cisco Live!
TURN
IT
UP
#CiscoLive

The bridge to possible

Reimagining the Internet for the Future 2.0

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DLBINT-43

- Almost 3 billion people do not have Internet access.
- How do we connect the next billion?

Cisco Innovations

A new economic paradigm

Silicon

3.2Tbps to 25.6Tbps

Software

Modern Cloud-enhanced

Optics

100GbE ZR

400GbE ZR/OpenZR+

Systems

100G

400G

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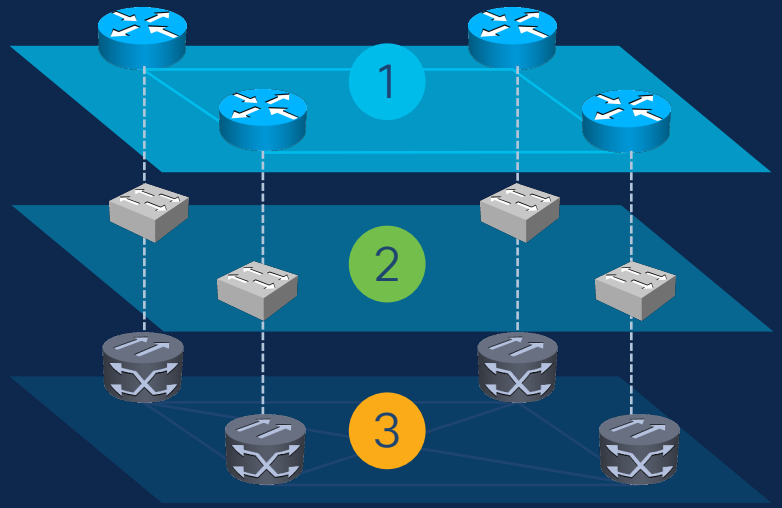
Traditional Layers in Transport Networks

1. IP Routing
2. OTN
3. Optical (ROADMs)



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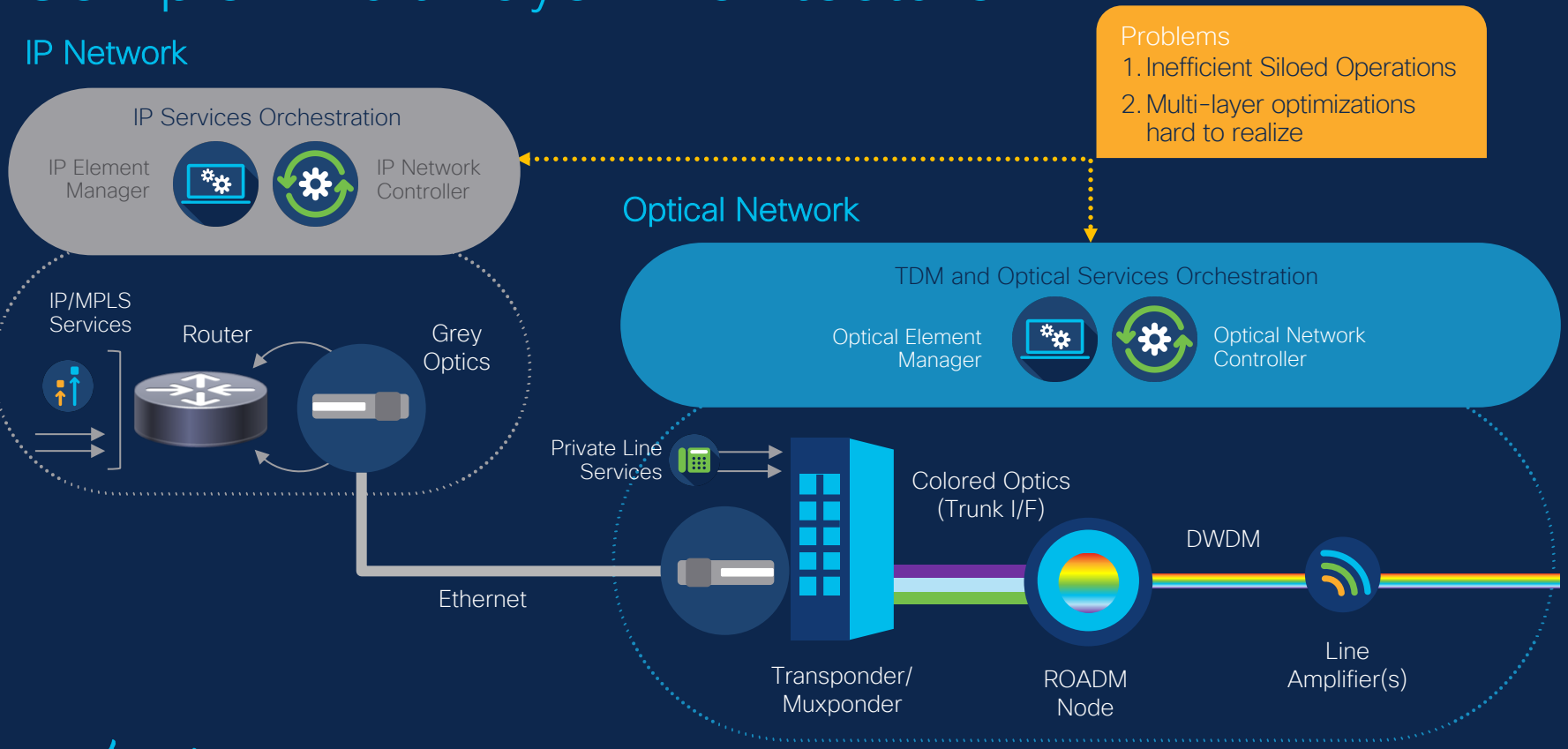
Complex Multi-layer Architecture



