

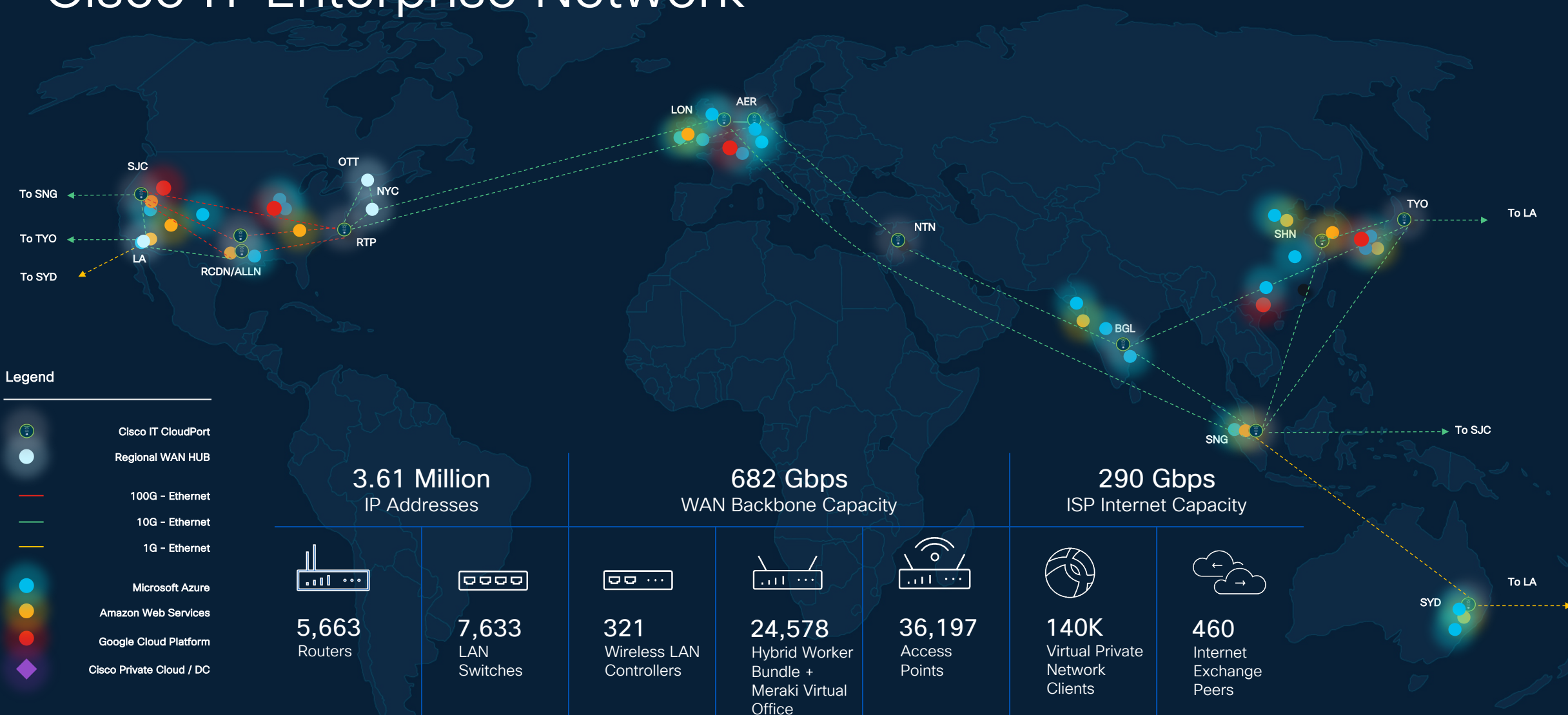


Navigating the Network Triathlon

From Zero Touch Deployment to AI-Driven Operations

Jackie Li, APJC Network Infrastructure Leader, Cisco
ITLGEN-1025

Cisco IT Enterprise Network



Agenda



SWIM



Zero Touch Deployment Journey



Improve Efficiency



Create
Consistency



Enable Scalability



Reduces errors

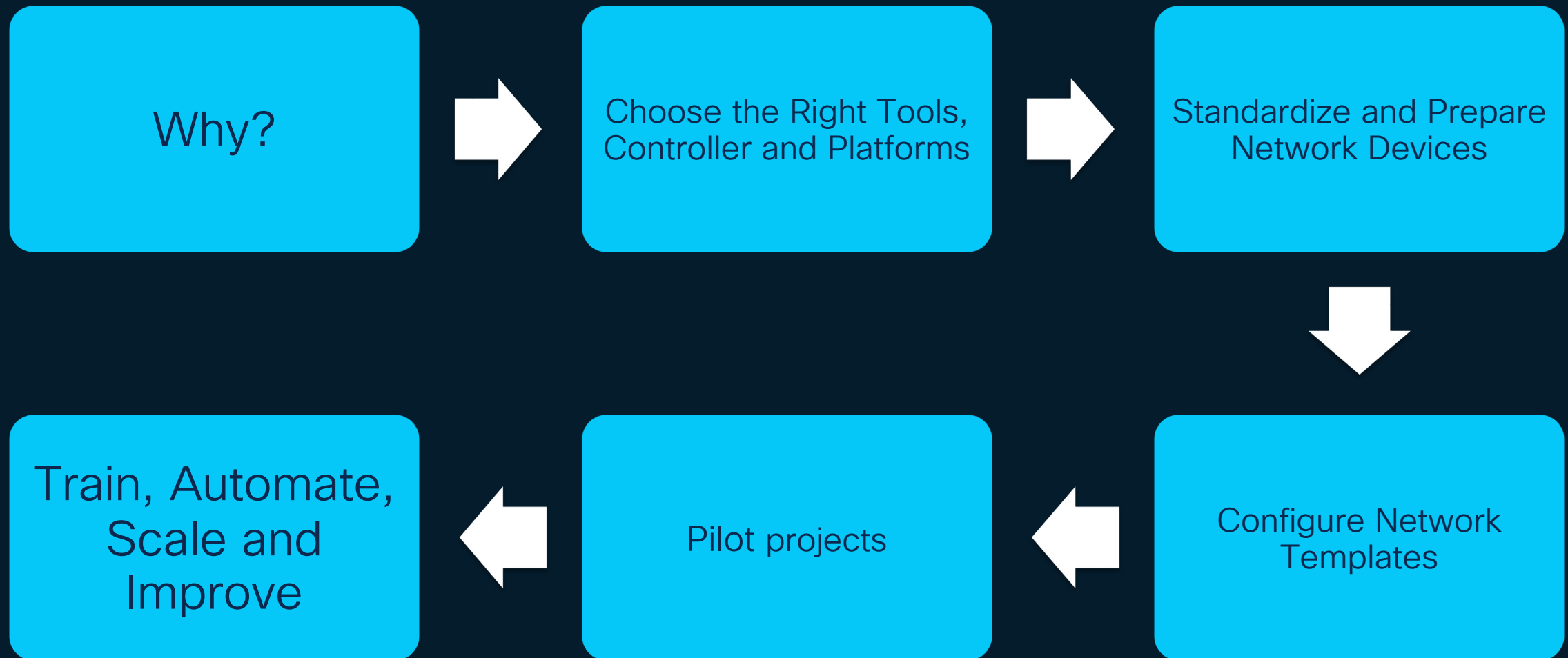


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Steps To Zero Touch Deployment



Zero Touch Deployment Cost savings



Simple Redundant Design

4 devices * 3 hours * 300 sites * \$150 engineer =
540k



Things to consider

- Design
- Cost of impact
- Engineers cost
- Size of site
- No. People

Devices = access, core, lab, WLC

\$150 engineer cost

~300 sites



**These are estimated savings with high variability

Zero Touch Deployment Cost savings



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Larger Complex Design

14 devices * 3 hours * 300 sites * \$150 engineer =
1.89M

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No INC cause by IMP * 50 people * 4 hours =

Minimum 30k per INC

