

SCTE ISBE CABLE-TEC
EXPO'16

SEPTEMBER 26-29 PHILADELPHIA

**Hype or Reality! Can Network Operators Really
transform their business with SDN & NFV?**

Ben Bekele

Sr. Manager, Business & Technology Architecture Marketing

Cisco



@bbekele



@benbekele



 #CableTecExpo

Essential Knowledge for Cable Professionals™

© 2016 Society of Cable Telecommunications Engineers, Inc. All rights reserved.

ATT Network on Demand Service

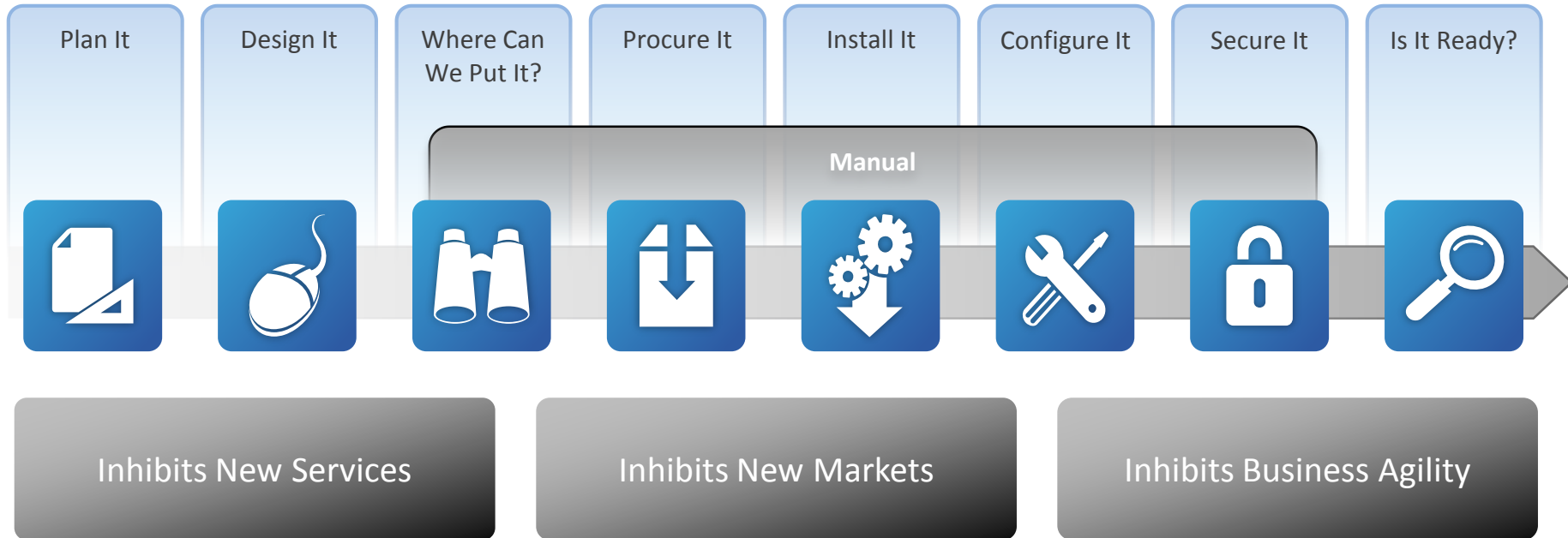
“And what I love about it is my revenue cycle is 90 seconds.
That’s a pretty good deal when you can lower capex, opex and shorten the revenue cycle for your business. “

Ralph De La Vega, CEO, AT&T Business Solutions and AT&T International, LLC

Source: <http://www.rcrwireless.com/20160524/carriers/att-sdn-nfv-efforts-claim-financial-return-international-expansion-planned-tag2>

