



The Role of Big Data & Advanced Analytics in SDN/NFV

Moderated by

Jim Hodges, Senior Analyst, Heavy Reading

June 9, 2015

DAY 1 – TUESDAY, JUNE 9, 2015 | 3:00 – 4:00 PM
BREAKOUT ROOM #4 | VIRTUALIZATION

The Role of Big Data and Advanced Analytics in SDN/NFV



Moderator:

Jim Hodges, Senior Analyst, Heavy Reading



Panelists:

Ashish Singh, GM/VP, Products, SK Telecom



Scott Sumner, VP, Solutions Marketing, Accedian Networks



Mike Heffner, Senior Director - Technical Product Marketing, Overture Networks




John Govert, Chief Technologist, Network and Service Enablement, JDSU

#BTE2015

Agenda



- Presentations (10 minutes)
- Panel Discussion (40 minutes)
- Q&A (10 minutes)

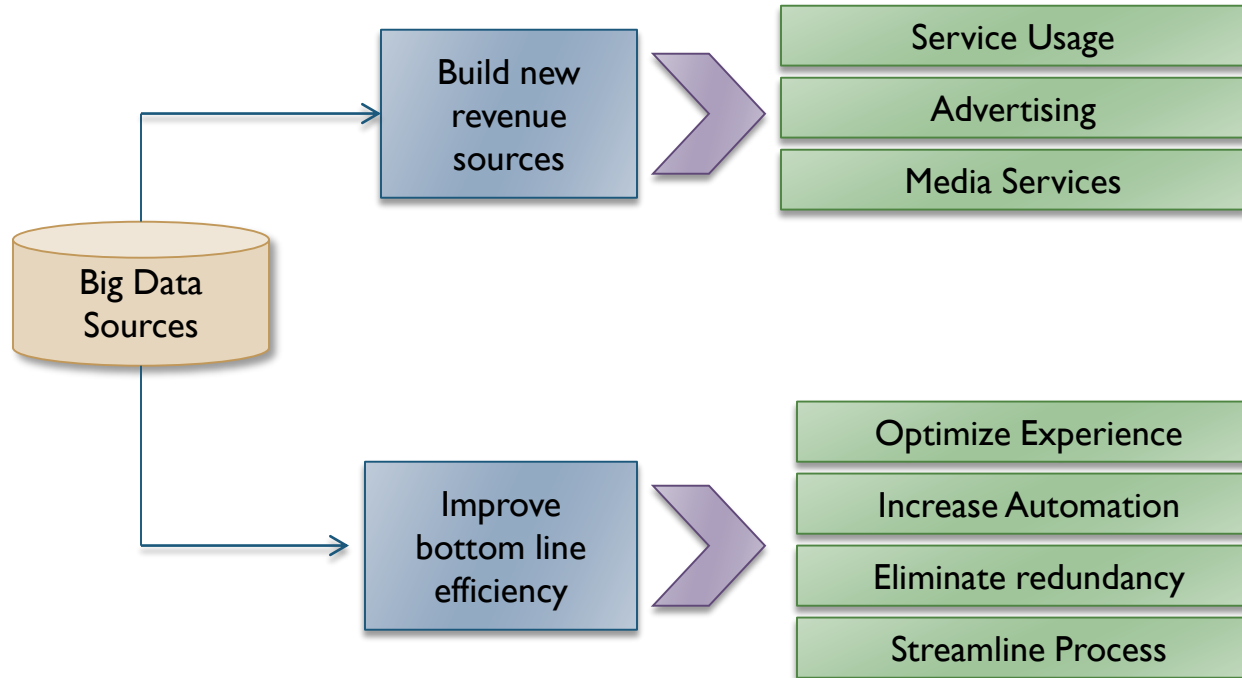


Big Data , SDN/NFV

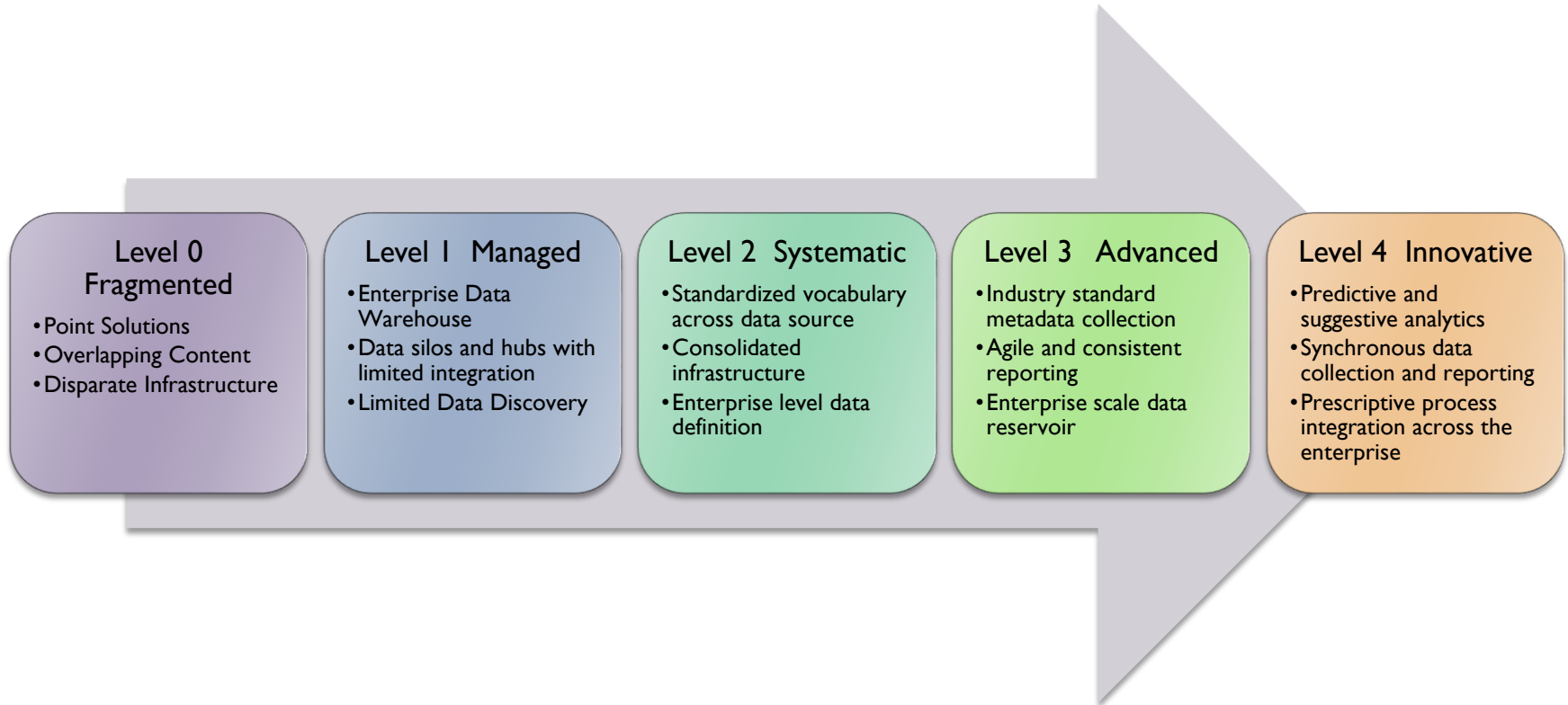


Transition from ARPU to ARPE_xperience

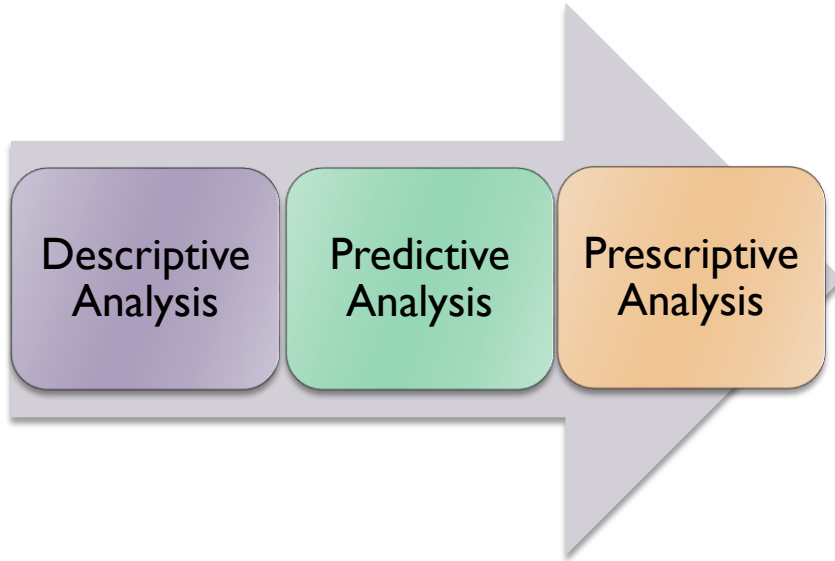
