

A Survival Guide for IT Leaders in the Age of Agentic AI

ITLGEN-2000

Rich Delisser

Vice President, Commerce Engineering, Cisco

CISCO Live !

IT Leadership Program

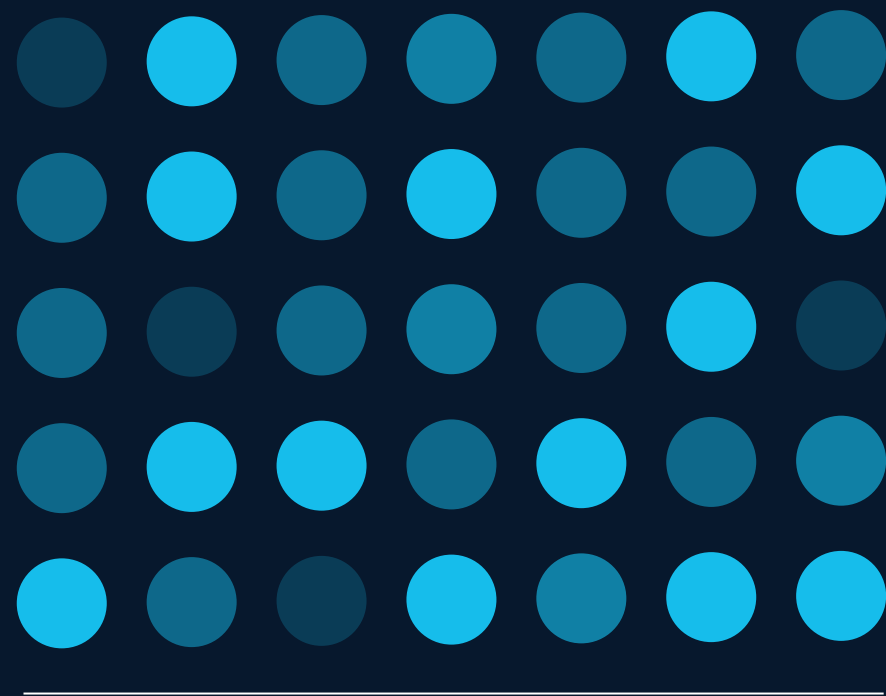
Welcome!