Major Barrier To Transformation: Complexity

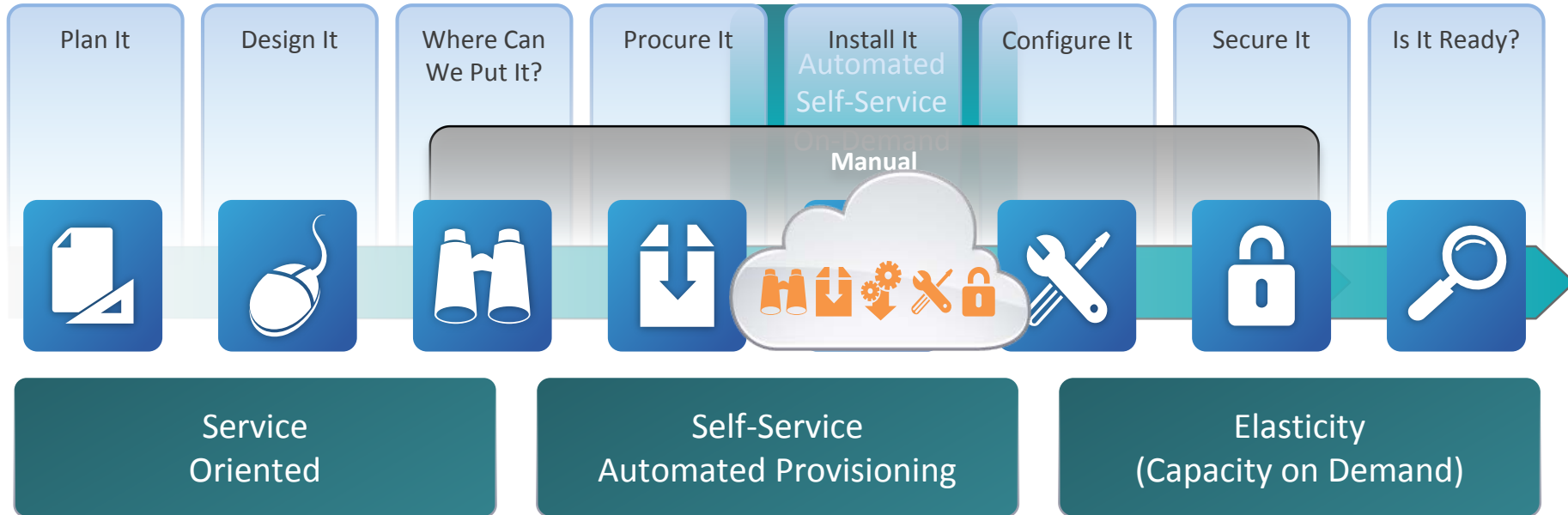
Time-consuming, rigid operations, high operations costs—cannot scale!



From Complexity to Simplicity and Automation

A platform for innovation

From Months to Minutes



SDN/NFV Impact on Operations



Case Studies : Broadband, Wireless Backhaul, L2VPN/Ethernet Service, L3VPN



SDN & NFV SP Business Transformation

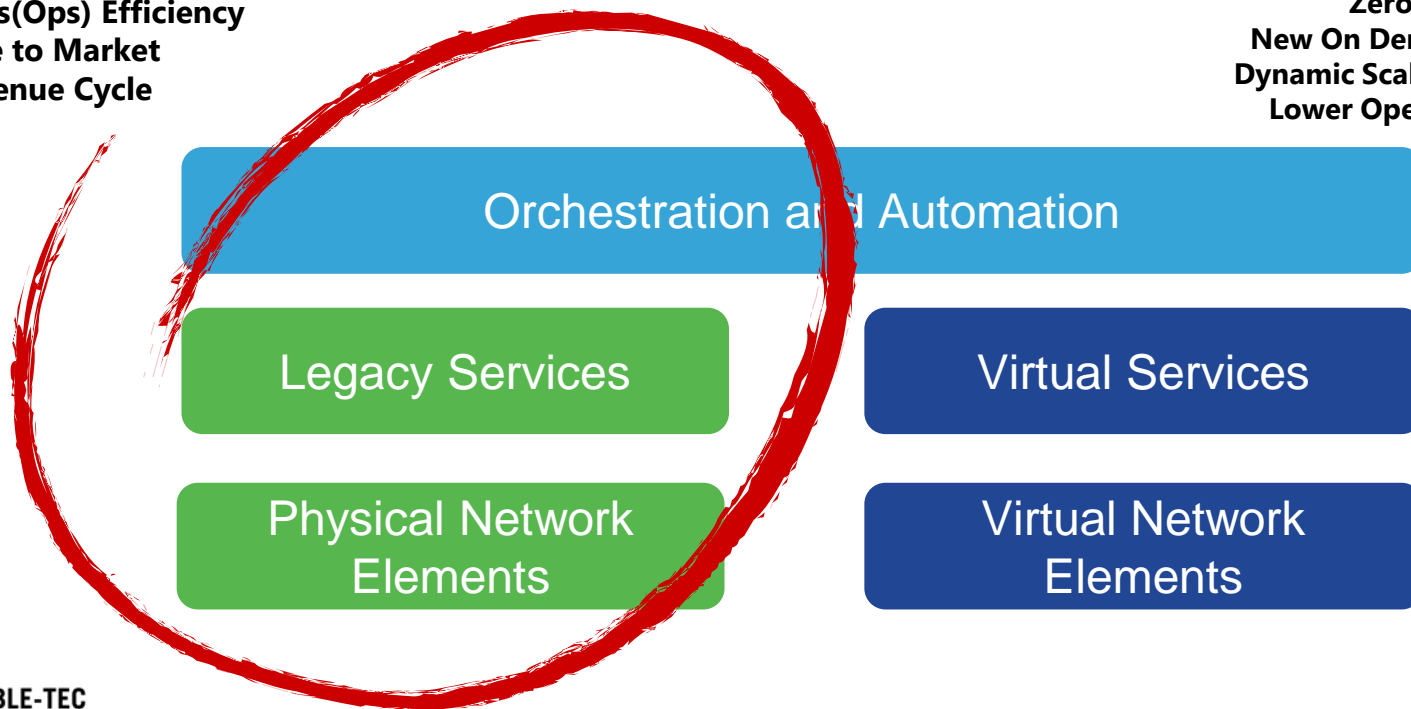
Start with Ops Efficiency for Legacy and Expand into Virtual Services Monetization