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Minimum 30k per INC

Cost to implement Zero
Touch design

?

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CYCLE



Cycle



Zero Touch



One Place



Two Eyes
Observability

The Journey so far for upgrades



Manual
upgrades



Onboarding



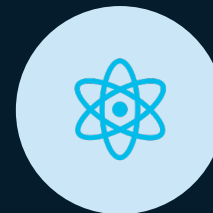
Cleaning



Swimming



Outdoor Swim



Atomic Swim



What is Atomic SWIM?

Automated workflow that enables UNATTENDED software upgrades per single network devices and incident management

Why Atomic SWIM?



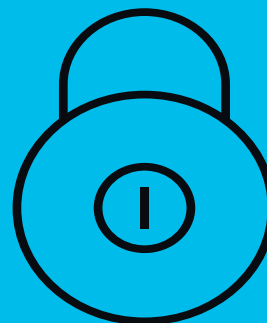
Time



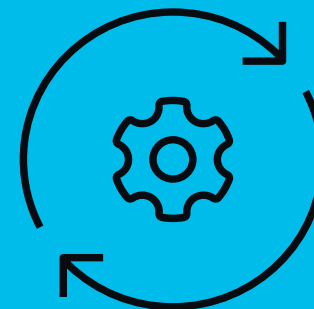
\$ Cost



Human Error



PSIRT



New Features

Cost savings

Manual upgrade Per devices



- No. Devices x Cost of engineer PH x No. of hours =
- COST: ~ \$2 M - \$12M
- Time frame – 18 months
- Team of engineers

CatC SWIM Per site



- No Sites x Cost of engineer PH x No. of hours =
- COST: ~ 45K – 135K
- Time frame – 3-6 months
- 3 dedicated engineers

CatC Atomic SWIM Per devices



- No Sites x Cost of engineer PH x No. of hours =
- COST: \$0
- Time frame – 48 Hrs to 2 weeks
- 1 team, 3 platforms in 3 PI

