



The bridge to possible



Automation and Real-time Orchestrated Service Assurance

Cisco Knowledge Network Webinar

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Today's Presenters



Marc Austin

Head of Strategy and
Growth, Crosswork
Network Automation



Paul Thompson

Director of Solution
Engineering –
Strategic Partnerships



Jay Stewart

Director of Solutions
Engineering



Session Agenda

- Cisco's Automation vision
- 5G Market Drivers and Challenges
- 5G Service Assurance Challenges and Success factors
- Cisco Crosswork and Accedian Skylight
- In action (Demo)
- Service Provider business value
- Automated assurance - looking ahead



Cisco's Automation Vision

Automate processes by bringing together visibility, insights and actions in a closed loop



Visibility

Verify and monitor customer experience



Insights

Correlate data, identify trends and patterns

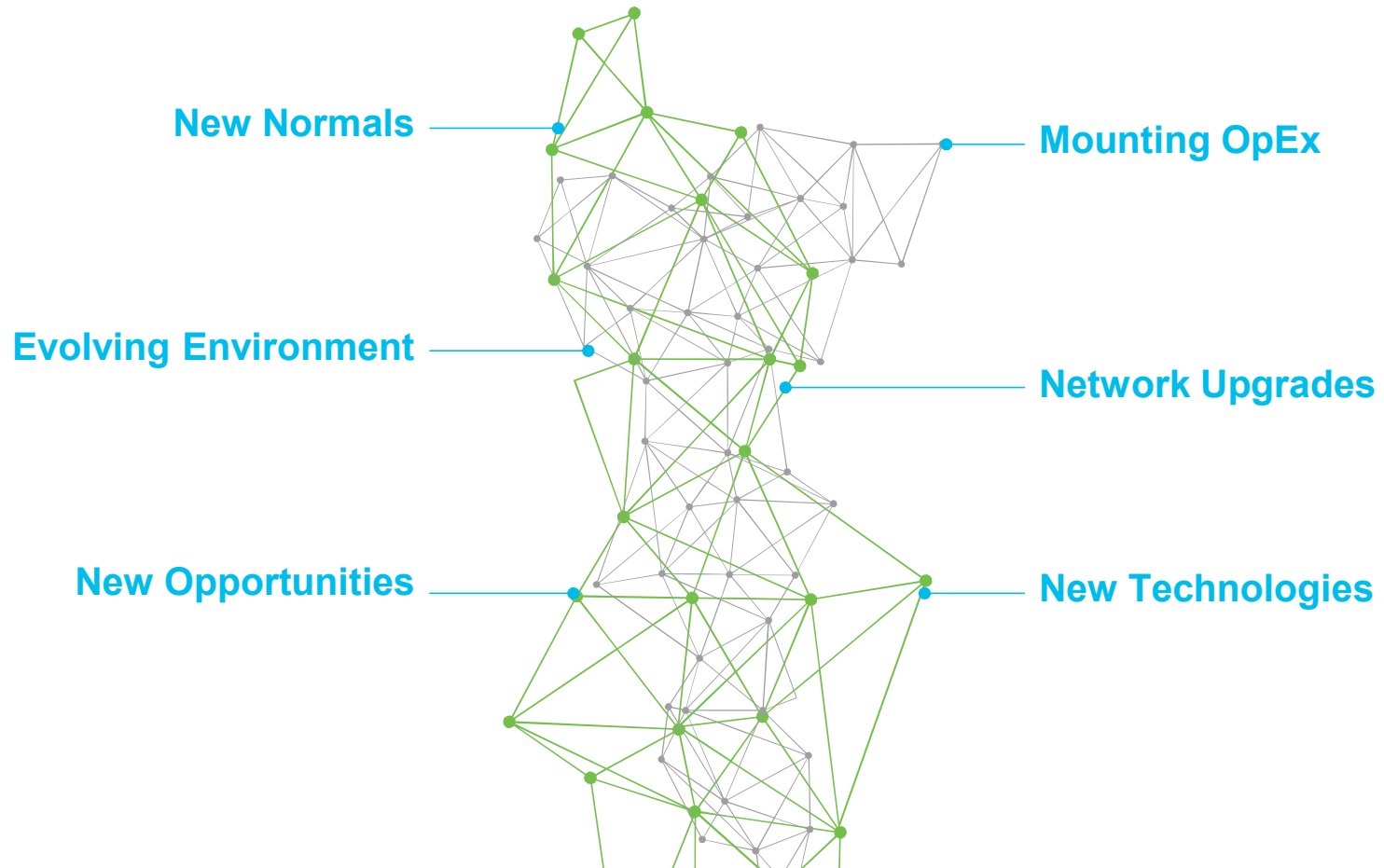


Action

Automate processes to drive agility

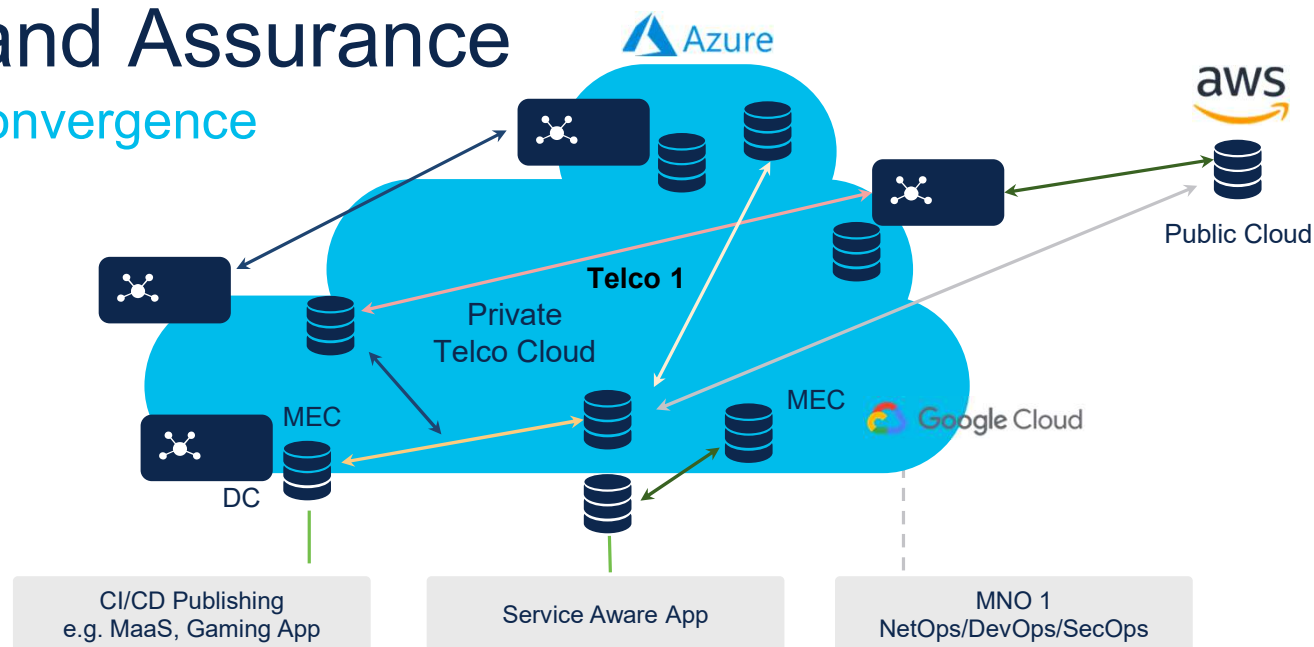
Complexity is the Enemy of Speed

Break the economics



The Emerging Complexity of Service Delivery and Assurance

Telco-Cloud convergence



1. As networks become complex and dynamic how do you instrument the network to gain visibility?
2. These networks are complex and all components create a lot of data, but how do you take all of the data to create actionable insight?