Business transformation with Big Data



Big Data Maturity Model



Real-time data processing as 5G network foundation



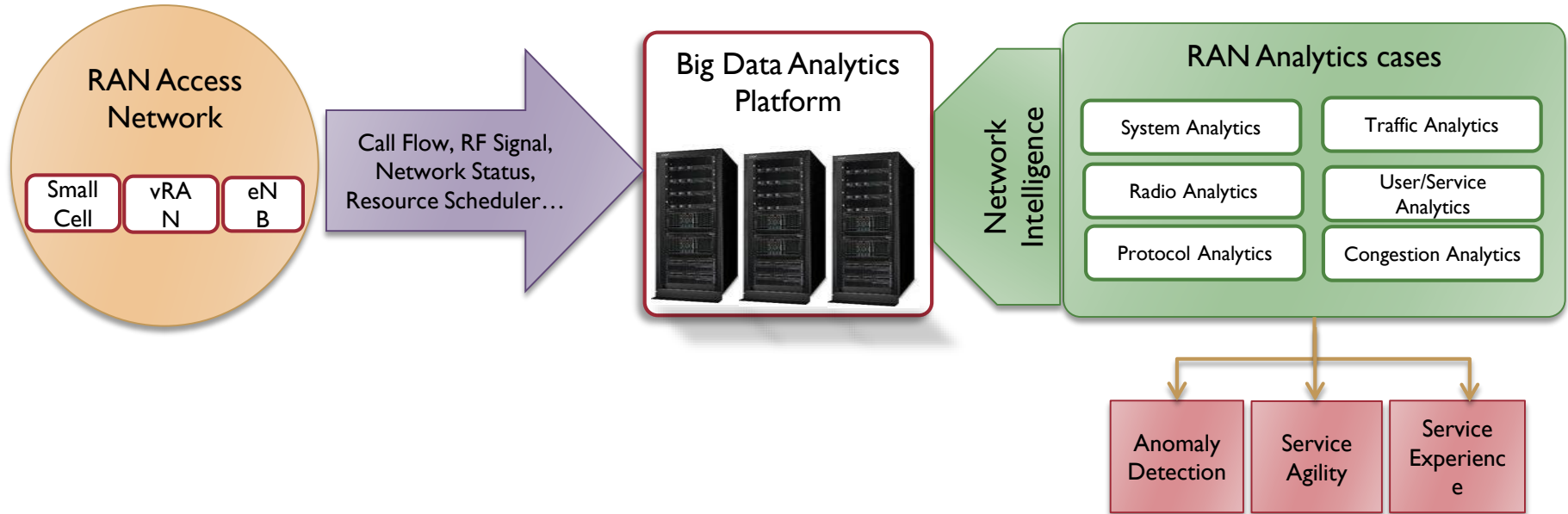
Provide insight on a specific event by analyzing large volume of multi-dimensional unstructured data

Improve network usability and performance using performance data from elements in real-time

SON, sophisticated anomaly detection and network traffic congestion prediction using correlation on the edge