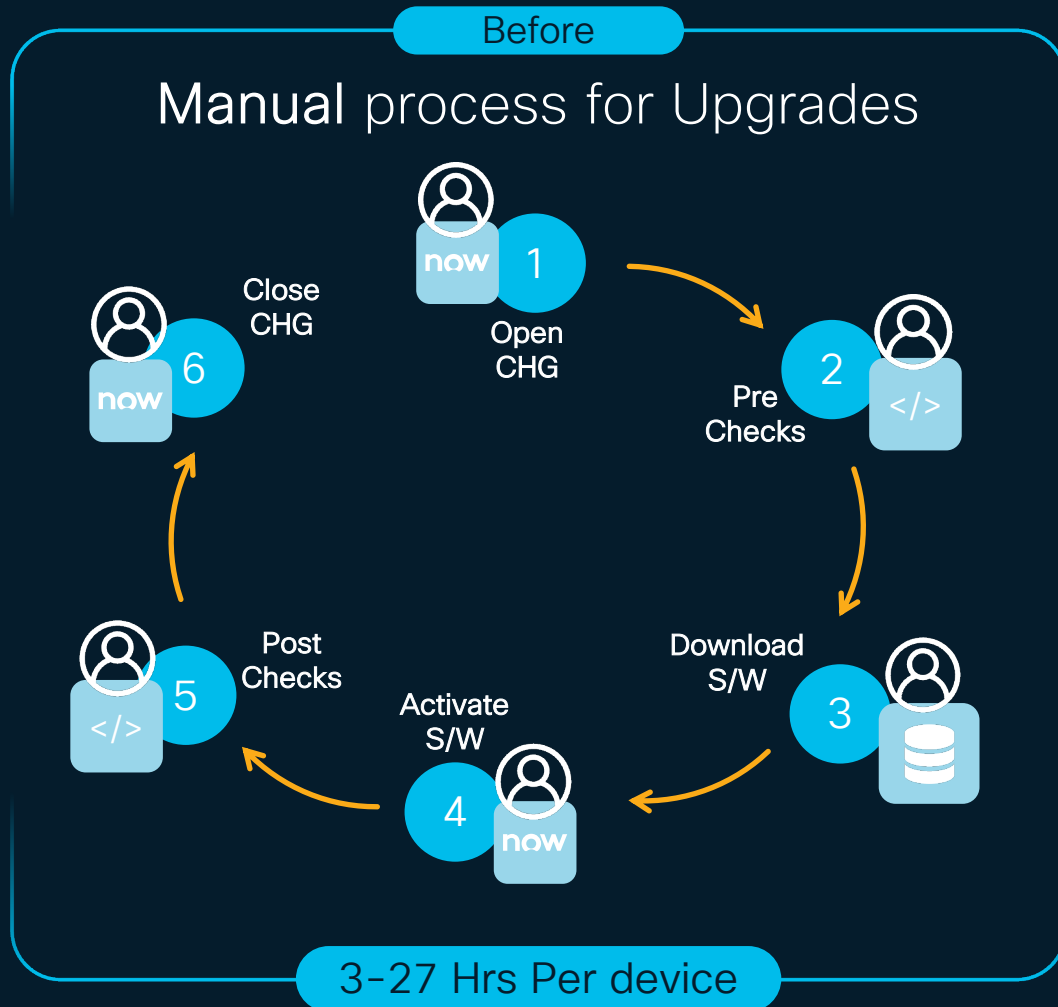
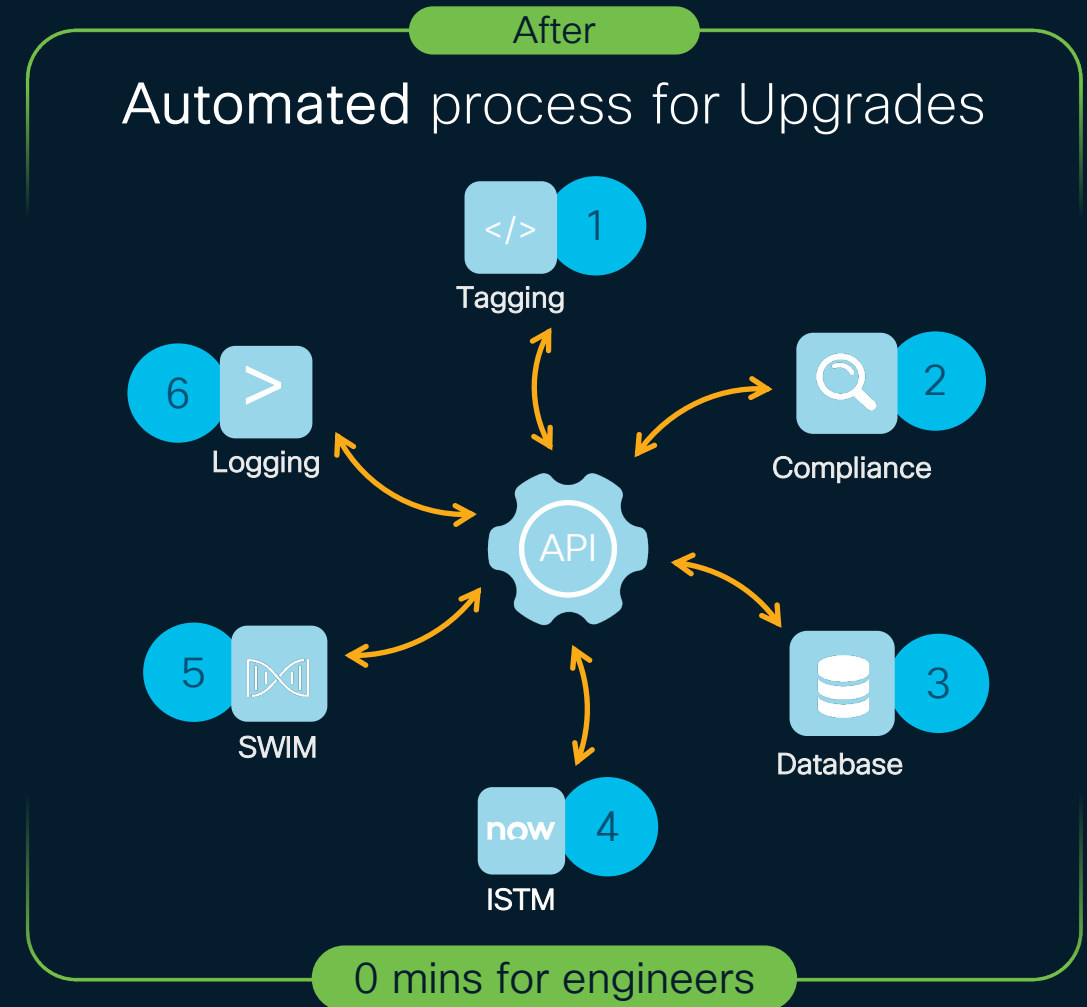
13617 devices