Optimization Focus

Operations(Ops) Efficiency
Time to Market
Revenue Cycle

Monetization Focus

Zero Touch
New On Demand Services
Dynamic Scale up and down
Lower Opex and Capex





Service Automation

Service Based Operational Processes





Network Automation

Network Operational Processes

NetOps -
Network
Operations

Maintenance Window

ACL Management

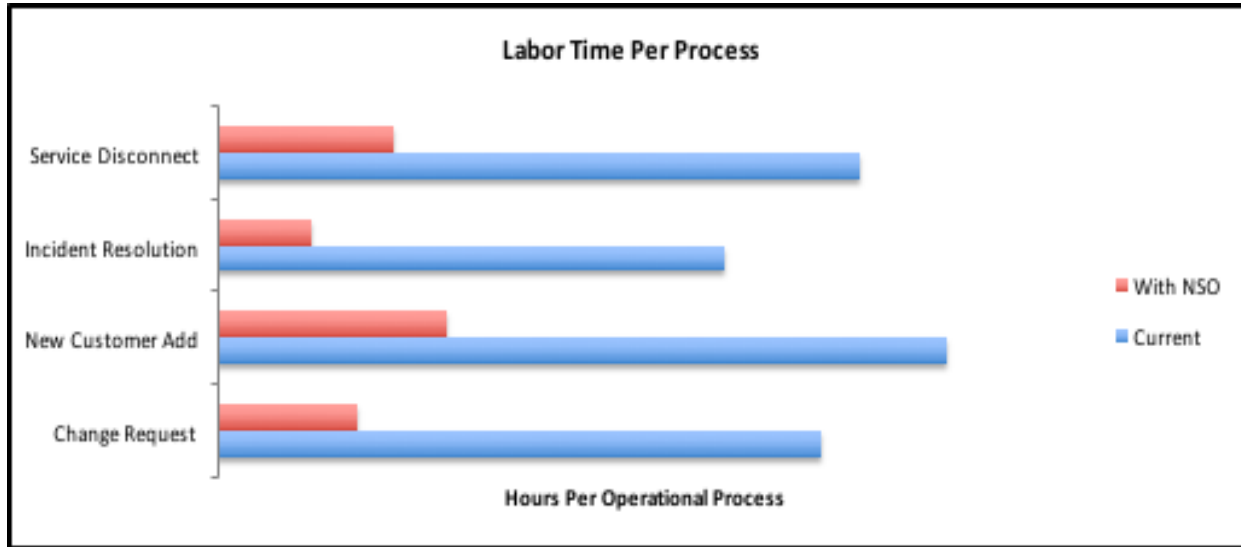
Device Migration

Config Validation

Network Refresh/Regional Rollouts

