



ERICSSON

SDN, NFV, CLOUD

CHANGING NETWORKS

June 2014

Raul Caldeira

CHANGING WHAT IS ON THE NETWORK OPERATOR'S MIND...



AGILITY



INNOVATION



EFFICIENCY

SDN ENABLED NFV & CLOUD INFRASTRUCTURE

NFV



Virtualizing
Network
Functions

CLOUD



Scaling Network
Functions to the
Cloud for Optimal
Deployment

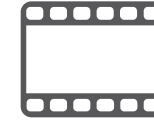
SDN



SDN for Cross Domain
Control, Orchestration &
Management

SERVICE PROVIDER SDN, NFV & CLOUD

HOW THE NETWORK EVOLVES



APIs, Exposable Services & Assets, Analytics

Cross-Domain Orchestration, OSS/BSS

Product / Service Management CRM & CEM Charging & Billing

Access Mgmt & Control IP & Transport Mgmt & Control Service Mgmt & Control Policy Control -----

Integrated Network Control Cloud Management

Virtualization & Abstraction

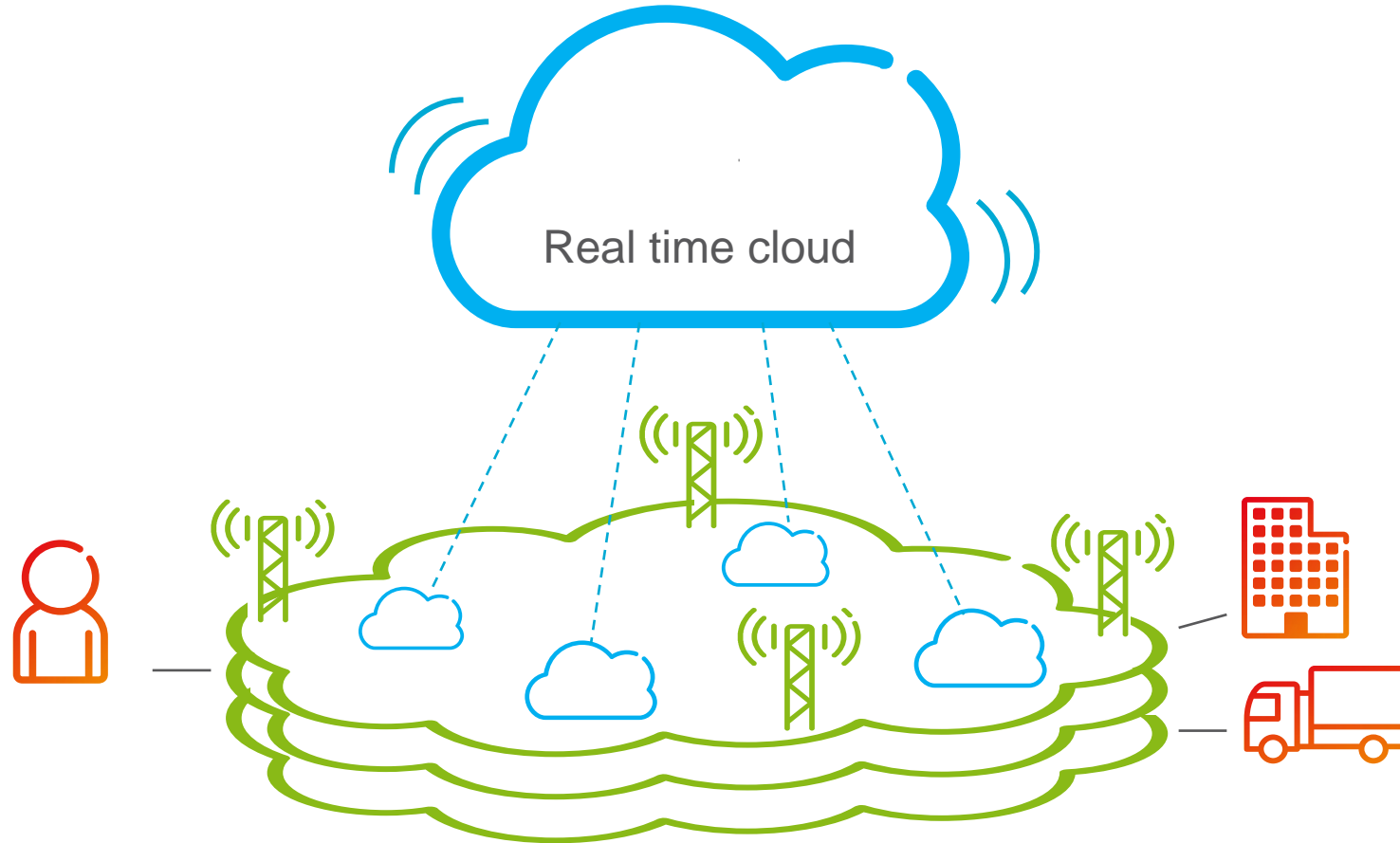
VNF ← Relocation with preserved identity VNF + VNF + VNF + openstack