\$50-150 engineer

3-6 hours

cost ~300 sites

End to End Automatic Upgrades of Catalyst Platform



ServiceNow ATOMIC SWIM Dashboard

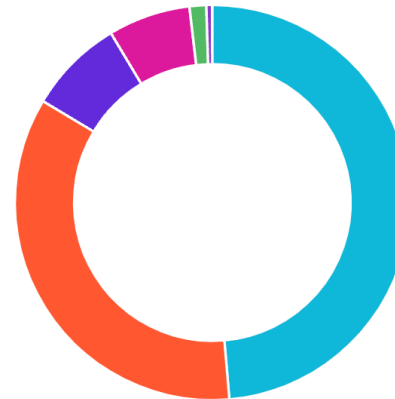
Atomic SWIM Distribution Changes Completed Successfully Count

3,775

Atomic SWIM Activation Changes Completed Successfully Count

2,707

Successful Atomic SWIM Activations by Device Model



Cisco C9410R = 1,313 (48.63%) C9300-48UXM = 944 (34.96%) Cisco C9407R = 211 (7.81%) Cisco ISR4331/K9 = 182 (6.74%) CISCO-FINISAR C9300X-48HX = 37 (1.37%) CISCO-ACCELINK C9300-48H = 13 (0.48%)

So, what can go wrong?