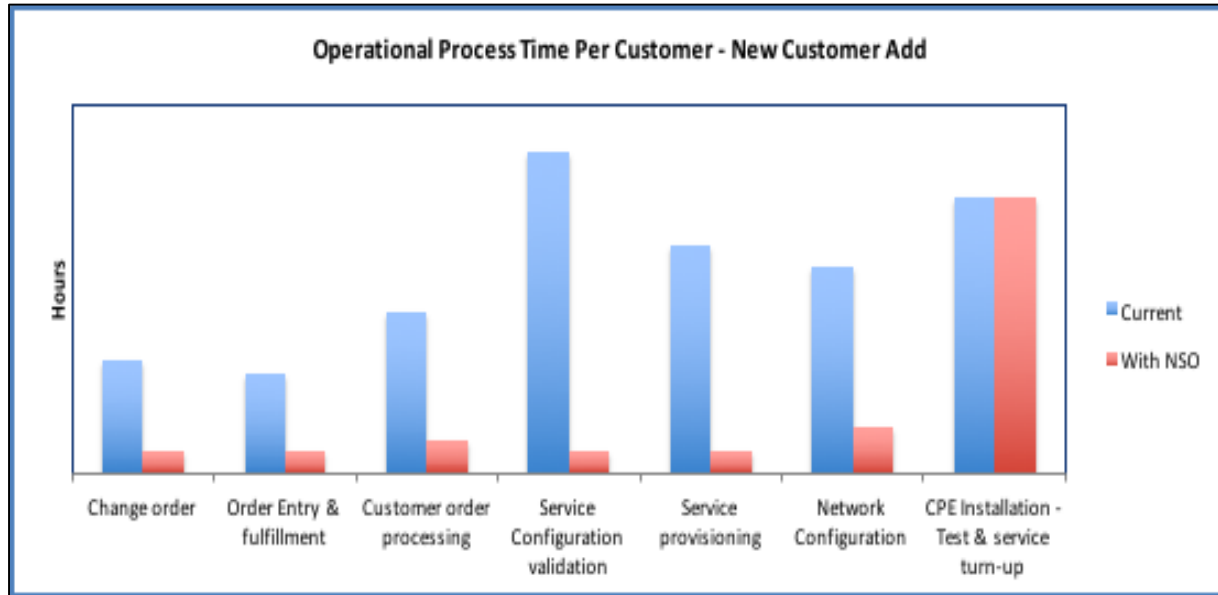
Device Provisioning

Ops Time Per Operational Process



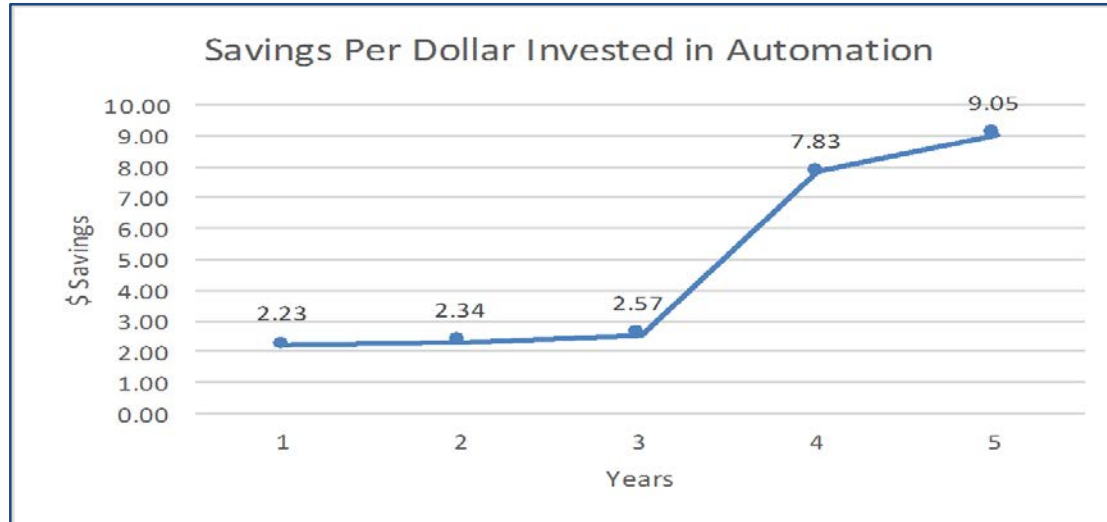
75% Efficiency in Ops on average

Ops Time to Add a New Customer



68 % reduction in Time to Add a New Customer

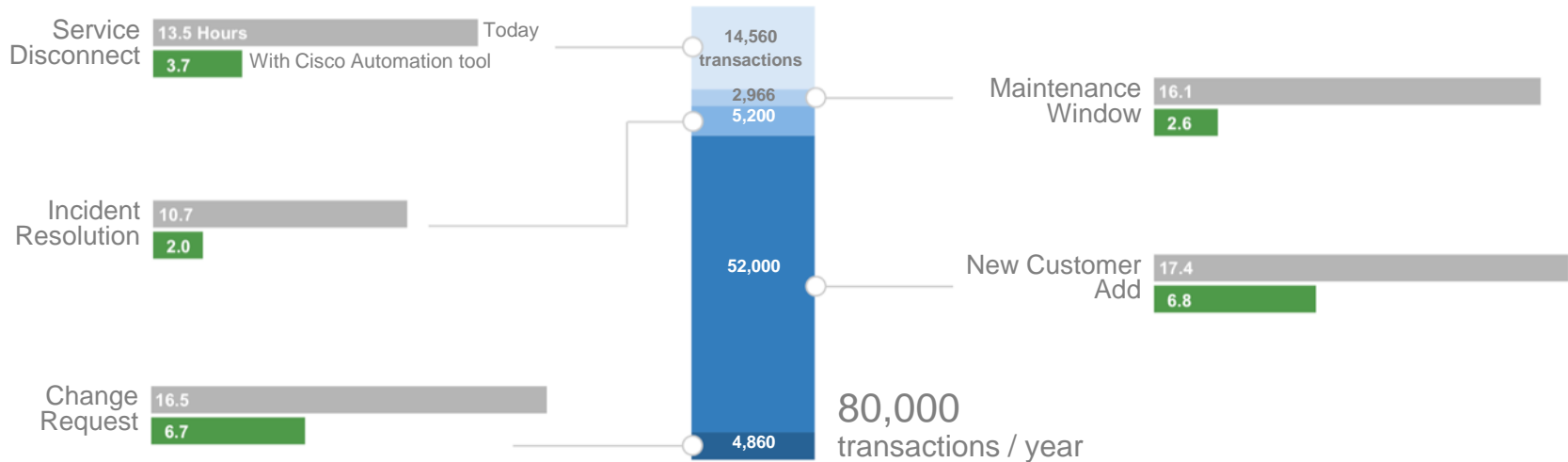
SPs Generate \$5 in Savings for every \$1 Invested in Automation



Average Savings **Increases** as more Services & Operations are Automated

How Automation Can Improve SP Operations?