Virtual Networking SDN Controller OPENDAYLIGHT



Data Center

CREATE HIGHLY PERSONALIZED NETWORK SLICES



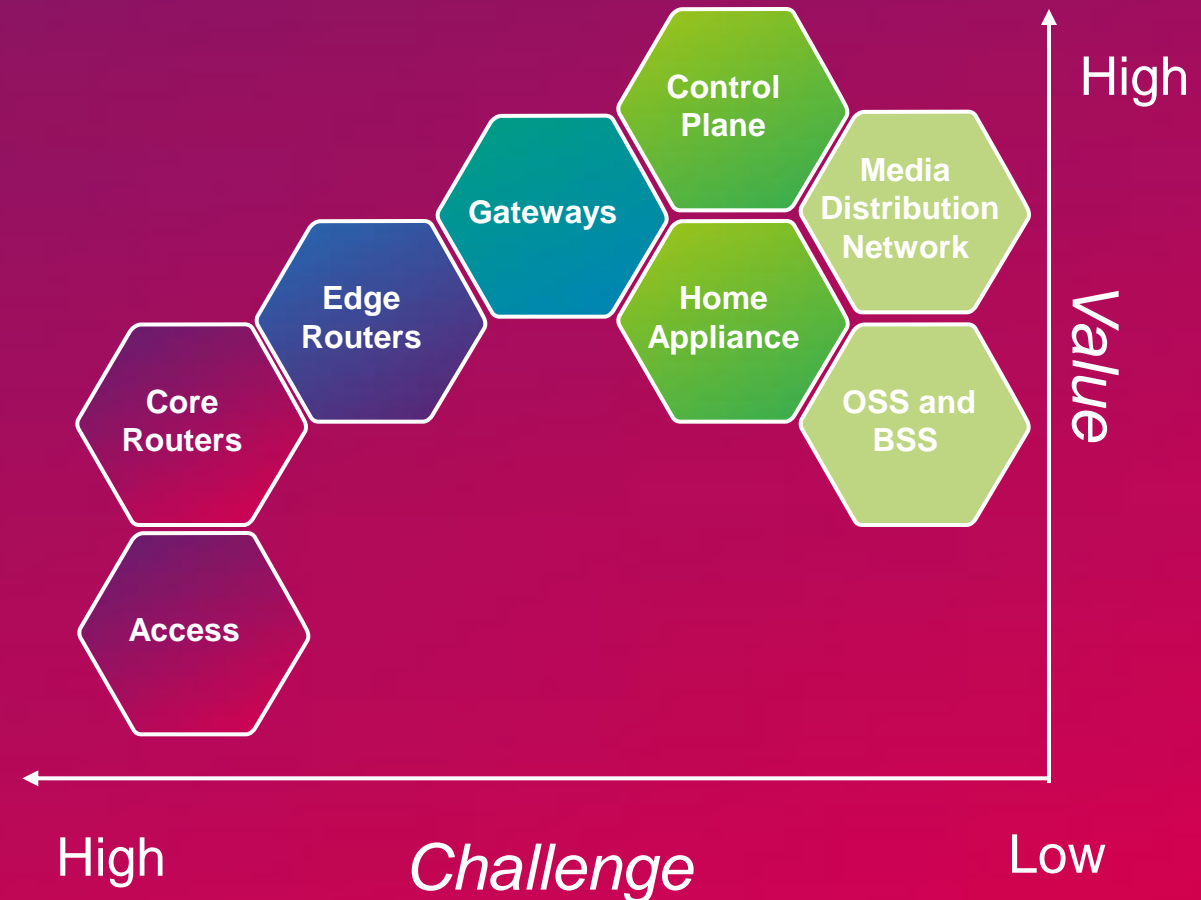
Network Slices – The best thing since sliced bread !