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LUXTERA

- Market-leading SiPh expertise and manufacturing
- Pluggable and onboard optics for Webscale and enterprise datacenters
- Innovation to scale and lower cost per bit

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ACACIA

- Complete portfolio of high-speed coherent pluggables
- Silicon for discrete photonic functions
- Innovations for high bit rate optics to lower cost per bit

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The Rise of Open Optical Systems

Any optic, any port, any line system

to reverse a history of...

- Lack of interoperability
- Limited choice and control
- Cost inflation

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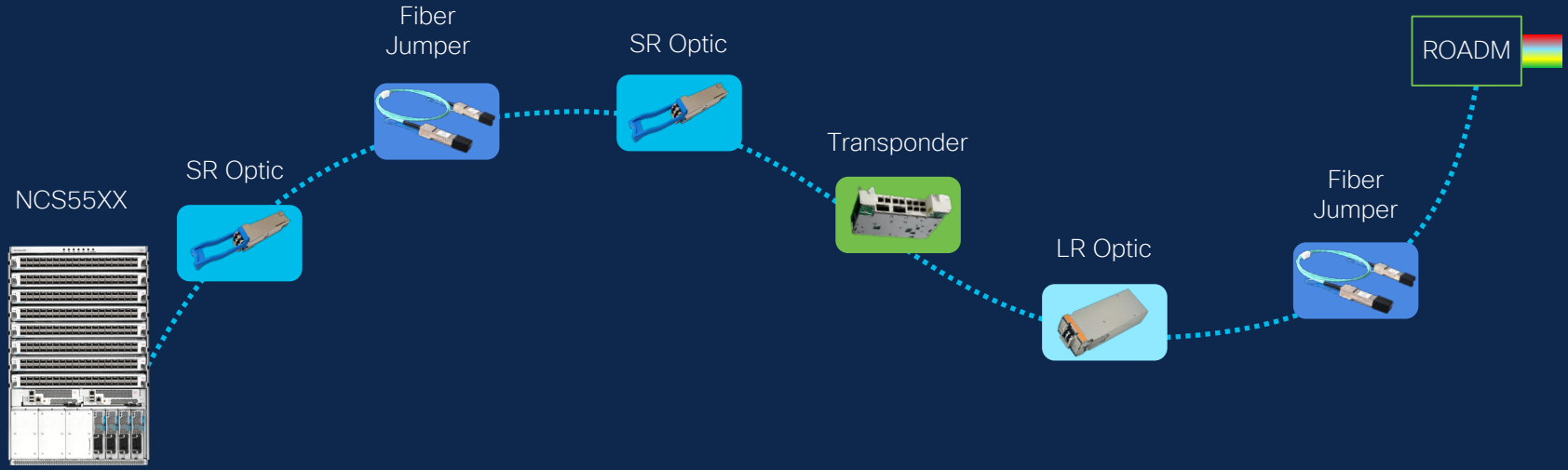
Twilight of Transponders