Tier 1 SP **70-80%** improvement in operations efficiency*



SDN/NFV Impact on Revenue





SDN & NFV SP Business Transformation

Start with Ops Efficiency for Legacy and Expand into Virtual Services Monetization

Optimization Focus

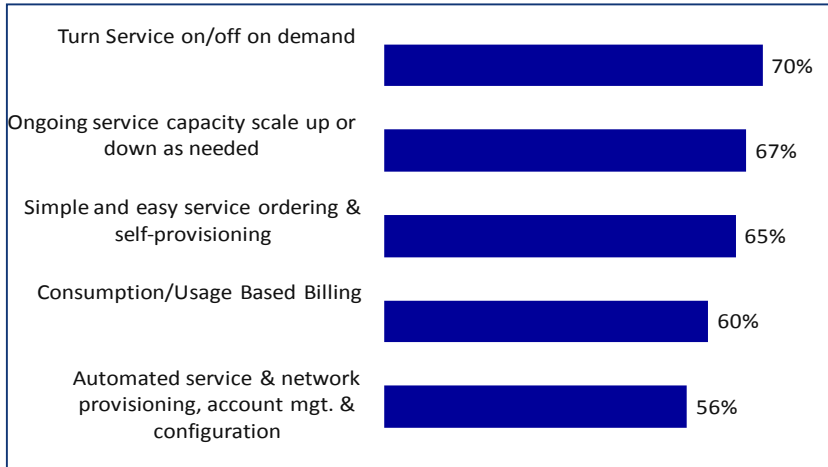
Operations(Ops) Efficiency
Time to Market
Revenue Cycle

Monetization Focus

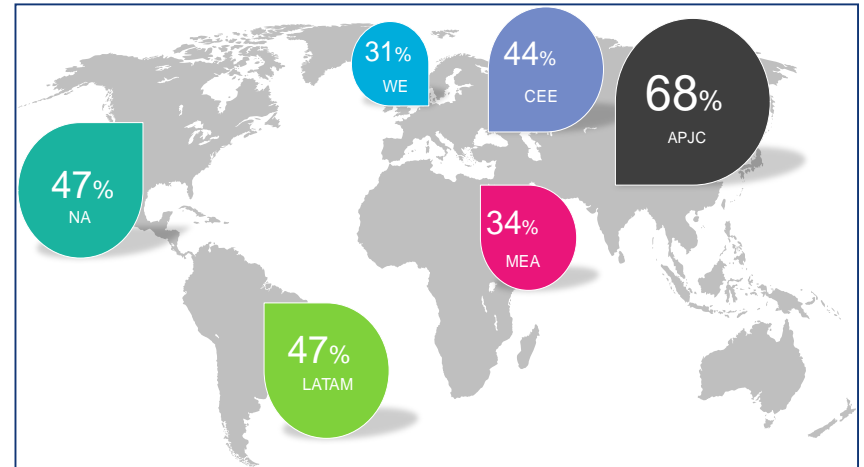
Zero Touch
New On Demand Services
Dynamic Scale up and down
Lower Opex and Capex



Reactions to SDN/NFV Benefits Are Highly Positive



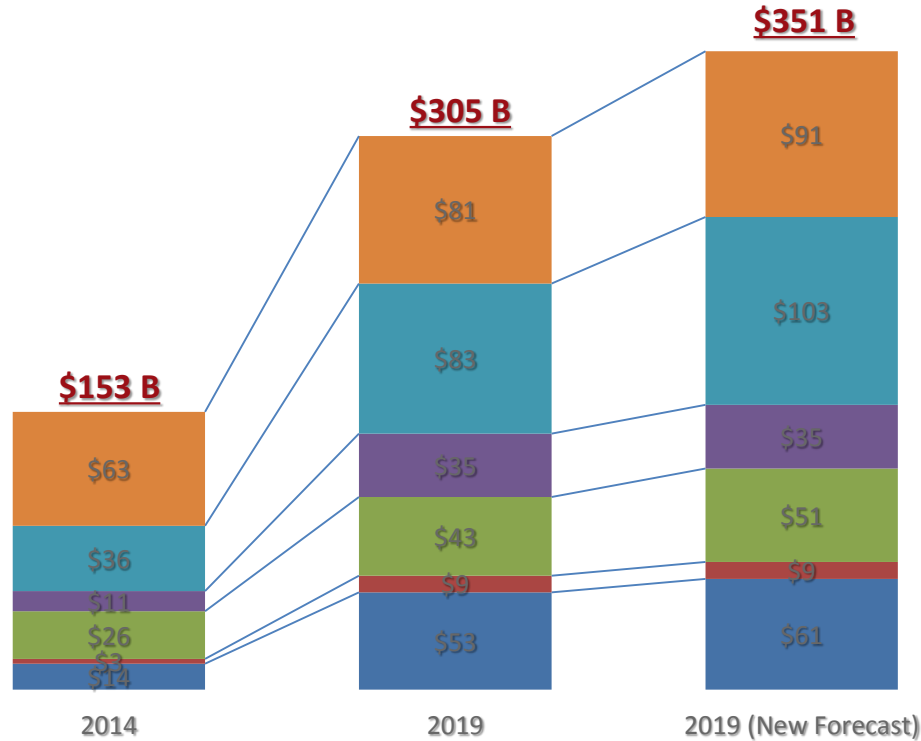
Services Personalization Is Highly Desired Globally