5G-Specific Challenges

- 5G's **service-based architecture** is an inflection point for industry change
- **Strict service SLAs** require real-time “accurate visibility” and “business impacting” insight
- 5G requires **assurance at the speed of human perception**

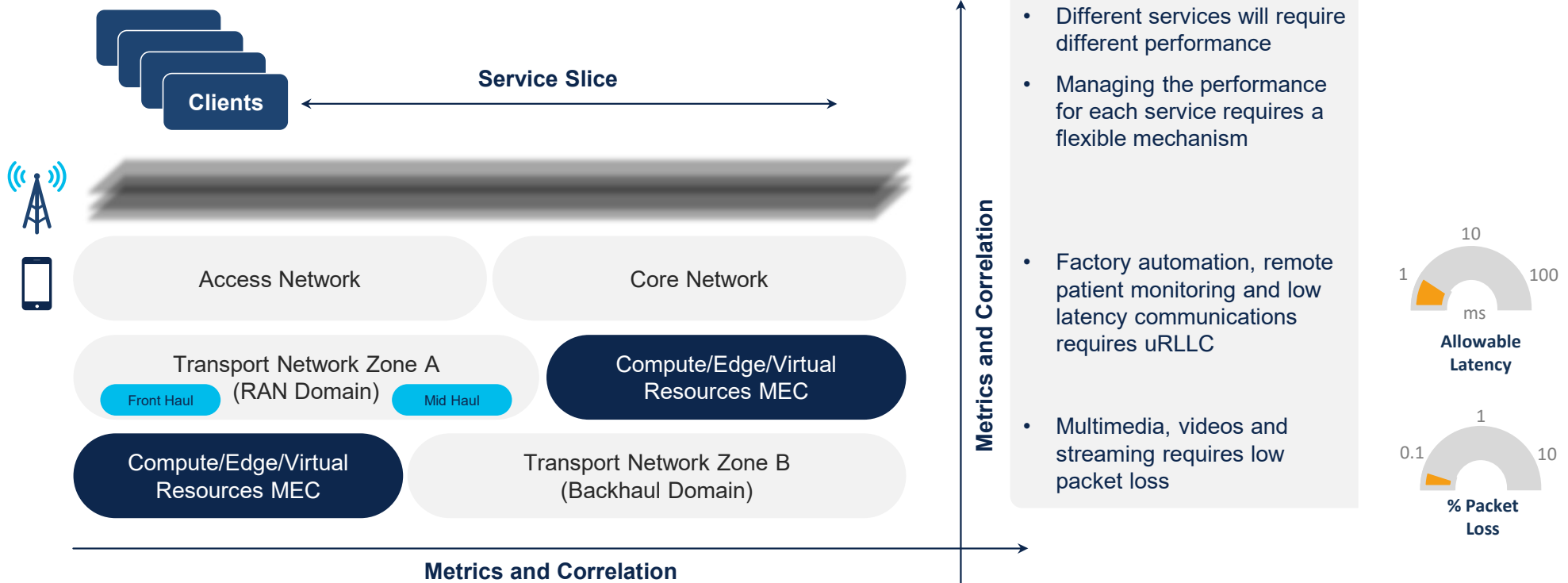


5G Services and Target KPIs

Class	5G Services	Throughput Required	Latency Allowable	Packet loss Sensitivity	Local compute Required
IoT NB-LTE-M/LTE-IoT allow devices to communicate as rarely as once every 40 minutes	mMTC Massive machine-type comms - sensors for agriculture, smart meters cars.				
	uRLLC Ultra-reliable, low-latency comms - factory automation, remote patient monitoring				
eMBB Extreme mobile broadband	Real-Time Communication VR/AR				
	Streaming Video/media				
	HTTP/HTTPS Internet/web services				