The Agentic Era is Here

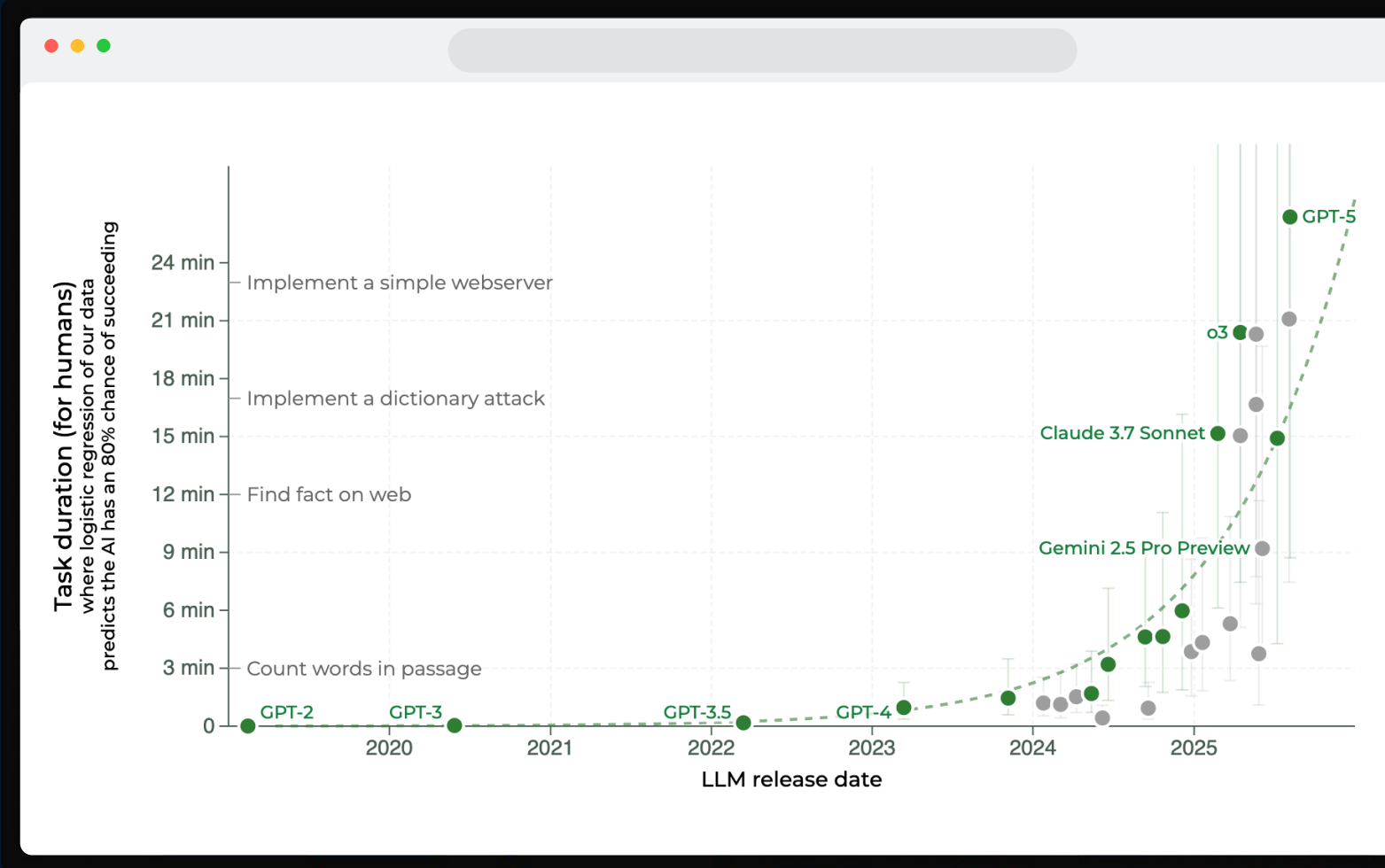
AI isn't short on
ambition...