SASE



Remove
Complexities

Remove
Inconsistencies

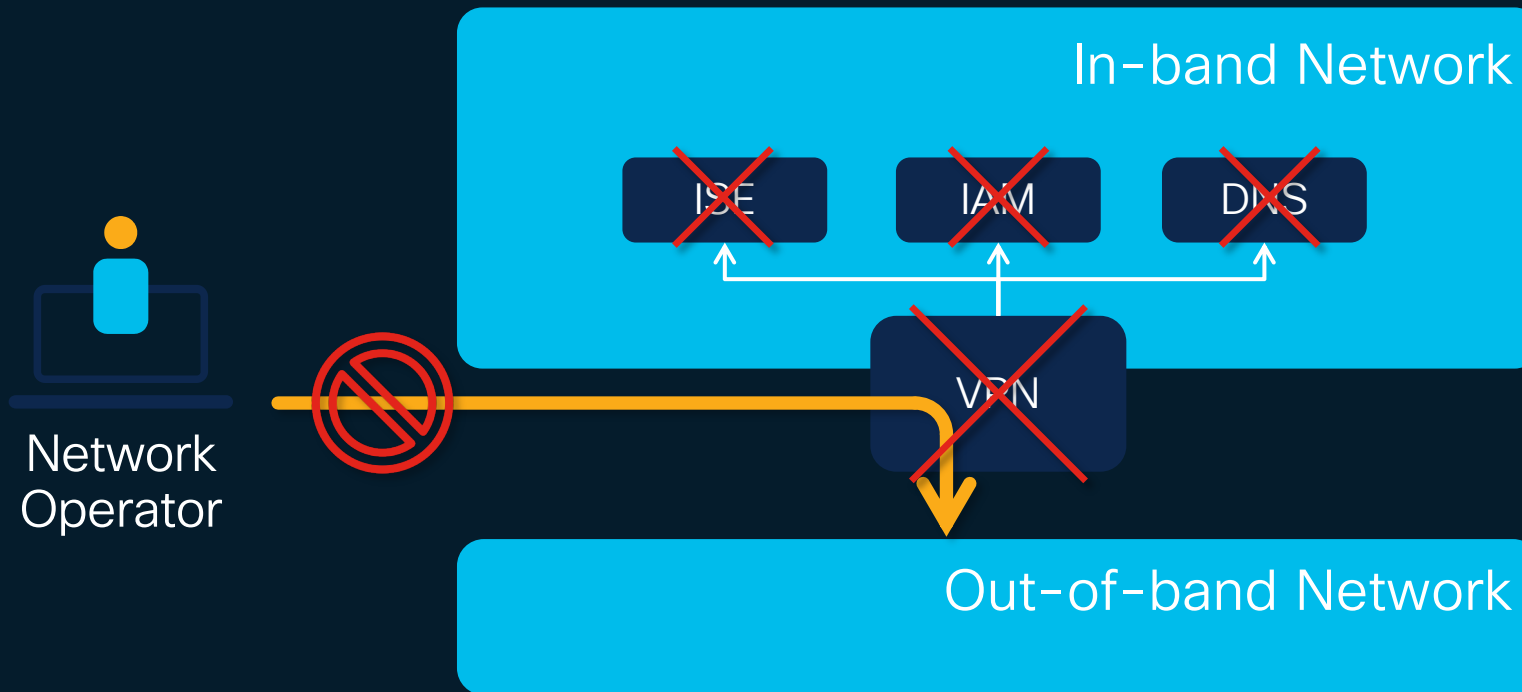
Remove
Managing
HW Cycle

Scale more
easily

SASE

Agility
Managing
Security

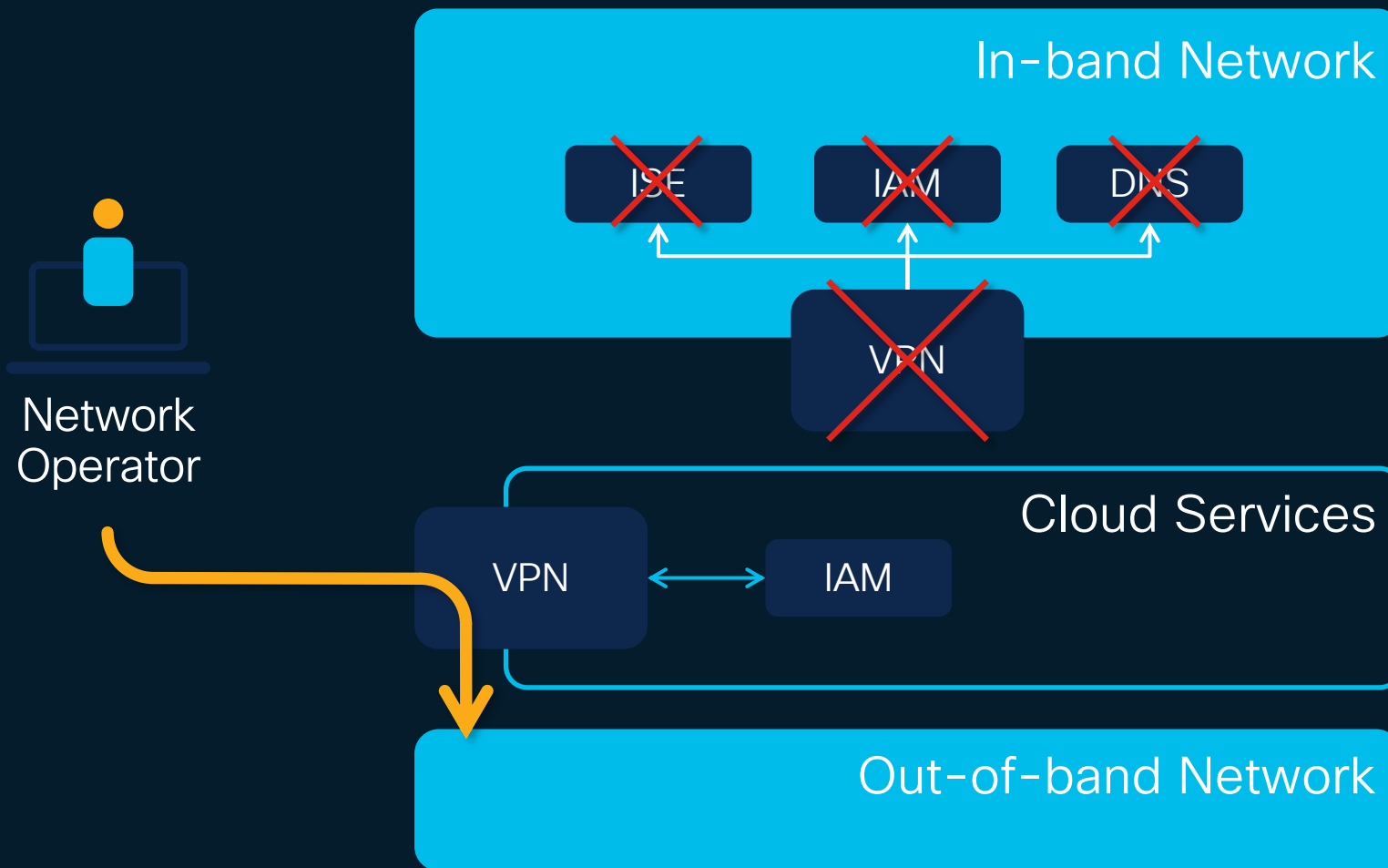
Supplementing with SASE Solution - VPNaaS



Problem

Getting to your out-of-band network if your in-band network has issues?