This is where the challenge lies

The 5G service assurance challenge is all about the service



The Cisco and Accedian SolutionsPlus Advantage

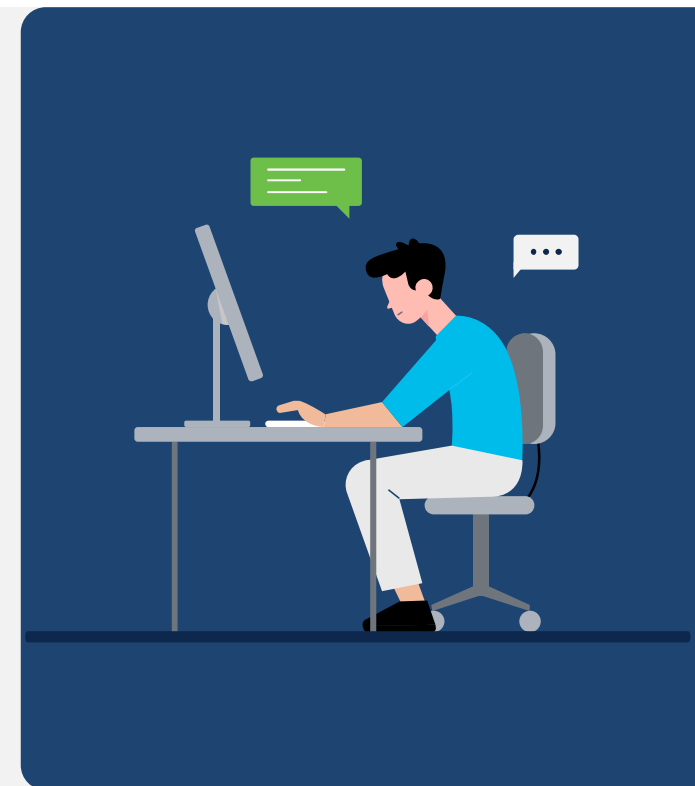


Accedian is an official member of the Cisco® DevNet SolutionsPlus Program

- This means that CSPs worldwide can approach Cisco and approved Cisco partners to purchase Accedian Skylight as a validated solution and as an addition to Cisco Crosswork™ and Cisco NSO

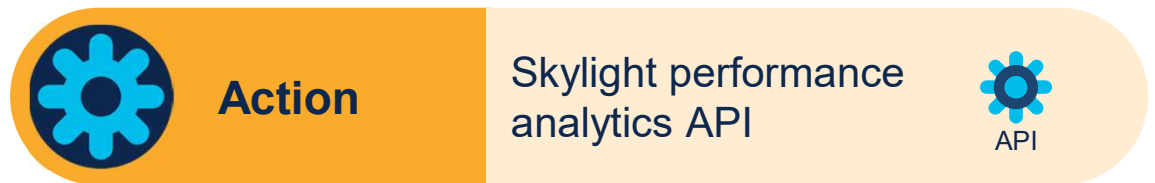
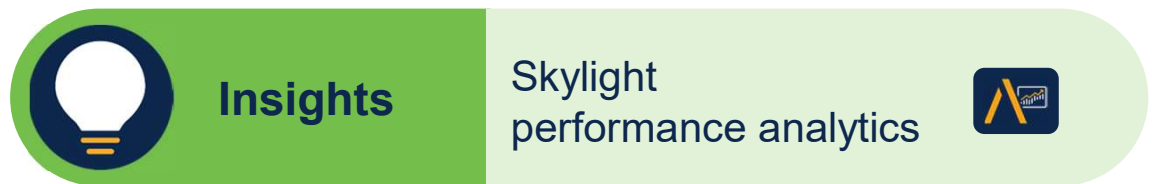
Customers benefit from Cisco SolutionsPlus:

- More and better choices to solve challenges and generate outstanding business outcomes
- Simplified procurement
- Coordinated developer support
- Confidence with Cisco validated and tested apps