It's short on results



Measuring AI agent performance

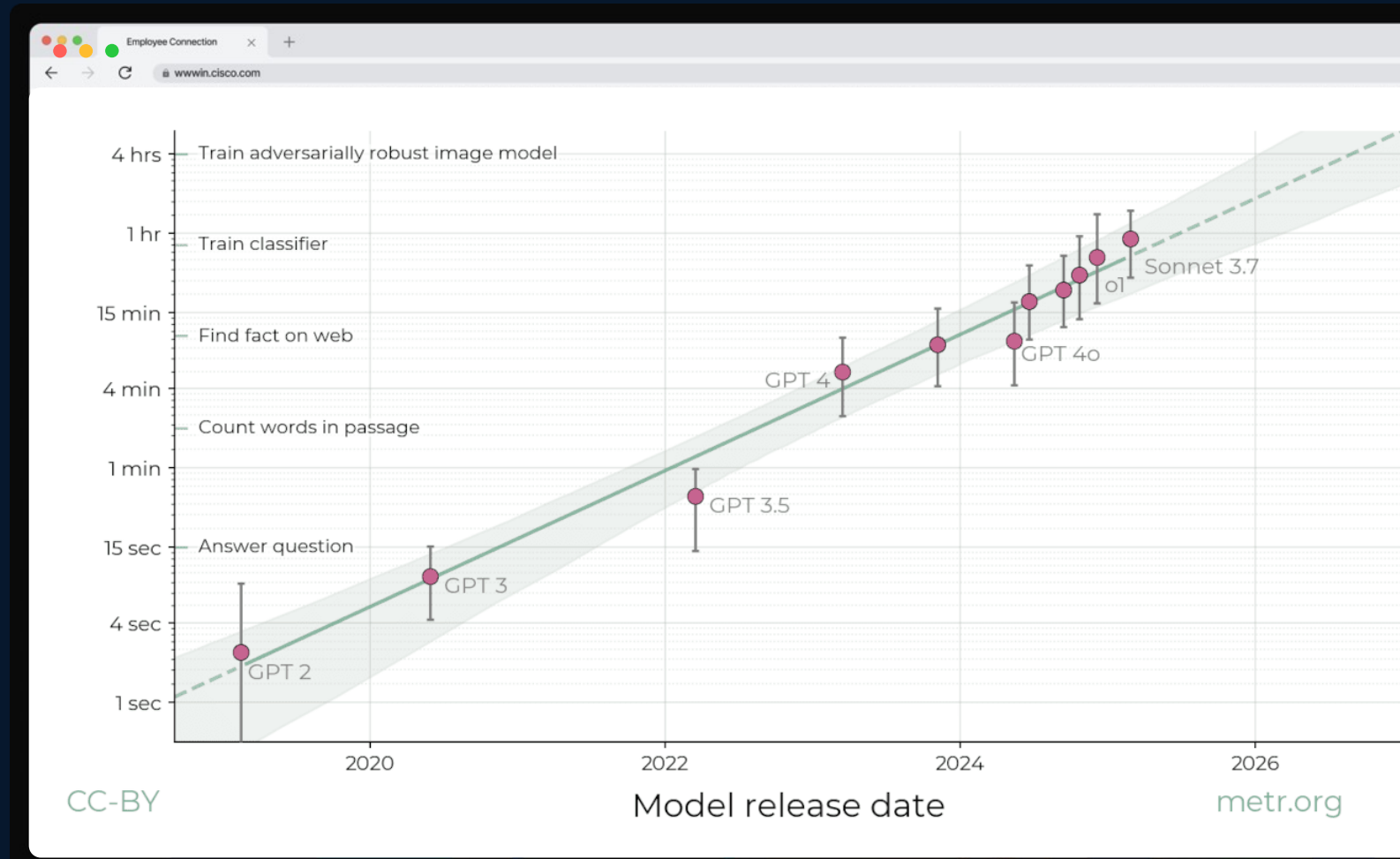
Length of tasks



Credit: METR <https://metr.org/blog/2025-03-19-measuring-ai-ability-to-complete-long-tasks/>

Measuring AI agent performance

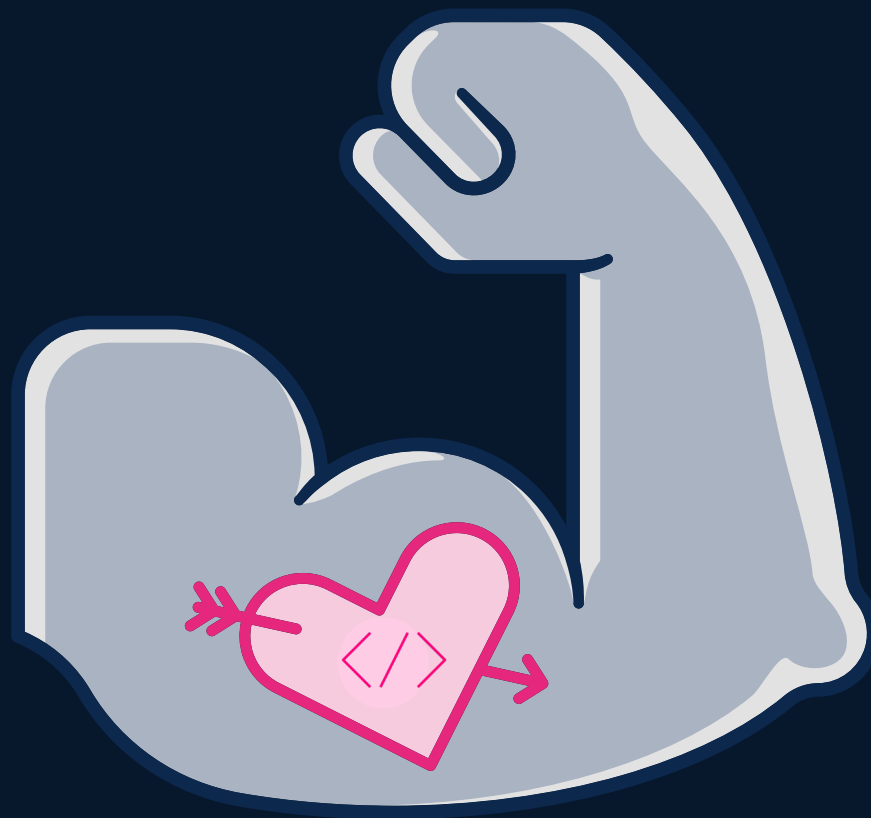
Independent run time for AI agents is doubling every 7 months

