Delivering Managed SD-WAN Faster and at Lower Operations Cost

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Today’s Presenters

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Agenda

• Market Evolution and Opportunity
• Cisco SD-WAN
• Cisco MSX Platform for Multiservice, Multitenant and Multivendor Environments
• Case Studies
• Partnering with Service Providers in Service Creation
| Service Provider Opportunities For Revenue Growth |
|--------------------------------------------------|-----------------------------|
| Security                                         | SD-WAN                      | Cloud                        |
| $6B in 2016                                      | $225M in 2015               | $67B in 2015                 |
| $10.8B in 2022                                   | $8B in 2021                 | $162B in 2020                |
| 9.7% CAGR                                        | 69% CAGR                    | 18% CAGR                     |
Business landscape

By 2021, over

90% of enterprises will use multiple cloud service and platforms
-IDC

2/3rds of enterprises plan to deploy SD-WAN in the next 2 years (IDC)

There are 1 million Cisco routers deployed that are SD-WAN ready

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Unprecedented demands on the network

**Digital Disruption**
- 63 million new devices online every second by 2020¹

**Complexity**
- 3X spend on network operations vs network²

**Security**
- 6 months to detect breach³

**Lack of Business and IT Insights**

**Slow and Error Prone Operations**

**Unconstrained Attack Surface**

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1. Gartner Report - *Gartner’s 2017 Strategic Roadmap for Networking*
The branch and WAN cannot keep up...

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor user experience</td>
<td>- Delays enabling new connectivity - Inconsistent application performance</td>
</tr>
<tr>
<td>Complex to operate</td>
<td>- Difficult to manage multiple network devices - Increasing bandwidth demands</td>
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<tr>
<td>Difficult to secure</td>
<td>- Support non-traditional devices - Can’t use the internet for SaaS</td>
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Benefits of Cisco SD-WAN

Security
Reduce threats with the right security at the right place

Cloud
Get direct access to cloud applications faster

Analytics
Predict and identify problems before they occur

>90% of SD-WAN vendors are not traditional security vendors (Gartner)
Branch-office internet traffic has doubled in the past 12 months (IDC)
30% of organizations have a need for better analytics and visibility in the WAN (IDC)
How does Cisco SD-WAN work?

- **On-premise or Cloud Managed**
- **Transport Independence**
  - Internet
  - MPLS
  - LTE
- **Network Services**
  - Unified Communications
  - SD-WAN
  - Application Hosting
- **End-point flexibility**
  - (Physical or Virtual)
  - Public Cloud
  - Campus
  - Branch
  - Colocation
  - Data Center

**Analytics and assurance**

**Integrated Security**
Comprehensive threat protection
Integrated security

- Meet industry compliance with end-to-end segmentation
- Reduce attack surface with cloud and on-prem security
- Talos threat intelligence protects all users devices
Easier to deploy, manage and operate
Centralized cloud managed fabric

- Cloud-first management and operations with a single WAN fabric across all endpoints
- Simplified workflows for easier configuration, monitoring and troubleshooting.
- Advanced analytics and assurance for application service level agreement
Simplify migration to the cloud
Application quality of experience

- Secure branch to cloud connectivity protects data in motion
- Agile workflows simplifies extending the enterprise to IaaS or SaaS
- Analytics determines the optimal path for the best application experience
Optimize the user experience
Analytics and assurance

Visibility of applications and infrastructure across the WAN
Forecasting and “what-if” analysis
Intelligent recommendations

Viptela vAnalytics

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Deploy branches faster at lower cost
Transport independence

- Leverage internet for public cloud and Internet access
- Secure VPN overlay for private and virtual public cloud access
- Seamless extension to the cloud enables business policy to follow workloads
Reduce complexity for remote sites
Single rich services branch platform

- SD-WAN
- Unified Communications
- Cloud Based Security
- Application hosting
- Application Optimization

- Easy to deploy and manage services on-demand
- On-demand physical and virtual form factors
- Best of breed trusted network services
Case Study
Canadian super market chain

Background
• Thousands of stores
• Deployed ISR 4000 and ASR 1000
• 3 WAN circuits
• Wanted to use LTE cost effectively

Benefits of Cisco SD-WAN
• No new routers
• No additional hardware required
• No truck rolls
• Simple image upgrade
Background

- Reduce OpEx and CapEx costs
- Re-energize customer in-store experience
- Improve mobile application performance
- 1600 stores globally
- MPLS - dual broadband
- 7 Segments – PCI, guest WiFi, security

Benefits of Cisco SD-WAN

- 26x Bandwidth improvement
- 5x Improvement store conversions
- $20M Saved over 3+ years (40% savings)
- Ease of Management
- Customer insights
Getting started with Cisco SD-WAN

Advisory Services
Strategize, assess readiness and analyze gaps to create a custom transition plan for your SD-WAN deployment

Professional Services
Plan, design, implementation and training

Technical Support Services
Case management, escalations, stakeholder reviews and scope management
Cloud delivered secure, flexible and rich services architecture that delivers the best user experience over any connection.

Scale your WAN over thousands of endpoints with consistent policy and the strongest security.