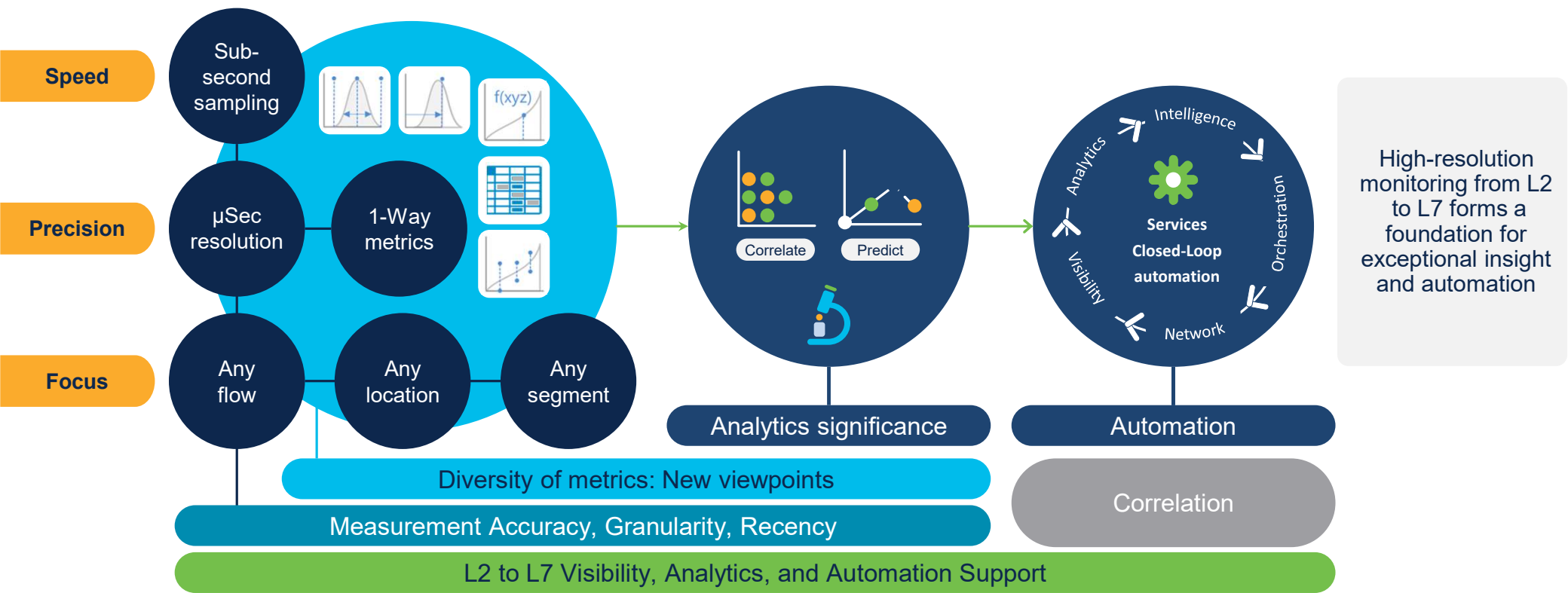


Cisco Crosswork Automation with Skylight

- Visibility across all network domains
- Visibility across all layers of the network
- Multi-vendor integration
- Service provider scale and adaptability
- Fully software-based solution
- Hardware-assist capability
- Data granularity and accuracy