RAN Analytics based Network Intelligence

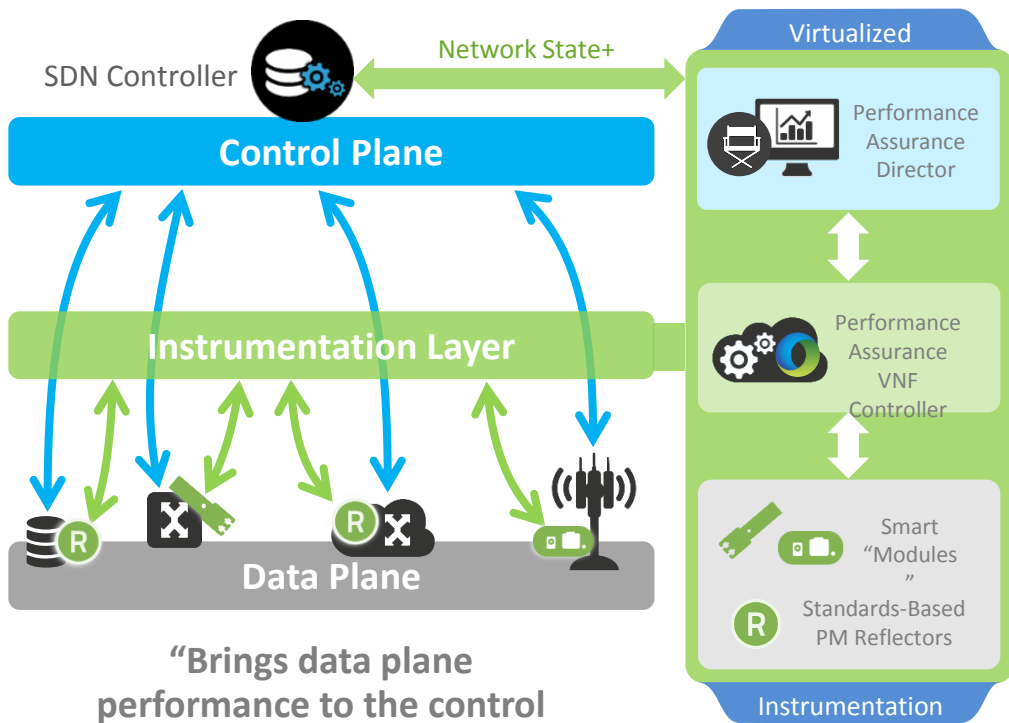
- ▶ Ability in real-time to correlate RAN KPI's and manage service experience



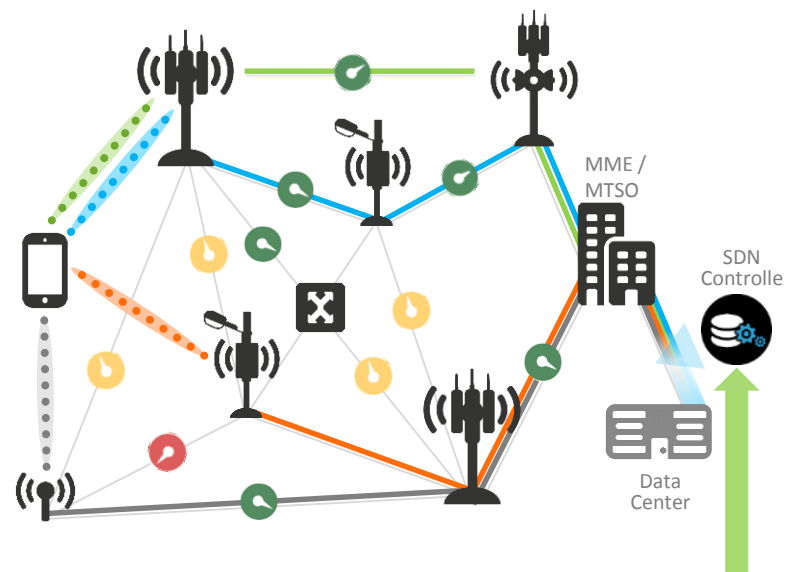
VIRTUALIZATION: THE ROLE OF BIG DATA AND ADVANCED ANALYTICS IN SDN/NFV

ACTIVATING ANALYTICS FOR SDN • THE MISSING “INSTRUMENTATION LAYER”

“Supports **SK telecom** use case”



“Brings data plane performance to the control plane.”



