

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

Light Reading's

BC
TELECOM
EVENT

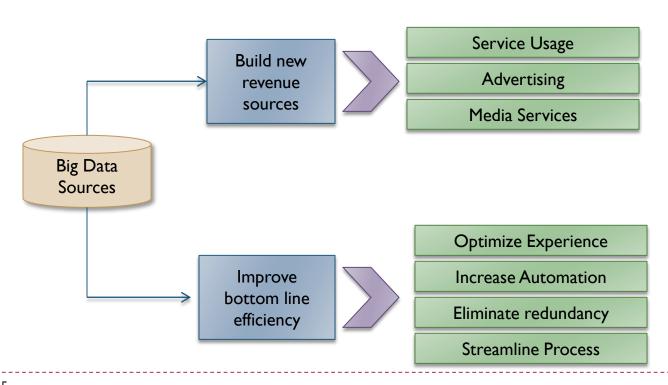
- Presentations (10 minutes)
- Panel Discussion (40 minutes)
- Q&A (10 minutes)



Big Data, SDN/NFV

Transition from ARPU to ARPExperience

Business transformation with Big Data



Big Data Maturity Model

Level 0 Fragmented

- Point Solutions
- Overlapping Content
- Disparate Infrastructure

Level I Managed

- Enterprise Data
 Warehouse
- Data silos and hubs with limited integration
- Limited Data Discovery

Level 2 Systematic

- Standardized vocabulary across data source
- Consolidated infrastructure
- Enterprise level data definition

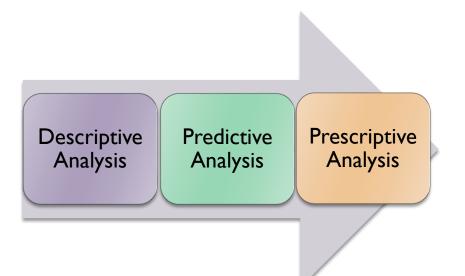
Level 3 Advanced

- Industry standard metadata collection
- Agile and consistent reporting
- Enterprise scale data reservoir

Level 4 Innovative

- Predictive and suggestive analytics
- Synchronous data collection and reporting
- Prescriptive process integration across the enterprise

Real-time data processing as 5G network foundation



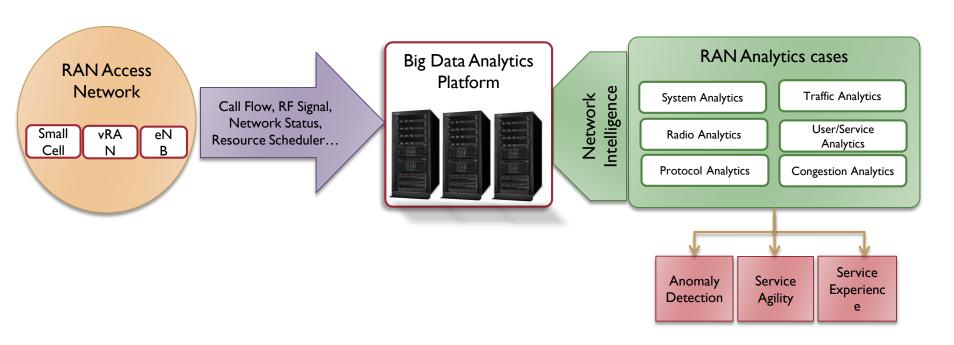
Provide insight on a specific event by analyzing large volume of multidimensional unstructured data

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

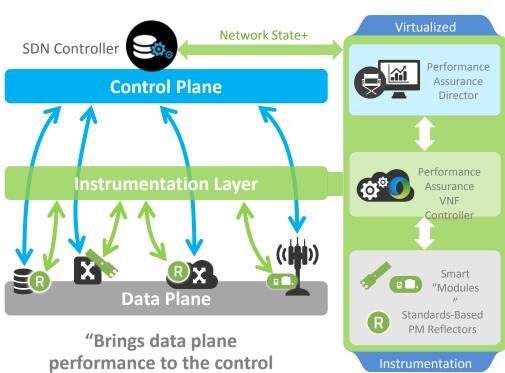
▶ Ability in real-time to correlate RAN KPI's and manage service experience