VIRTUALIZING THE NETWORK FUNCTIONS

Immediate Values

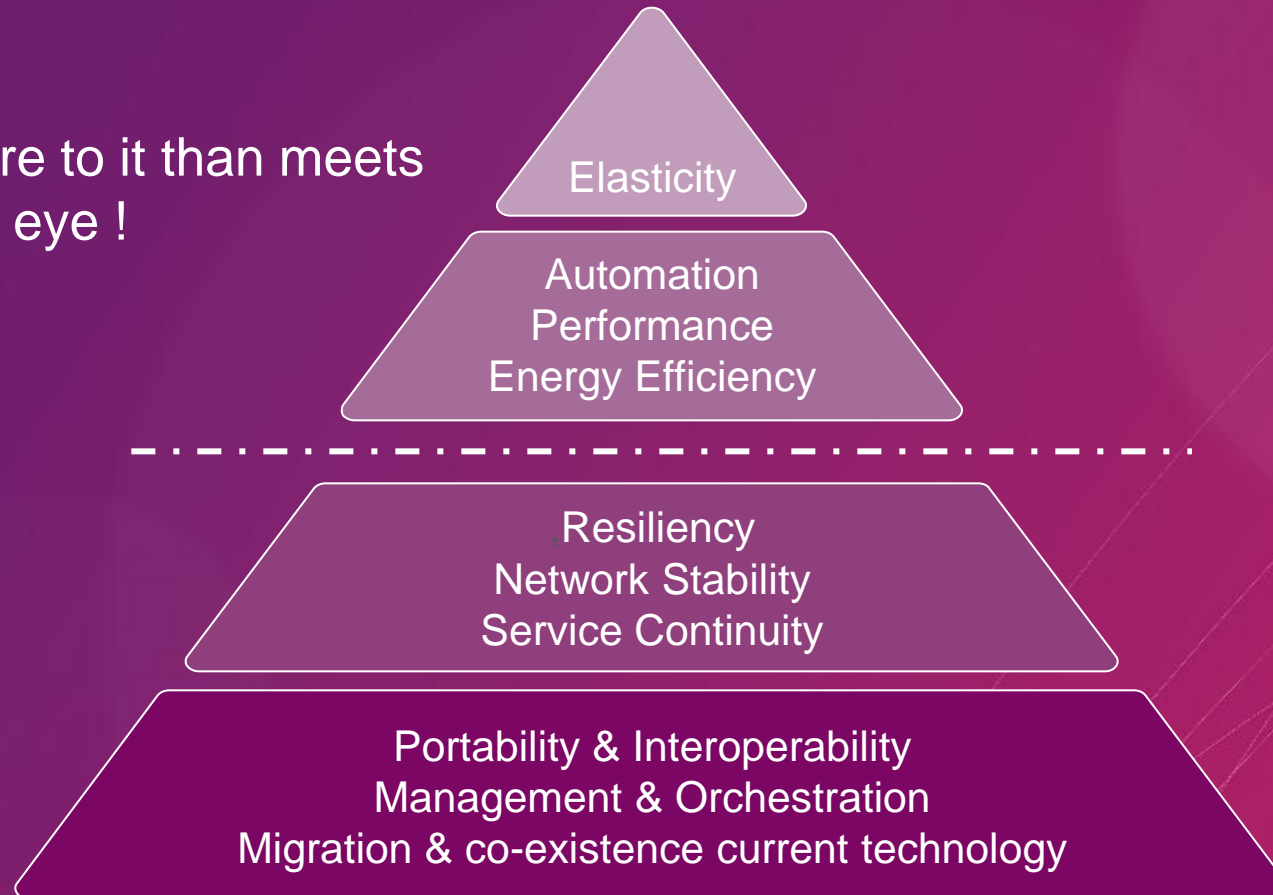
- › TTM for new services
- › Elasticity and scalability
- › Improve operational efficiency

Virtualization – challenge versus value



BUT NFV IS MORE THAN VIRTUALIZING

More to it than meets
the eye !