Real-Time, Ubiquitous, Open Visibility

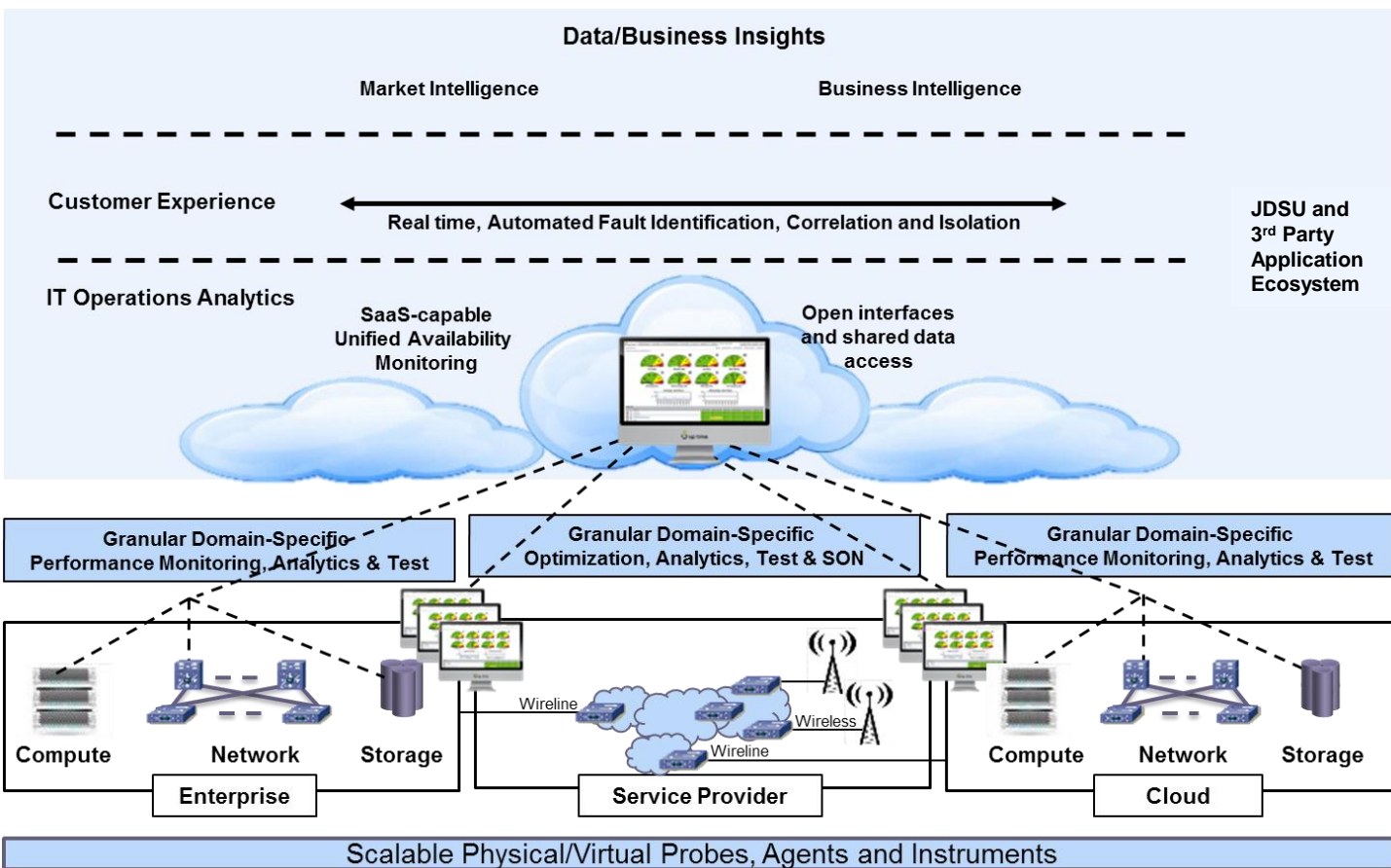
Utilization • Available Capacity • Packet Loss
 Latency • Delay Variation • QoS/E KPIs