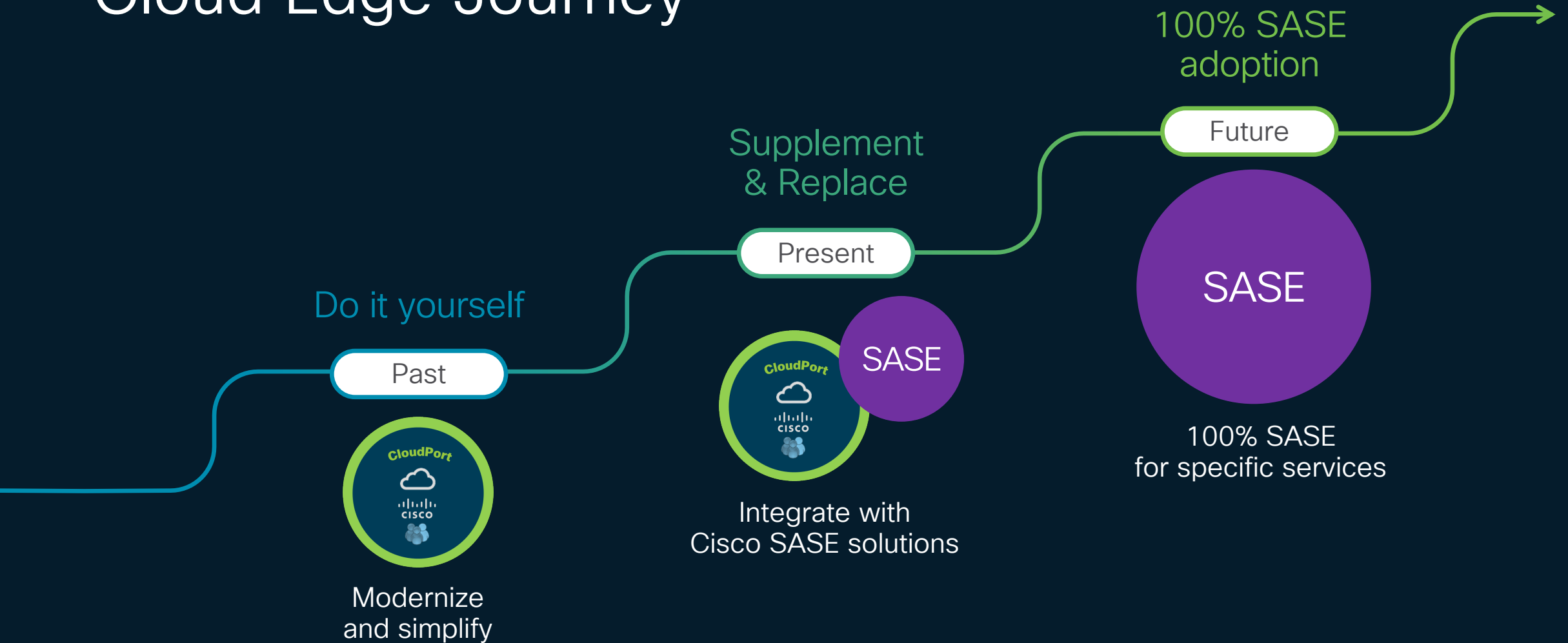
Supplementing with SASE Solution - VPNaaS



Solution

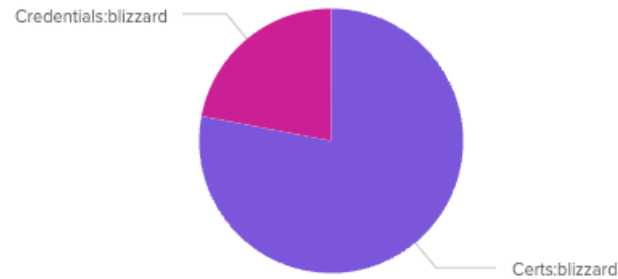
Cloud-based VPNaaS
(Cisco+ Secure Connect Now)
and Azure AD

Cloud Edge Journey

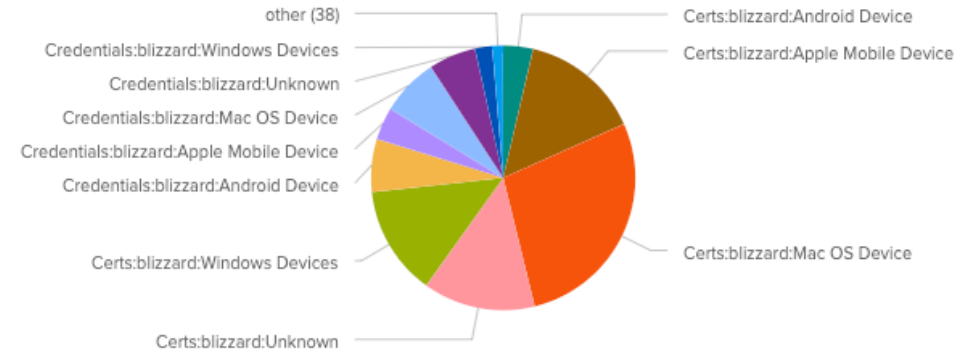


Splunk

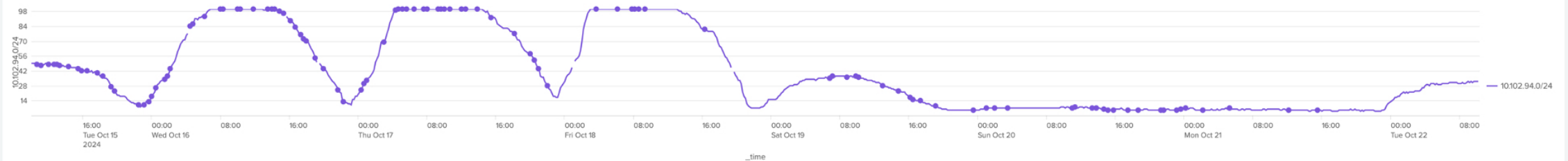
% of traffic using cert and credentials per SSID(groupby filter) -Click chart below for breakdown