It is about infrastructure meeting
changing demands

- › Open and horizontalized system with maintained Telco performance
- › Integrity and Security
- › Migration from existing environment

CLOUD, SDN & NFV IN A WIDE AREA CONTEXT



Service trigger, dynamic connectivity, service scaling, real time: ~second

Cross Domain Service Orchestration

Service Catalogue, BSS interface, Subscriptions, near real time ~minute



East/West signaling, Forwarding state control. High transaction rate & sub second domain

OSS NMS/EMS



Control



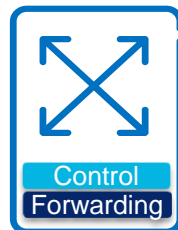
Control



Forwarding



NFV



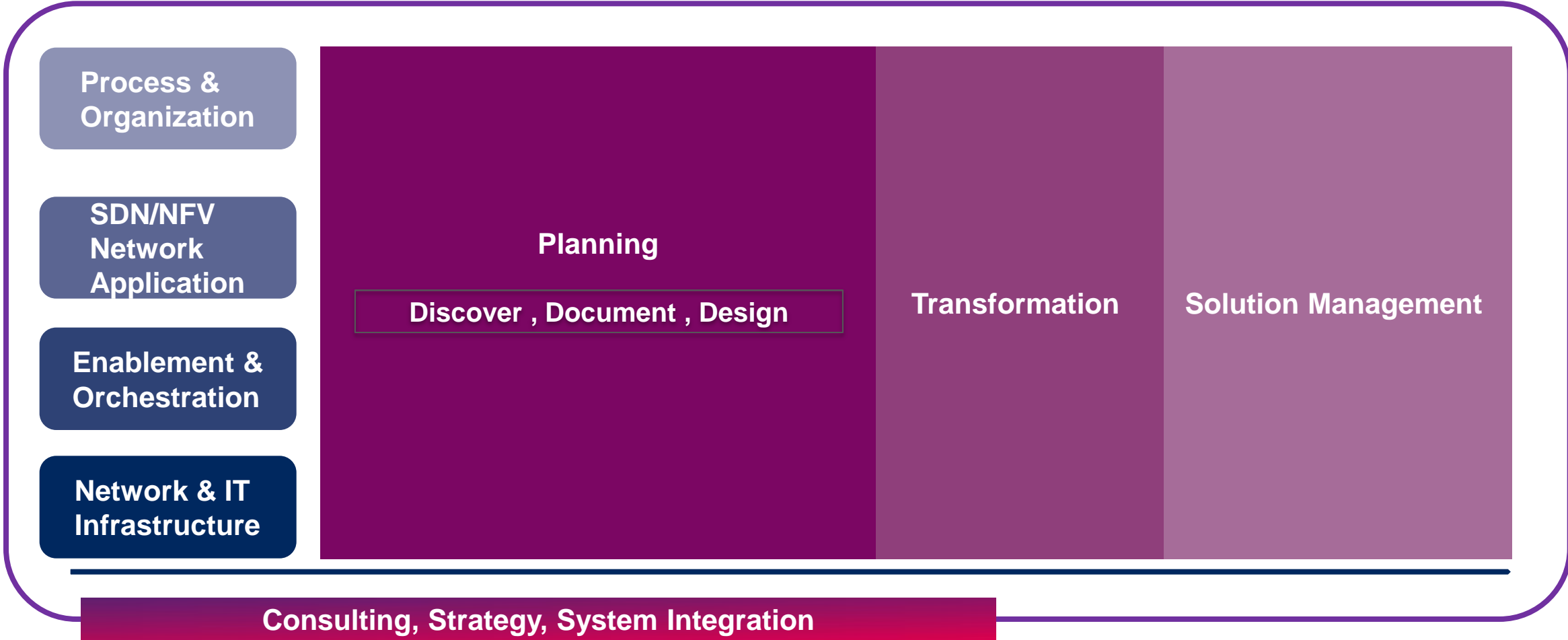
USE CASES PORTFOLIO JUST THE BEGINNING...