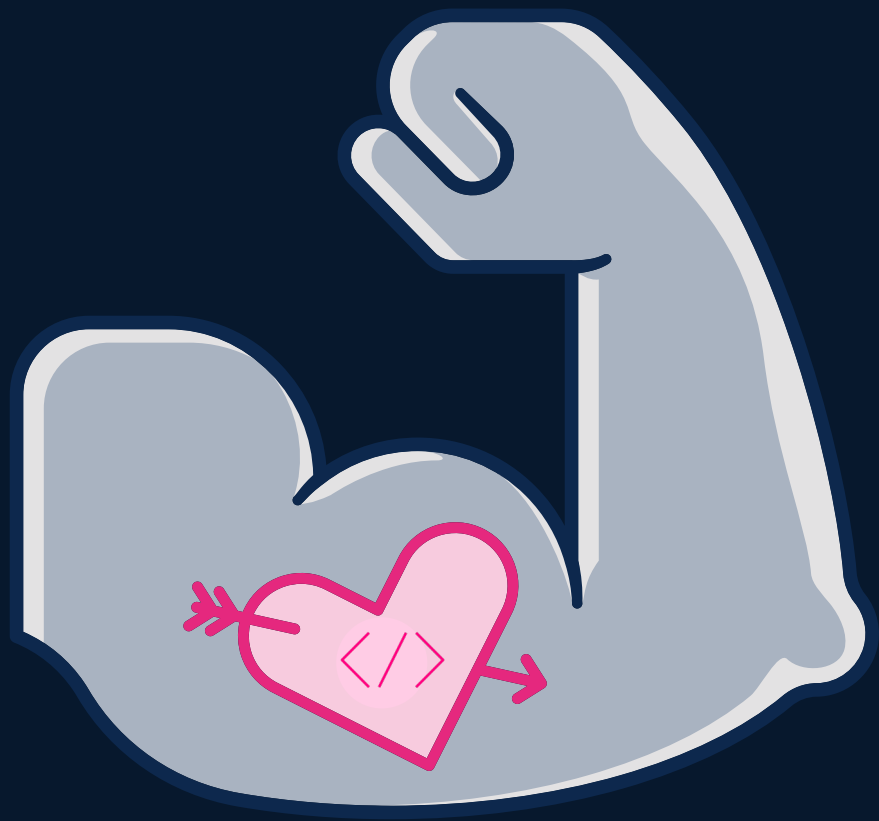


Credit: METR <https://metr.org/blog/2025-03-19-measuring-ai-ability-to-complete-long-tasks/>

**Your IT engineers
are having an
existential crisis**







Architects of intelligence

This isn't the end of IT engineering.

But it *is* the end of how we **used to do it.**

Scaling AI isn't just a technical challenge – it's also an organisational readiness one.