% of traffic using cert and credentials per SSID and devicetype(groupby filter)



Scope Utilization% Data Over Time Range



RUN



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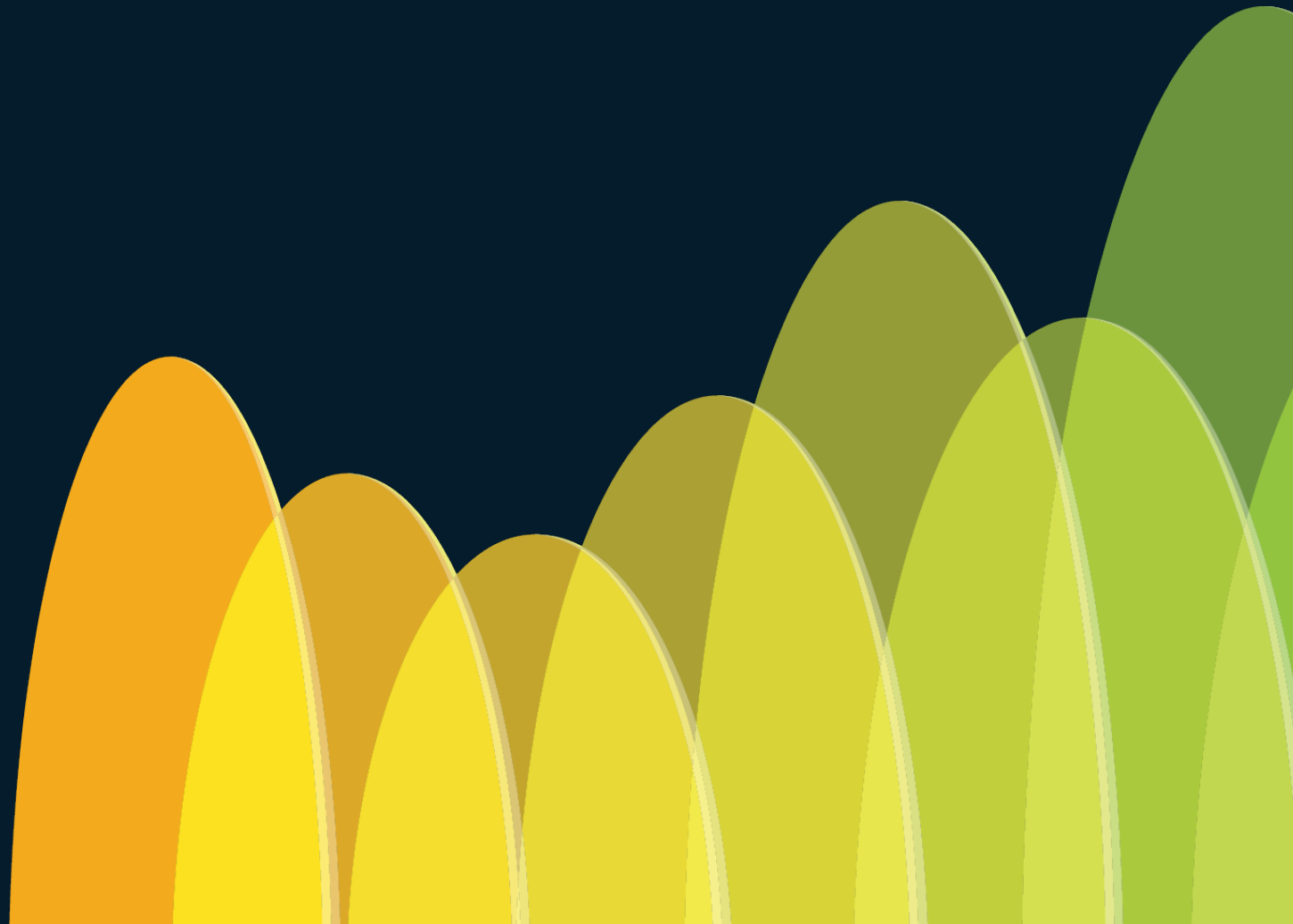


92% of CIOs believe AI
will be implemented in
their organizations by
2025

49% of leaders highly
involved in AI report that
their organizations
struggle to estimate and
demonstrate the
technology's value