Industry’s broadest protection and greatest agility from the network edge to the cloud.
Cisco Is Delivering For Service Providers

Faster deployment cycles
Pay as you Grow Virtual Branch and Cloud Based Routing
Deploy in minutes not weeks / months
Ongoing Access to Newest Features

Scalable consumption
Control scaling what, when, where they want
Dynamic license consumption
Faster time to value (quicker deployment)

Financial benefits
Hardware Independence and Freedom of Choice
License Portability for added Flexibility
Lower cost of entry
Managed Services Accelerator (MSX)
Cisco Managed Services Accelerator (MSX)

Cisco MSX is a cloud-native, multi-tenant service creation and delivery platform that helps service providers **quickly, easily, and cost-effectively** develop and deliver managed services to business customers.
MSX Simplifies Service Creation & Delivery

One Platform; Many Services
MSX is a full-stack solution that integrates into a BSS/OSS once and enables multiple service offers.

Faster Time to Market
Multiple Deployment Options
Reduced Development Costs
Differentiated Services
Independent Services Drive SP complexity

High cost to integrate ...  
... high cost to operate.

Complexity lowers service velocity and ability to differentiate

No cost, complexity advantage to adding additional Cisco services vs 3rd party

IOT  SDA  Branch NFV  SD-WAN  SPN  SP DC NFV  Cloud  Meraki  Umbrella  Collab
MSX Removes SP Complexity by Converging

Each service has lower cost to integrate…
… lower cost to operate.

Increased service velocity and differentiation from common context enabling new service mash-ups of Cisco and SP value

Common framework for service integration, catalog, delivery and operation.

IOT  SDA  Branch NFV  SD-WAN  SPN  SP DC NFV  Cloud  Meraki  Umbrella  Collab

Pre-built Cisco service packs reduce cost and complexity relative to third party options. Maximize Cisco pull-through in services and SP infrastructure.

The cost to integrate and operate each additional Cisco service is decreased, driving clear financial preference for Cisco.
Pre-Built Service Packs – Ready to Sell

SD-Branch
- Allows VNFs to be deployed on "universal CPE" running Cisco NFVIS
- Rich templating capabilities provide reusable service chains and device configurations

Cisco SD-WAN
- Speeds deployment of multi-tenant SD-WAN environments based on Cisco Viptela technology
- Coordinates with vBranch service pack to deploy virtual vEdge on ENCS

Managed Device
- Quickly on-board new devices with Cisco Plug-and-Play and assign them a templatized configuration

• And more to come
MSP Case Study - Managed SD-WAN Service

Cisco Managed Service Wrap

- Service Portal
- Service Assurance Monitor
- MSX Platform
- Service Orchestration

MSP Ops & End Customer

Self Service Change Requests, Reports etc

Cisco SD-WAN Overlay per End Customer

- SD-WAN Branch
- Physical or Virtual CPE

- MPLS (IP-VPN)
- Application Visibility + Policy Based Traffic Load Balancing
- Service Provider Network Operations for IPVPN / Internet / 4G Underlay

- Internet/4G

Service Deliverables:
- Order & Workflow Management
- Service Request Fulfillment
- Project Management
- Event Management
- Incident Management
- Problem Management
- Change & Configuration Management
- Circuit Management
- Standard Service Reporting
- Service Level Management
- Billing Reports
- Proactive Problem Management
- CPE SW Release Management

LiveAction LIVE-SP
(Previously called Living Objects Eye.Lo)

Service Portal

Customer 1
MSP Case Study - Managed SD-WAN Service

Cisco Managed Service Wrap

**Service Portal**
**Service Assurance Monitor**

**MSX Platform**

**Service Orchestration**

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**Cisco SD-WAN Overlay per End Customer**

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**Service Portal**
**Service Assurance Monitor**
**Service Orchestration**

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**Customer 1**
- vManage
- vSmart
- vBond

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**Customer 2**

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**MSP Ops & End Customer**

- Self Service Change Requests, Reports etc

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**MSP Case Study - Managed SD-WAN Service**

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MSP Case Study - Managed SD-WAN Service

Cisco Managed Service Wrap

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Customer 2

Customer 3 etc...

Self Service Change Requests, Reports etc

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Partners in Service Creation
Partnering for Profitability

With our Cloud and Managed Service Program, Cisco helps our Service Provider partners get to market faster, enhance their profitability, and achieve top-line growth in their managed and cloud businesses.

Expedite Go-to-Market
Enable profitable growth and increase customer satisfaction by offering customers ready to deploy Cisco Powered solutions that accelerate their digital transformation.
Go to market confident that their services are exceptional backed by our superior technology, support and security.

Secure Financial Rewards
Get recognition for your investment in Cisco through our financial rewards.
Simple and predictable incentives drive business in key growth areas.
Increase their margins with discounts, incentives, promotions, and market development funding.

Achieve Marketing Velocity
Reach new markets and new customers more efficiently using our sales enablement and marketing tools, events, as well as, designation and branding.
Use MDF funds to create more demand by using our marketing resources such as marketing campaigns and digital tools.
GTM Aligned to the Modern Buyer Journey

SP Brandable Collateral

How SD-WAN will Transform the Network
And lead to innovative, profitable business outcomes

Infographic(s)

Email Campaigns

Social
For more information

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October 22-25
Miami - BroadSoft Connections,
November 12-15
Las Vegas - Cisco Partner Summit,
November 13-15

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November 15 for SD-WAN announcements