Cisco IT at a Glance



9,852
Cisco IT Workforce



87,908
Cisco Global Employees
(+45K contractors)



135.7K
Laptops Under
Management



7,976
Servers (Cisco UCS)



22,110
Routers



5,865
LAN Switches



60 TB/Day
Ingested into Splunk



43.4B
DNS Lookups per Day



16,656
Changes per Month



12,364
Wireless Access Points



38,097
Cisco Video
Collaboration Devices



75,383
Virtual Machines



61,050
Mobile Devices



151.6PB
Overall Usable Storage



1,610
Supported Business
Apps



23.7M
DNS Threats Blocked
per Day

Our vision

To be a user experience-led, AI-powered
IT organisation.

Our mission

We enable our people to do the best
work of their lives.

Cisco IT at a Glance

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The Agentic AI Survival Guide for IT Leaders





APPROVED B-17F and G CHECKLIST

REVISED 3-1-44

PILOT'S DUTIES IN RED
COPILOT'S DUTIES IN BLACK

BEFORE STARTING

1. Pilot's Preflight—COMPLETE
2. Form 1A—CHECKED
3. Controls and Seats—CHECKED
4. Fuel Transfer Valves & Switch—OFF
5. Intercoolers—Cold
6. Gyros—UNCAGED
7. Fuel Shut-off Switches—OPEN
8. Gear Switch—NEUTRAL
9. Cowl Flaps—Open Right—
OPEN LEFT—Locked
10. Turbos—OFF
11. Idle cut-off—CHECKED
12. Throttles—CLOSED
13. High RPM—CHECKED
14. Autopilot—OFF
15. De-icers and Anti-icers, Wing and
Prop—OFF
16. Cabin Heat—OFF
17. Generators—OFF

STARTING ENGINES

1. Fire Guard and Call Clear—LEFT Right
2. Master Switch—ON
3. Battery switches and inverters—ON &
CHECKED
4. Parking Brakes—Hydraulic Check—On-
CHECKED
5. Booster Pumps—Pressure—ON &
CHECKED
6. Carburetor Filters—Open
7. Fuel Quantity—Gallons per tank
8. Start Engines: both magnetos on
after one revolution
9. Flight Indicator & Vacuum Pressures
CHECKED
10. Radio—On
11. Check Instruments—CHECKED
12. Crew Report
13. Radio Call & Altimeter—SET

ENGINE RUN-UP

1. Brakes—Locked
2. Trim Tabs—SET
3. Exercise Turbos and Props
4. Check Generators—CHECKED & OFF
5. Run up Engines

BEFORE TAKEOFF

1. Tailwheel—Locked
2. Gyro—Set
3. Generators—ON

AFTER TAKEOFF

1. Wheel—PILOT'S SIGNAL
2. Power Reduction
3. Cowl Flaps
4. Wheel Check—OK right—OK LEFT

BEFORE LANDING

1. Radio Call, Altimeter—SET
2. Crew Positions—OK
3. Autopilot—OFF
4. Booster Pumps—On
5. Mixture Controls—AUTO-RICH
6. Intercooler—Set
7. Carburetor Filters—Open
8. Wing De-icers—Off
9. Landing Gear
 - a. Visual—Down Right—DOWN LEFT
Tailwheel Down, Antenna in, Ball
Turret Checked
 - b. Light—OK
 - c. Switch Off—Neutral
10. Hydraulic Pressure—OK Valve closed
11. RPM 2100—Set
12. Turbos—Set
13. Flaps $\frac{1}{2}$ — $\frac{1}{2}$ Down