The CIO Report - Gartner

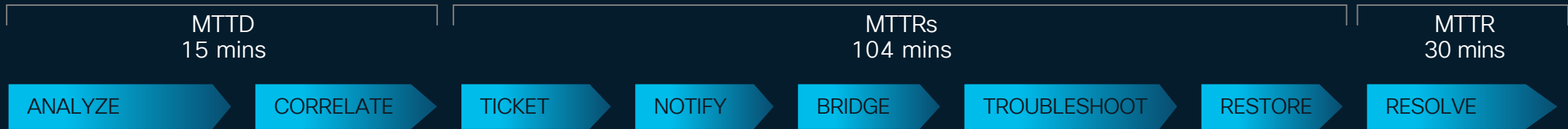
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Business value of AIOps

● Humans ● Algorithms

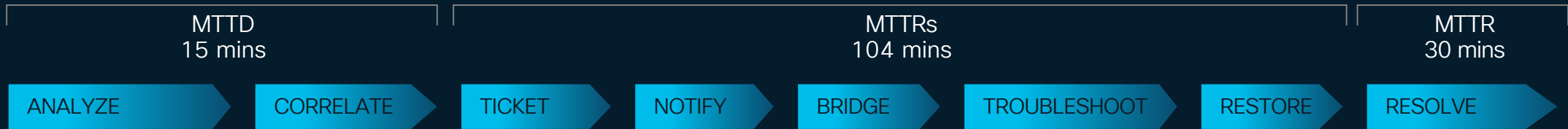
Before AIOps



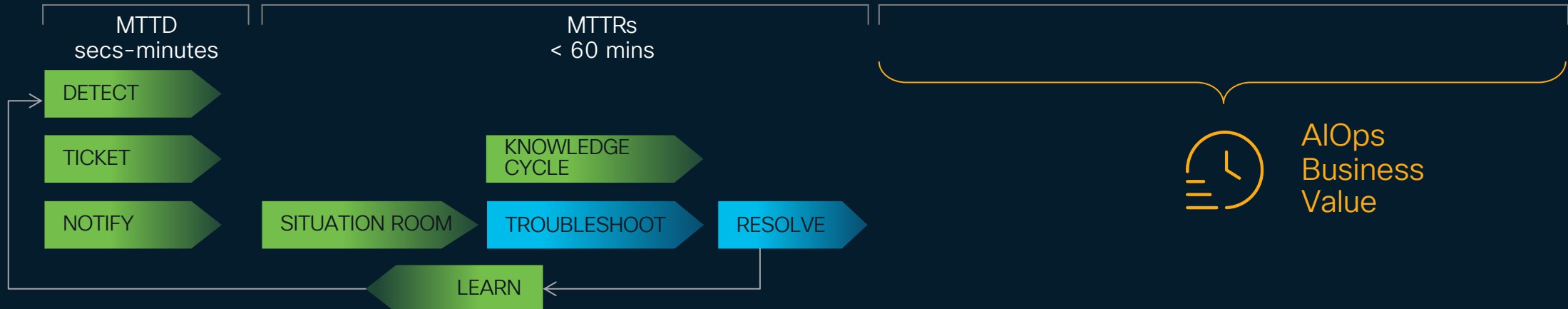
Business value of AIOps

● Humans ● Algorithms

Before AIOps



After AIOps





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Mindset Change

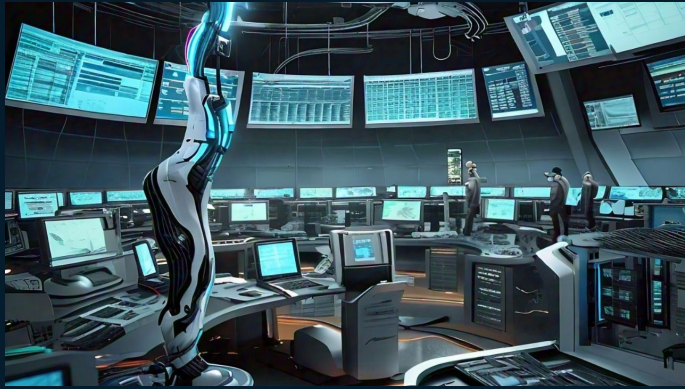
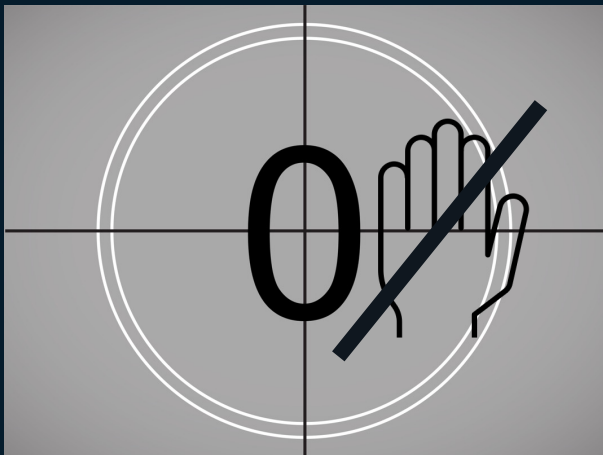


An aerial photograph of a vast solar farm with rows of solar panels stretching towards the horizon under a sunset sky. The sun is low on the right, casting a warm glow over the landscape. The panels are arranged in neat, parallel rows, creating a strong sense of perspective.

15% of IT leaders say their current IT workforce is prepared to meet their enterprise's future skills requirements.

The CIO Report - Gartner

TAKE ACTION





Thank you

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