Businesses Willingness to Switch to Service Providers that Offer Personalized IT Services Experiences

WW Market Expansion by ICT Solution

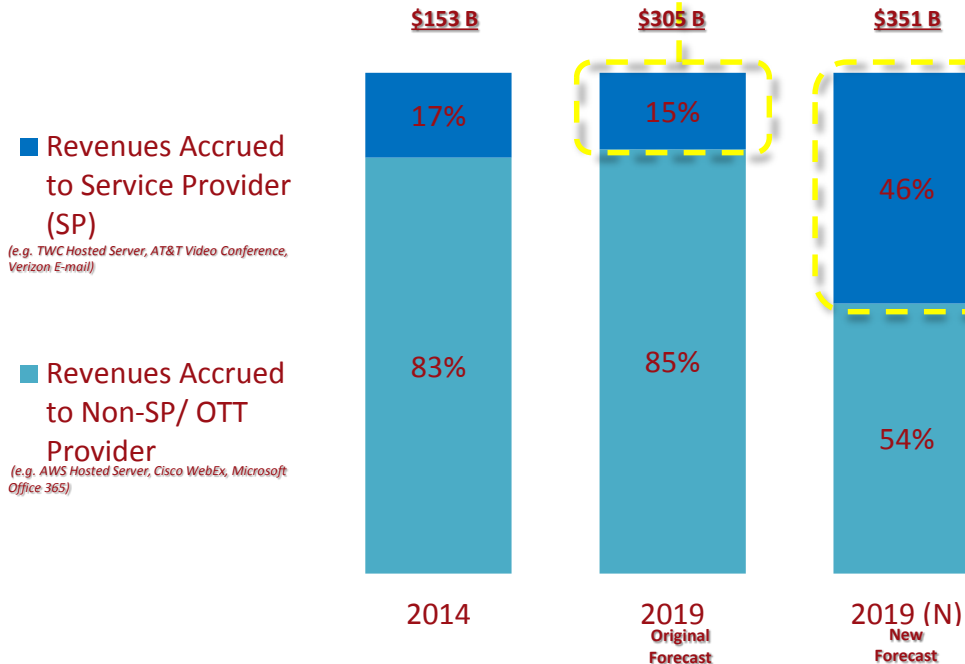
- Web Hosting
- Remotely Managed IT Services (RMITS)
- Online Collaboration, Productivity, & Email
- Video Conferencing & VoiP
- DaaS & PaaS
- Hosted Server, Online Backup & Storage (IaaS)



	<u>Uplift</u>	<u>New CAGR</u>
Web Hosting	15%	18%
Remotely Managed IT Services (RMITS)	12%	8%
Online Collaboration, Productivity, & Email	25%	24%
Video Conferencing & VoiP	1%	26%
DaaS & PaaS	19%	14%
Hosted Server, Online Backup & Storage (IaaS)	2%	28%
Total	14%	34%

Route to Market Shift

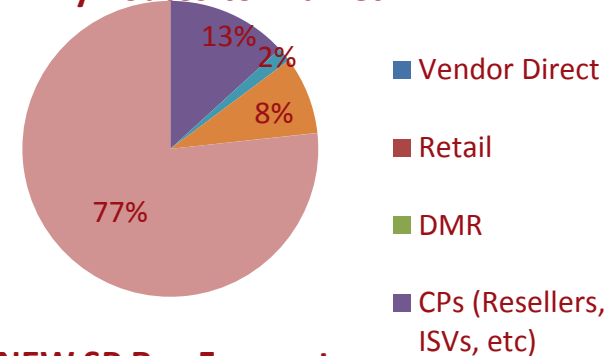
SP Uplift Driven from Selling both Directly and Indirectly (Other Channels)



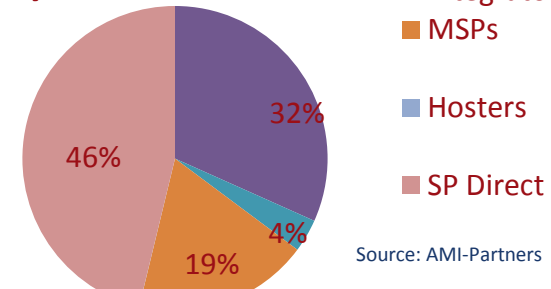
■ Revenues Accrued to Service Provider (SP)
 (e.g. TWC Hosted Server, AT&T Video Conference, Verizon E-mail)