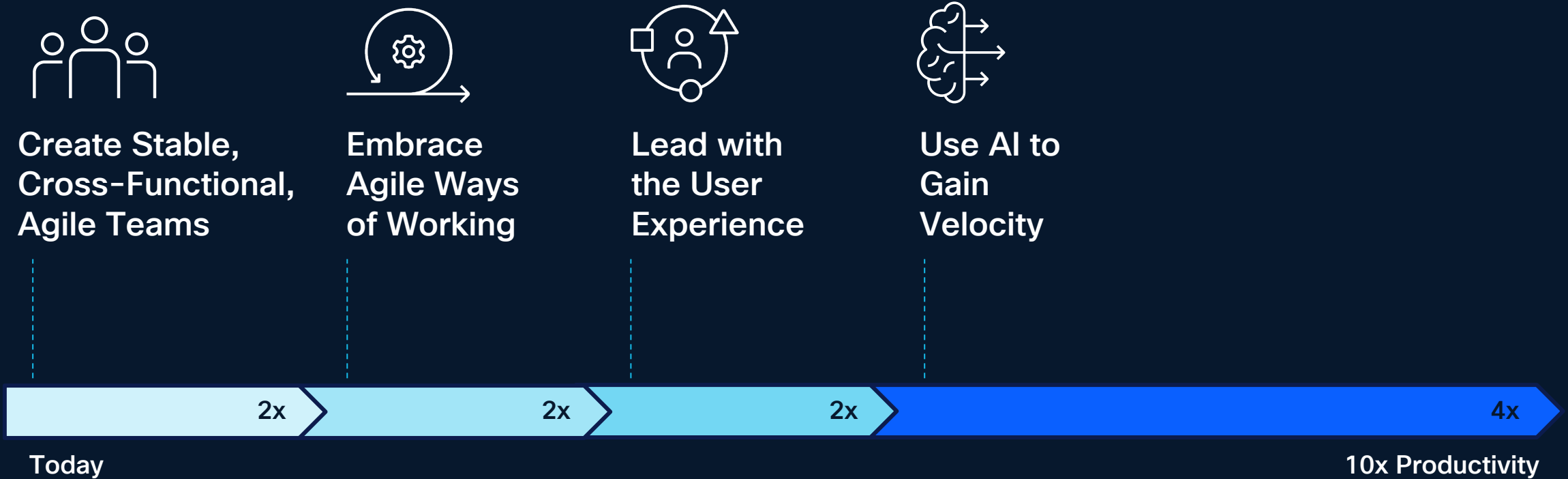
FINAL APPROACH

14. Flaps—PILOT'S SIGNAL
15. RPM 2200—PILOT'S SIGNAL

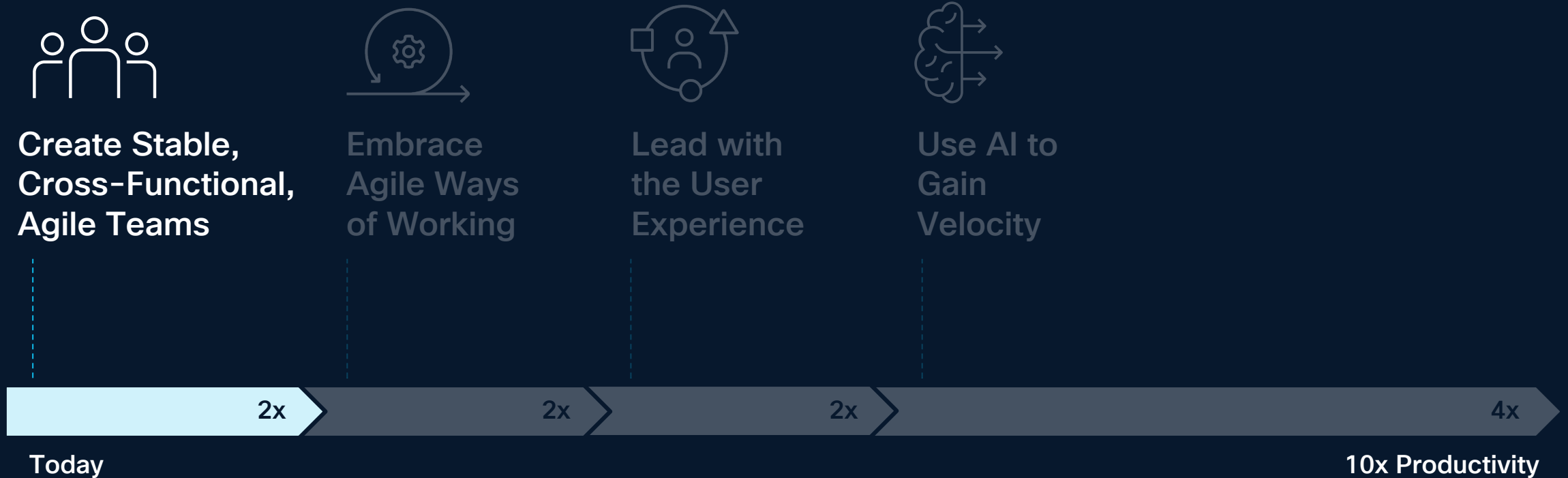


IT leaders love their checklists...