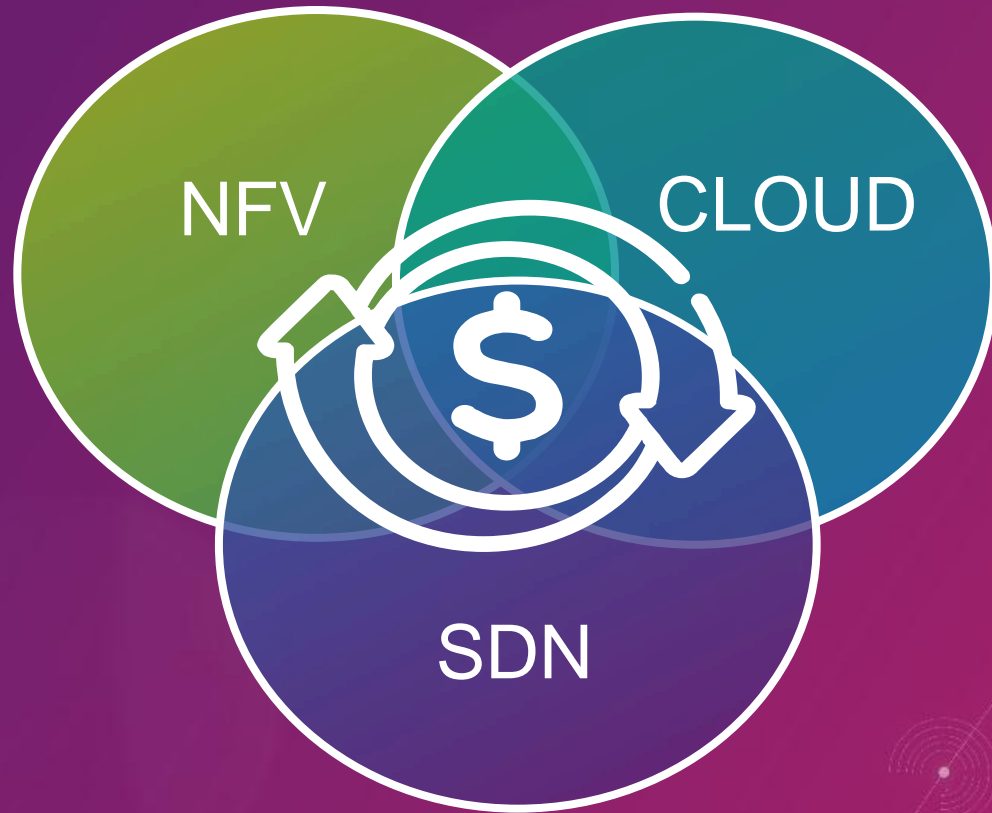
NEW CAPABILITIES

NEW OPERATIONAL TOOLS

HOW DO WE EXECUTE THE TRANSFORMATION

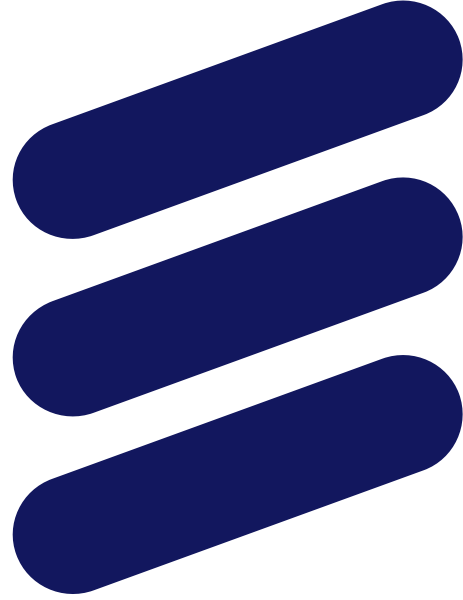


IT TAKES THREE TO TANGO ..



NETWORK
SERVICE
BUSINESS

TRANSFORMATION



ERICSSON