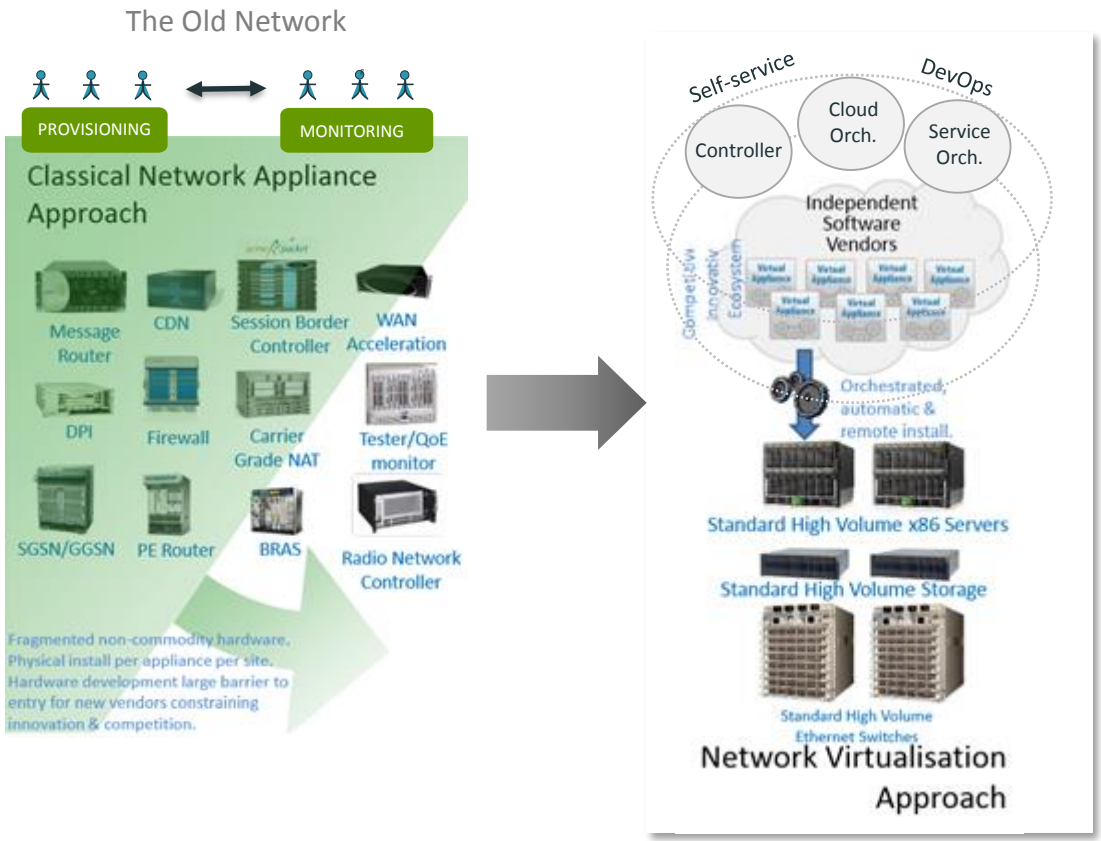
What are the Challenges Facing SDN/NFV Assurance



COMPLEX LAYERING
Correlation w/ underlay relationship tracking

VULNERABILITY
The data-plane will crack

VELOCITY
Staying on top of relationship, visualization

END-USER DRIVEN
Service Chains, Subscribers, Tenants

AUTOMATION
Auto-healing

MIGRATION
How to reuse existing assets

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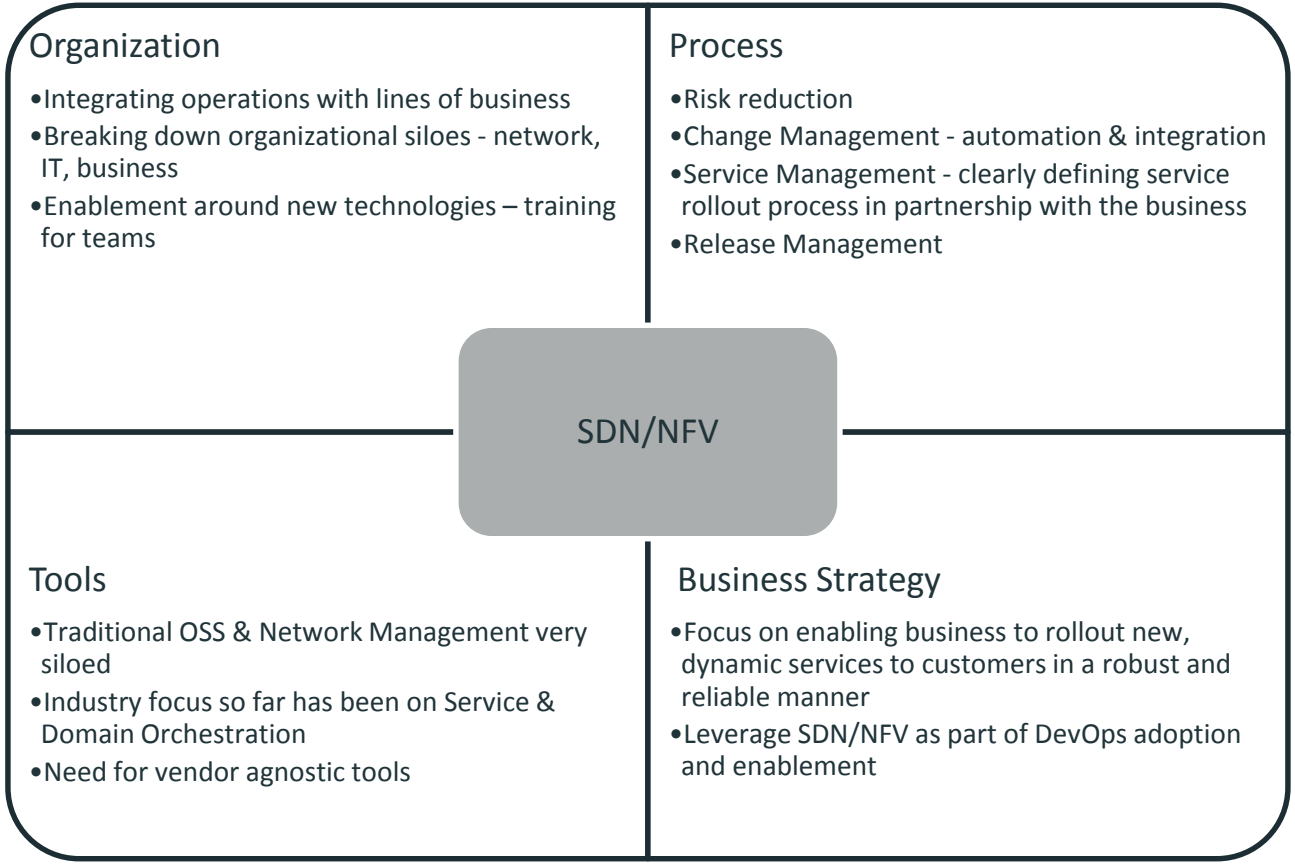
Extending the Operational Model to SDN/NFV: Addressing key pain points in rolling out a disruptive technology