VIRTUALIZATION: The Role of Big Data and Advanced Analytics in SDN/NFV

John Govert, Office of the CTO

JDSU End to End Vision



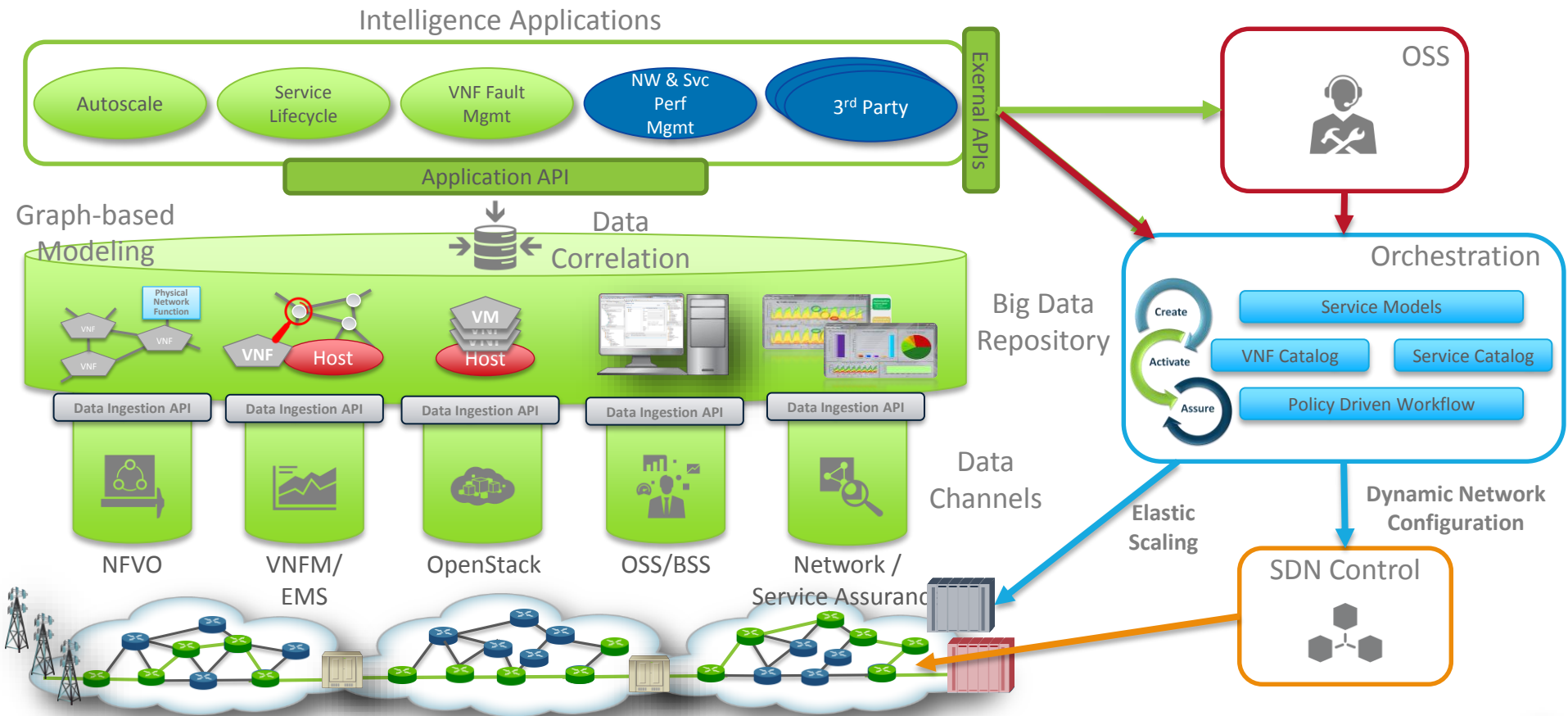
BIG DATA ANALYTICS FOR NFV & SDN

Light Reading Big Telecom Event

June 2015



Big Data Analytics Feeds Intelligent Orchestration



Network Operators Will Gain Immediate Value From Deploying Network Data Analytics Solutions Today



- Yes, levels of IP network penetration today require powerful real-time capabilities to meet customer experience requirements and to support deployment of SDN and NFV.
- No, it will be crucial for 5G and M2M IoT support, but today probes and DPI are good enough.

Analytics Is a Vital Part of a Successful NFV Implementation



- Yes, it will be extremely difficult to meet QoS and QoE requirements and orchestrate VNFs without analytics.
- No, it's not required immediately since NFV rollout will be gradual and represents only a small percentage of live traffic for the next few years.

What Are the Highest-Value Analytics Use Cases for NFV?



- Service chain performance analytics
- Others...?

What Are the Greatest Challenges in Deploying Analytics to Support NFV?



- Meeting physical and virtual network requirements
- Extracting data into meaningful formats
- Creating actionable analytics
- Monetizing the data
- Others....?

Analytics Is a Vital Part of a Successful SDN Implementation



- Yes, analytics will be crucial to support dynamic service chains, service automation and detect security threats.
- No, it's not mandatory, SDN controller policies will be relatively static in early implementations. Analytics will only make SDN implementation more complex.

What Are the Highest-Value Analytics Use Cases for SDN?



- Dynamic network control
- Intelligent network provisioning
- Others...?

What Are the Greatest Challenges in Deploying Analytics to Support SDN?



- Availability of standardized interfaces
- Operational requirements
- Performance – scaling commercial networks
- Others...?



Q & A