Skylight and Cisco Crosswork address service assurance challenges



Slide 12

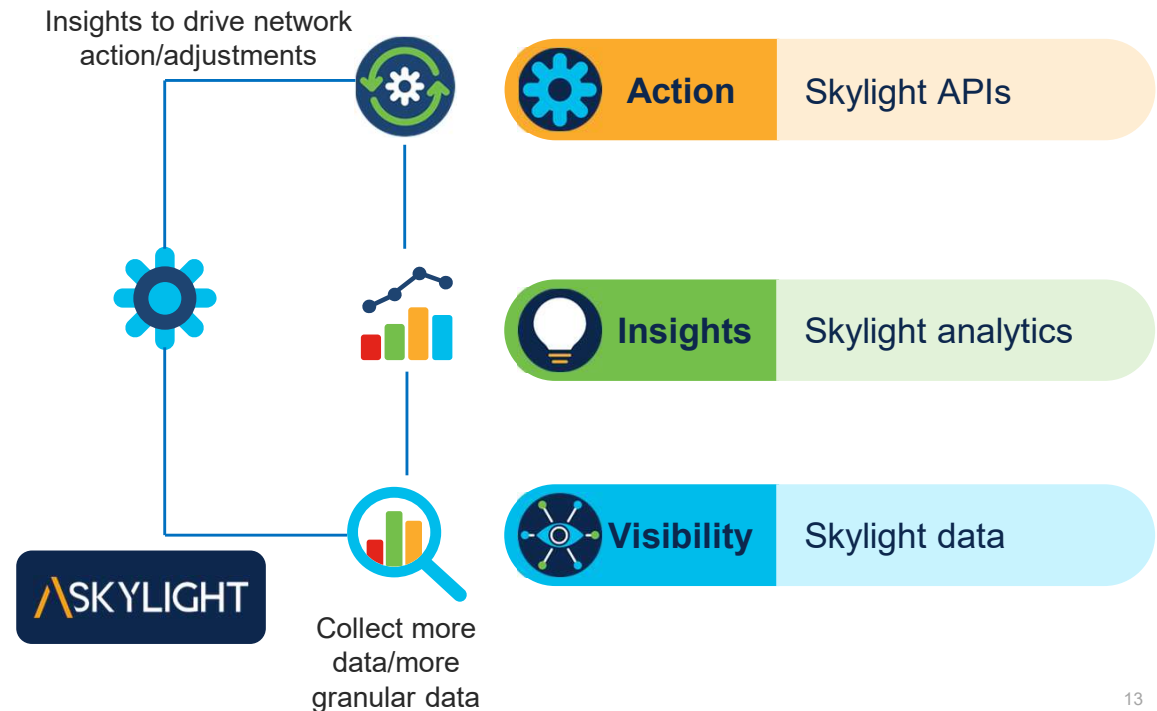
- 1** Please advise if this stays or we go with slide 8 instead
Microsoft Office User, 2/21/2022
- 1** Well, I want it to stay, but if others want to remove it, remove it
Paul Thompson, 2/17/2022
- 1** I think it's useful to show the How? part of solution slide 8 is high level
Sandra Oboyle, 2/17/2022
- 2** Team, please determine if this is going to be included and if any what edits need to be made
Microsoft Office User, 2/17/2022
- 2** Yes I want it included
Paul Thompson, 2/21/2022
- 3** Changes made to suit what I need
Paul Thompson, 2/21/2022