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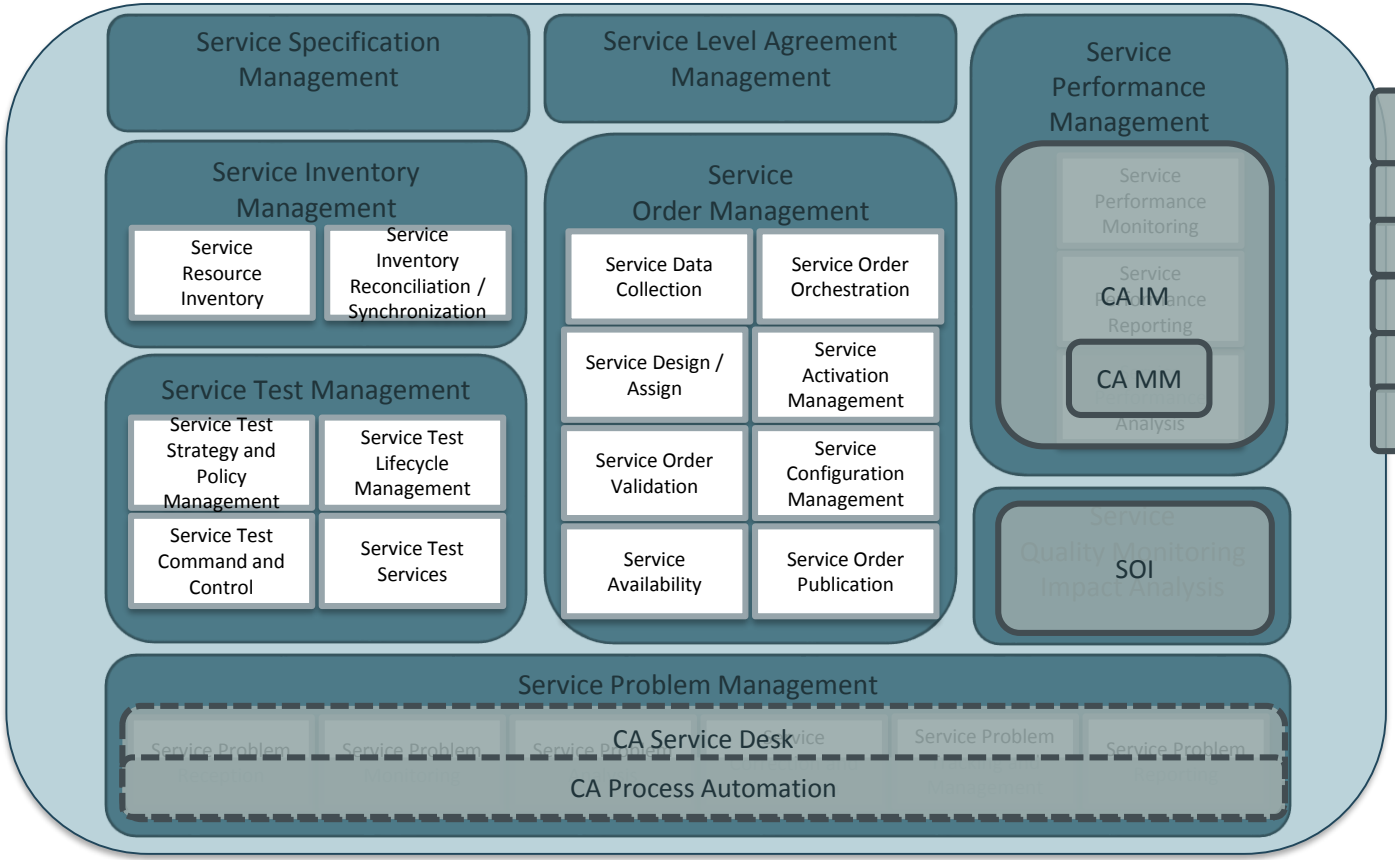
Extending the Service Lifecycle to Virtualized Networks



- CA Infrastructure Management (Spectrum & Performance Mgt)
- CA Virtual Network Assurance
- Service Operations Insight (SOI)
- CA Mediation Manager (CAMM)
- CA Service Desk
- CA Process Automation (CA PA)

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