The Past



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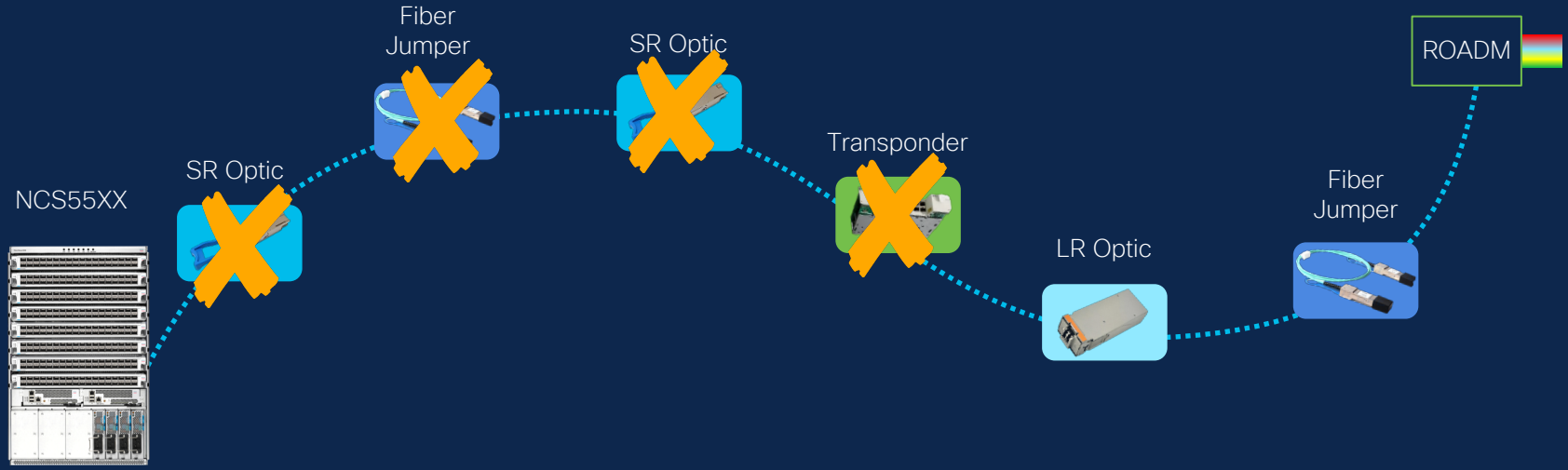
Twilight of Transponders

The Past



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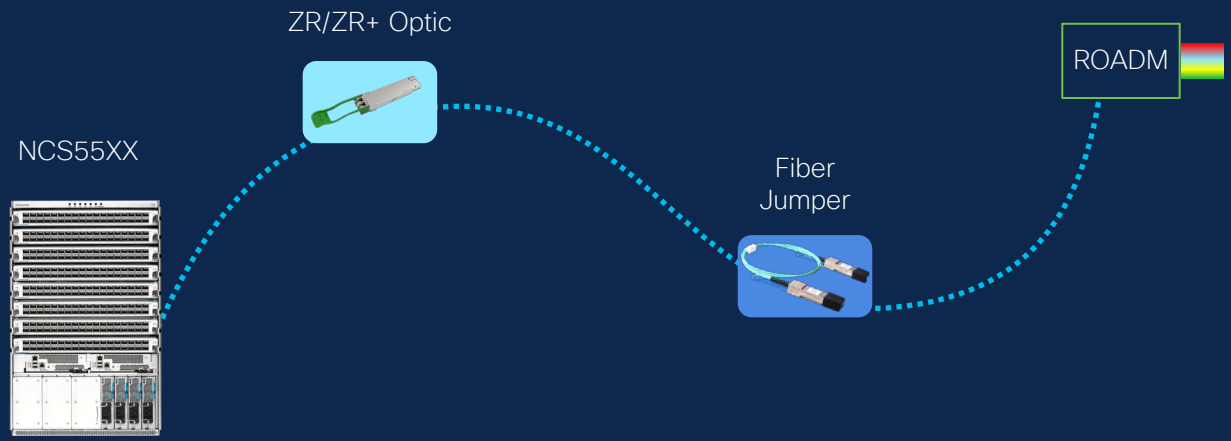
Twilight of Transponders

The Future



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Routed Optical Networking

- Modernized operations and procurement
- Interoperability and standardization
- Efficiency gains

Savings

35%	57%	46%
CapEx	OpEx	TCO

Source: ACG Research

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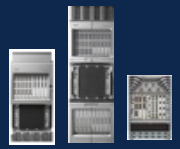
Mass-scale Systems

100G | 400G

NCS 5500

Cisco 8000



ASR 9000

NCS 500

End-to-End

ZR/Open ZR+ optics

IOS XR

Segment Routing

EVPN

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Enriching the Networking Stack

- **Advanced Performance Monitoring**
  SR performance measurement toolkit (delay, loss, liveness)
- **Circuit Emulation**
  Circuit-style SR policies
- **Point-to-Multipoint Transport**
  Delivery with Tree-SID

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Enriching the Networking Stack

- **Better Service Resiliency**
  Dual node redundancy, geo-redundant, fast convergence
- **Point-to-multipoint Service Delivery**
  E-TREE services delivery with EVPN

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Network Automation

Visibility | Action | Insights

Software Defined

Multi-vendor + Multi-domain

Autonomous

Scalable and Adaptive

Cloud Scale

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Customer Panel

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The bridge to possible

Thank you

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