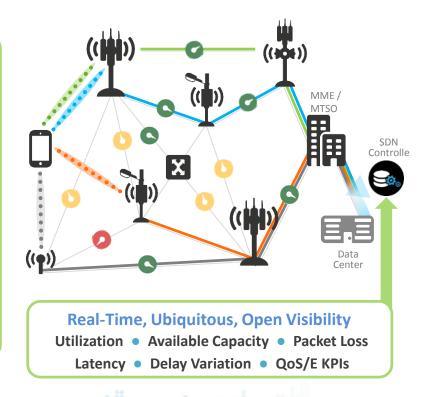




ACTIVATING ANALYTICS FOR SDN • THE MISSING "INSTRUMENTATION LAYER"







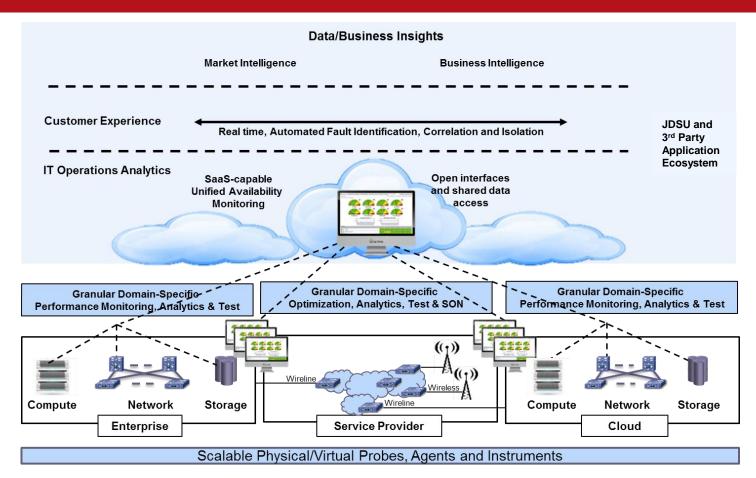
plane."



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

John Govert, Office of the CTO

JDSU End to End Vision







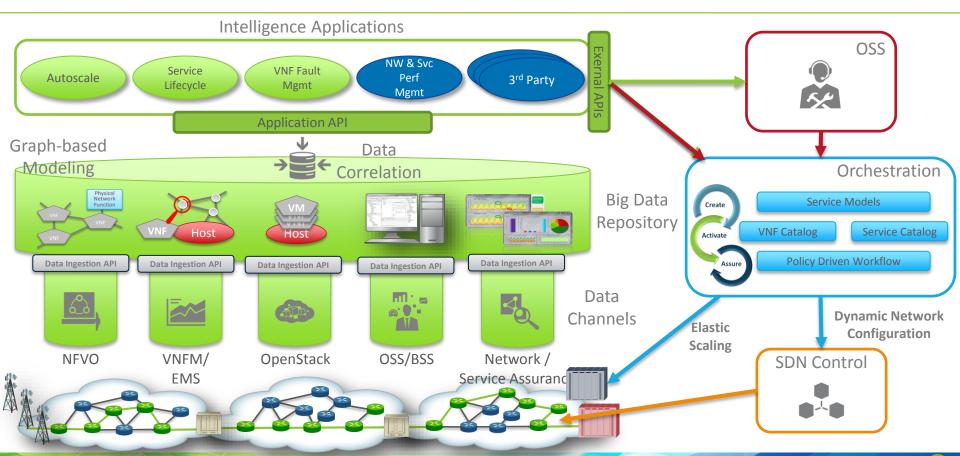
BIG DATA ANALYTICS FOR NFV & SDN

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