■ Revenues Accrued to Non-SP/OTT Provider
 (e.g. AWS Hosted Server, Cisco WebEx, Microsoft Office 365)

PREVIOUS SP Rev Forecast By Routes-to-Market



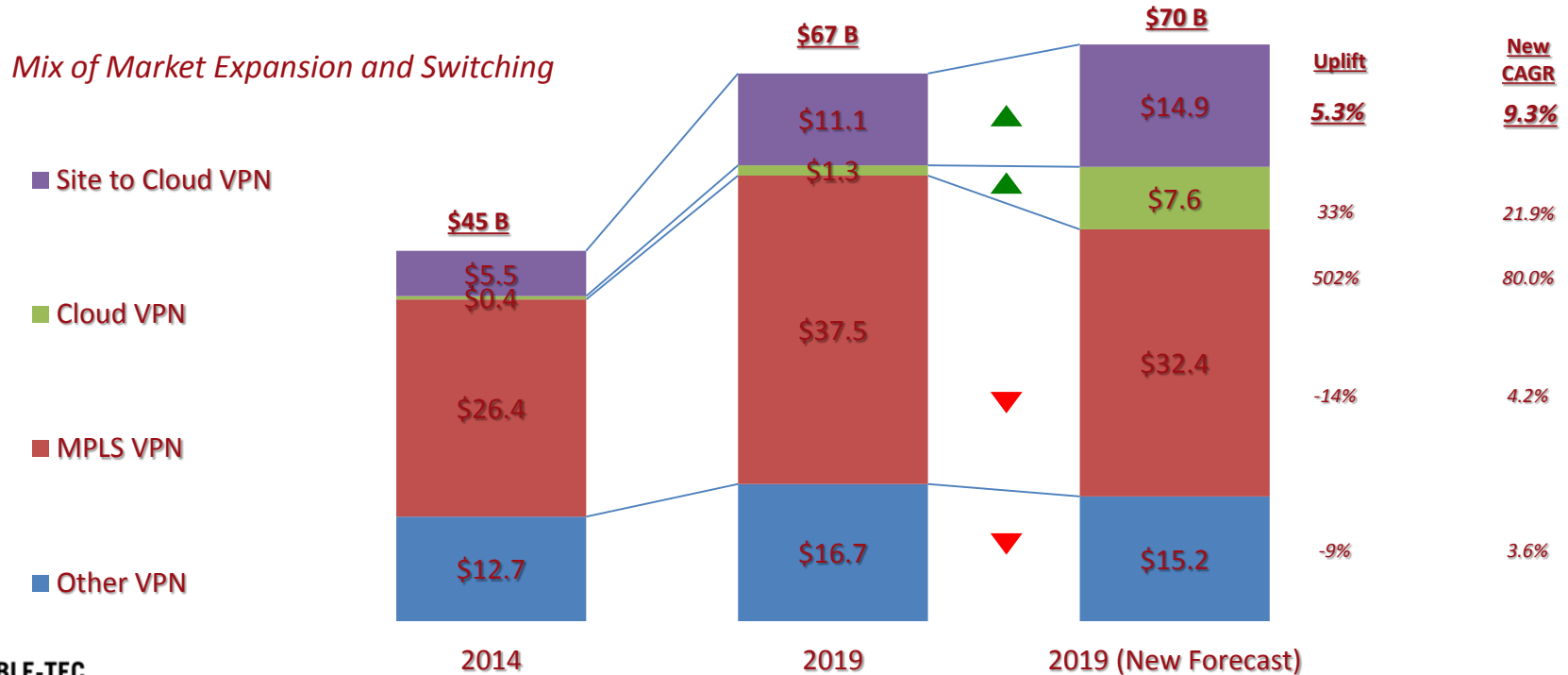
NEW SP Rev Forecast By Routes-to-Market



Source: AMI-Partners

Impact of Virtual Services on Legacy Services

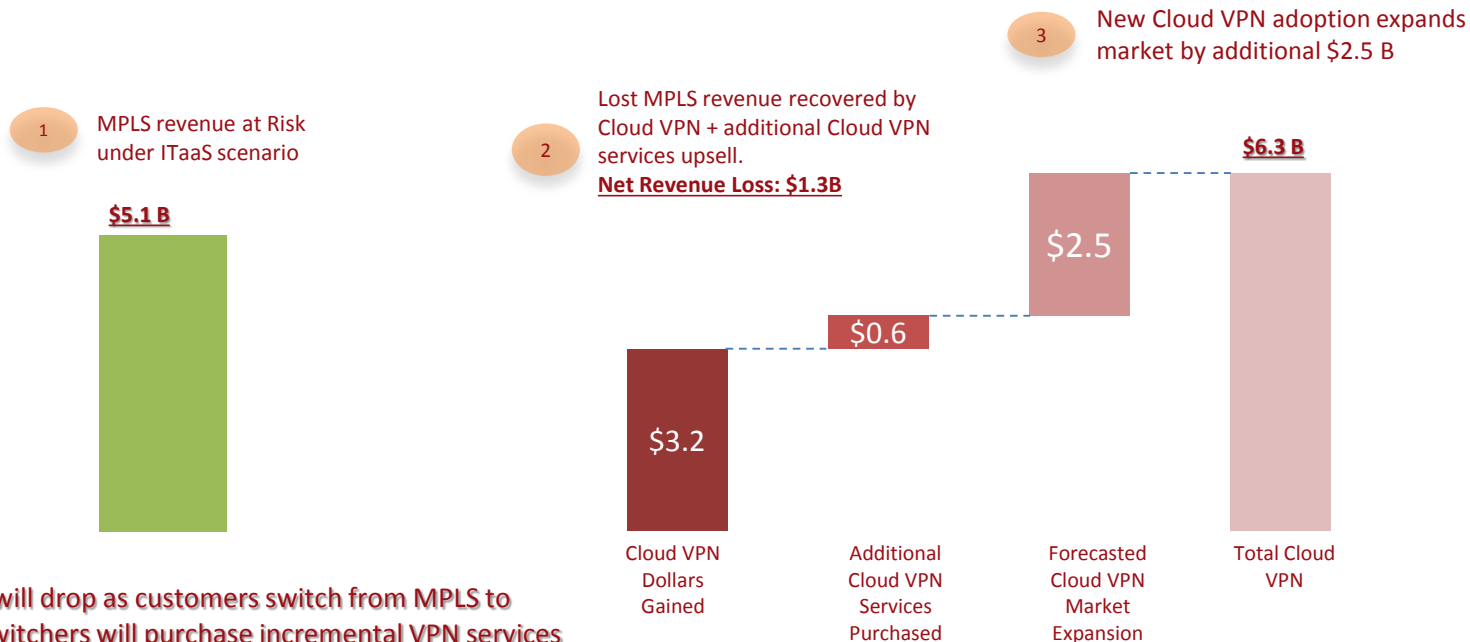
Cloud VPN Use case And Its impact on the existing VPN Market





Market Expansion, Upsell and Switching to Cloud VPN will Offset MPLS Revenue Losses

Migrating Existing Customers And Targeting Net New Customers Will Be Key



Revenue per customer will drop as customers switch from MPLS to Cloud VPN. However, switchers will purchase incremental VPN services