Accedian + Cisco Crosswork Automation

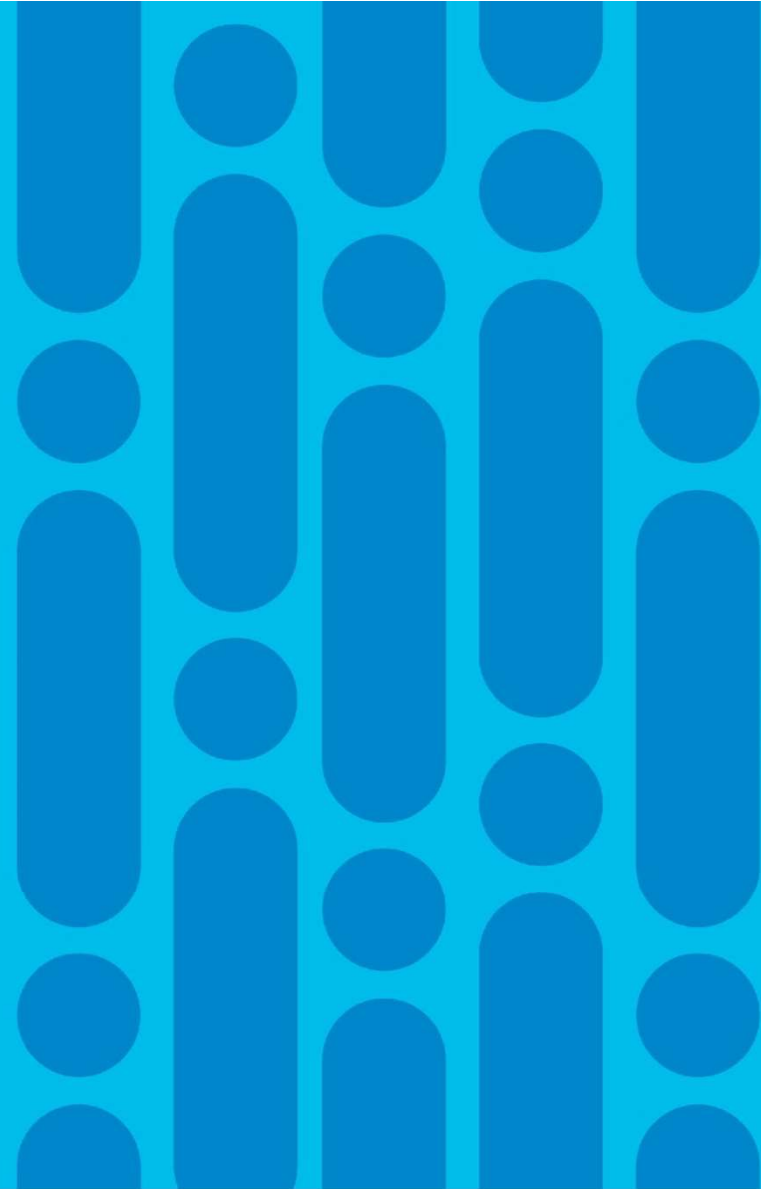
Use case example: 5G Slice Assurance

- Closed-loop automation to make changes to the transport and slice assurance
- Near-real-time adjustment
- Self-healing
- Automatically add new service assurance probes






Skylight Analytics provides insights to Cisco Crosswork to drive action



In Action (Demo)