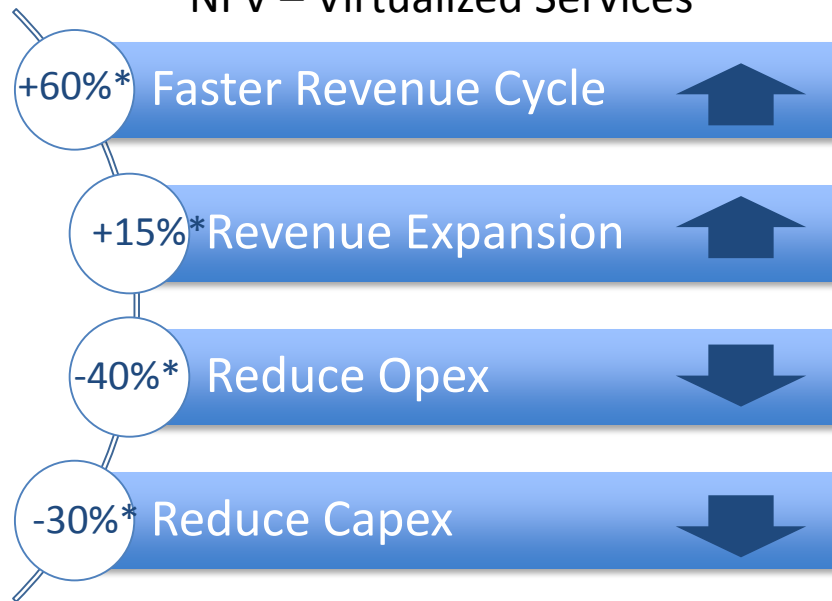


Summary – SP Business Transformation with SDN & NFV

SDN - Automation & Orchestration Value



NFV – Virtualized Services



*Estimates

Source: Industry average based on multiple use cases and customer engagements

SCTE ISBE CABLE-TEC
EXPO'16

SEPTEMBER 26-29 PHILADELPHIA

Ben Bekele

bebekele@cisco.com



 #CableTecExpo

Essential Knowledge for Cable Professionals™

© 2016 Society of Cable Telecommunications Engineers, Inc. All rights reserved.

Reference and Reading

- DEVOPS FOR NETWORK ENGINEERS: IMPLICATIONS FOR NETWORK AUTOMATION, Heavy Reading June 2016
- Cisco and AMI Global SDN & NFV SP Market Opportunity Study
- AMI ICT Services Revenue Forecast