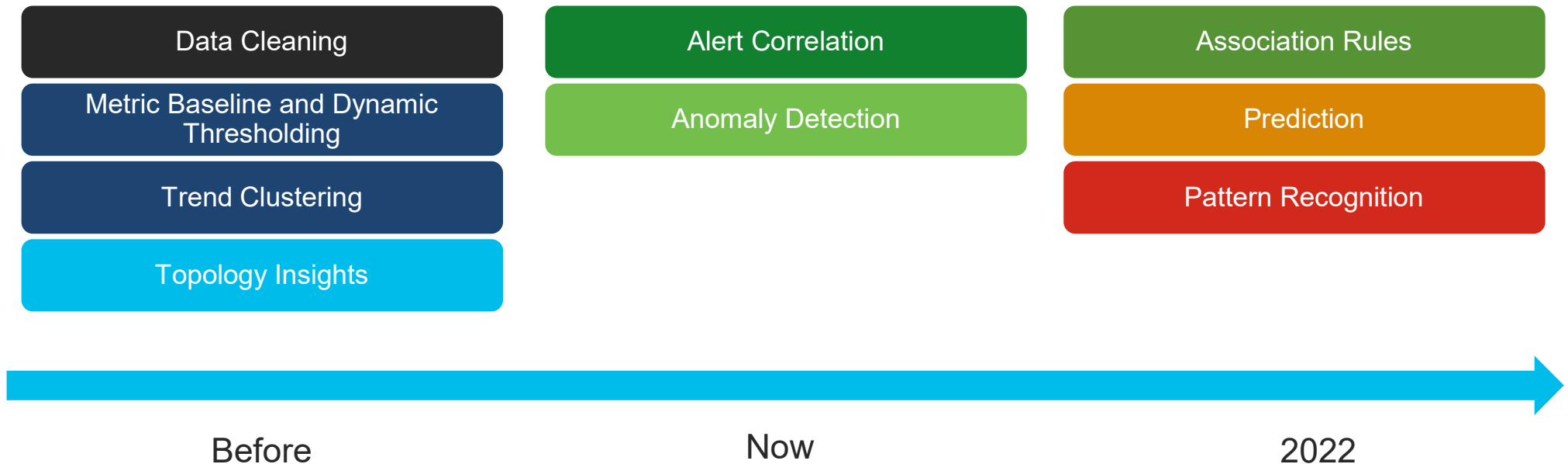


Business Value of Automated Assurance

	Proactive Assurance and Monitoring	<ul style="list-style-type: none">• Fix issues before customer QoE is impacted – reduce churn & meet SLAs
	Predictive Analytics and Planning	<ul style="list-style-type: none">• Smart CapEx - spend where it's most needed
	Operational Efficiencies	<ul style="list-style-type: none">• Drive down MTTR – find root cause and fix before calls to support
	Upsell and Differentiation	<ul style="list-style-type: none">• Multi-tenant customer reporting portal (example) (25%-40%+ premium or differentiator)
	Automation with Crosswork = Action	<ul style="list-style-type: none">• Automate assurance as part of the service lifecycle - CapEx and OpEx savings

Advanced Analytics - Evolution

Predict and take proactive action rather than react and respond



5G Service Assurance: Deliver New Services Successfully

1

Complexity: 5G standalone, 4G/5G interoperability, O-RAN, edge computing, VNFs and CNFs, AI/ML



Visibility

What's needed:

Network readiness to meet strict latency targets, optimize backhaul & transport cloud overlay/underlay/edge visibility

2

Diverse, dynamic services: High-performing services and dynamic network slices across multi-dimensional, multi-layer, multi-vendor domains



Insights

End-to-end service visibility, performance KPIs, multi-domain, monitor slices and slice-based services

3

Control: Avoiding performance degradations using precise, orchestrated, and real-time control



Action

Automated assurance in-service lifecycle, on-demand testing, real-time KPIs and insight to orchestrator

Attending MWC Barcelona? Come See Us!

Mobile World Congress

- Barcelona 28 Feb - 3 Mar
- Cisco Booth Located in Hall 3 Booth #3E30
- Accedian Booth located in Hall 2 #2H12



For more information on Cisco's Automation portfolio and Accedian Skylight, please visit:


cisco.com/go/crosswork

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Cisco Crosswork Network Automation



Modernize network operations

Crosswork Network Automation helps your customers simplify operations so they can deliver services faster and improve their customers' experiences. Increase visibility of your infrastructure to derive valuable insights so you can take proactive actions.

[Watch overview \(3:10\)](#)

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Simplify network automation


Crosswork Network Automation is a closed-loop, outcome-driven software suite used to deliver efficient mass-scale network operations across the services lifecycle. This is a scalable solution for operators of all-sized networks to accelerate mean-time-to-value by monetizing agile new services and minimizing mean-time-to-remediation to proactively prevent customer impacting issues.

Economic benefits from Crosswork Network Automation

Metric	Value
Faster time to service	85%
OpEx savings	55%
TCO savings	46%

Expanding Crosswork Network Automation with partners

Cisco DevNet SolutionsPlus Partners extend automation use cases and offer the assurance of fully validated "Cisco Compatible" products. Purchase directly from Cisco sales teams and channel partners.



Accedian Skylight for Cisco network automation

Accedian Skylight with Cisco Crosswork delivers exceptional customer experience with real-time orchestrated service assurance.

[Read solutions brief](#) | [Watch video \(2:58\)](#)

Questions?





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