Checklist in Action - The Agentic AI Survival Guide

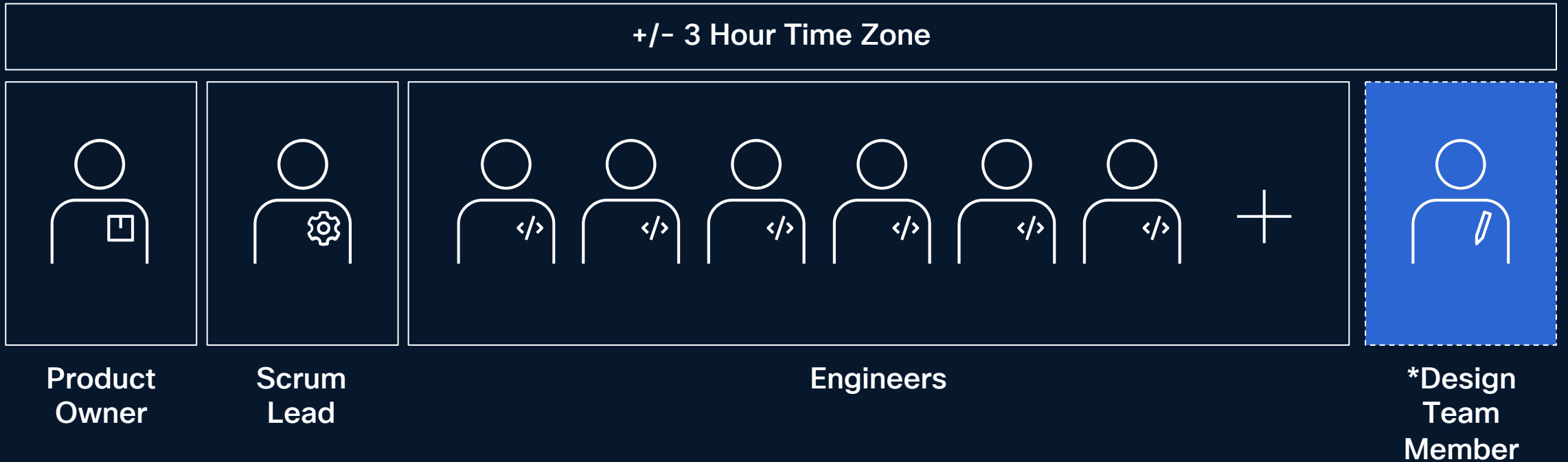


Checklist in Action - The Agentic AI Survival Guide



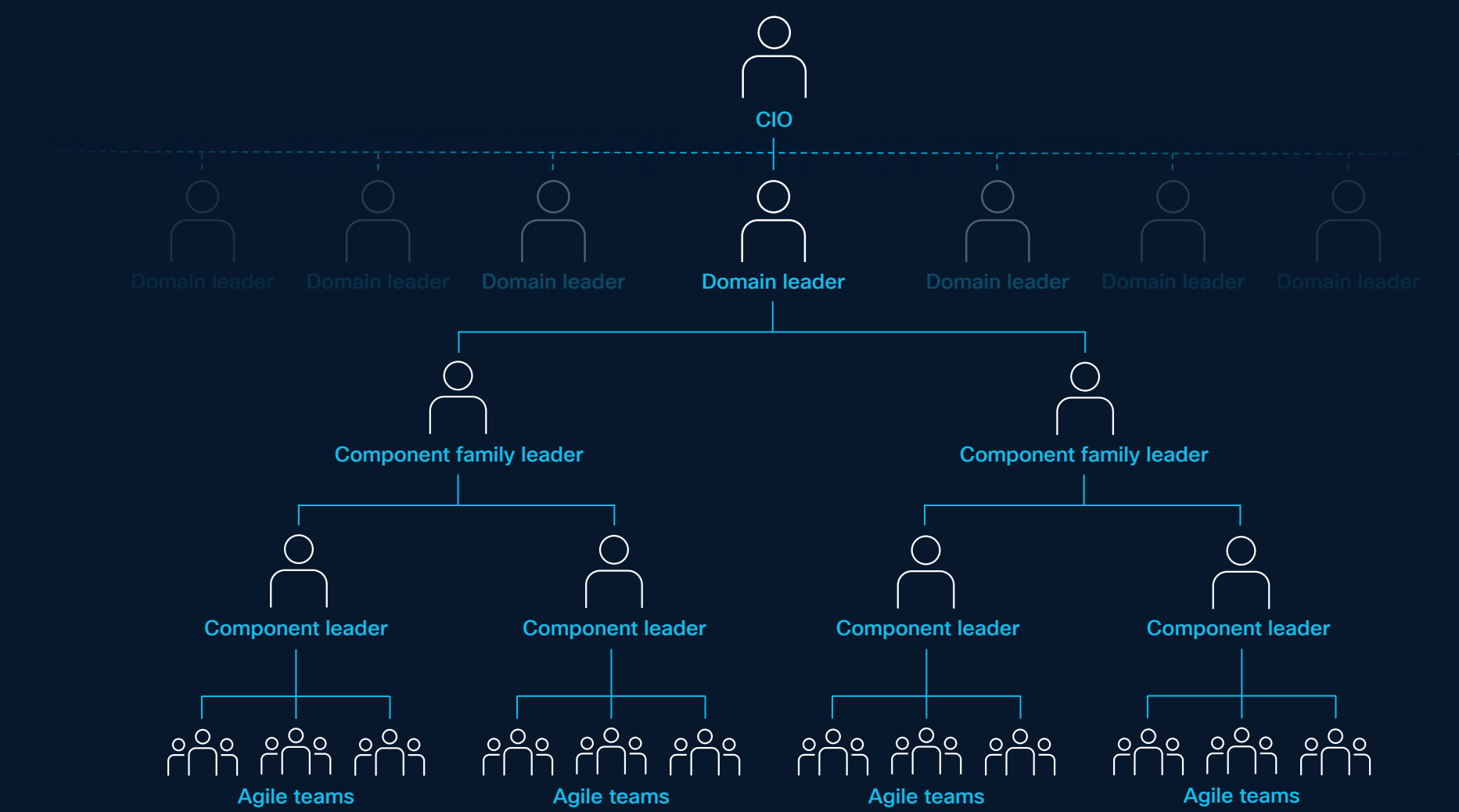
Creating Stable, Cross-Functional Agile Teams

An example of a well-formed **Agile team**:



 *Cisco IT Design is centralised, and designers are assigned to teams as needed.

How We Are Organised



Key Terms

Domain

A collection of platforms, grouped by common skills or technologies.

Component family

A group of related components, within a large domain of platforms.

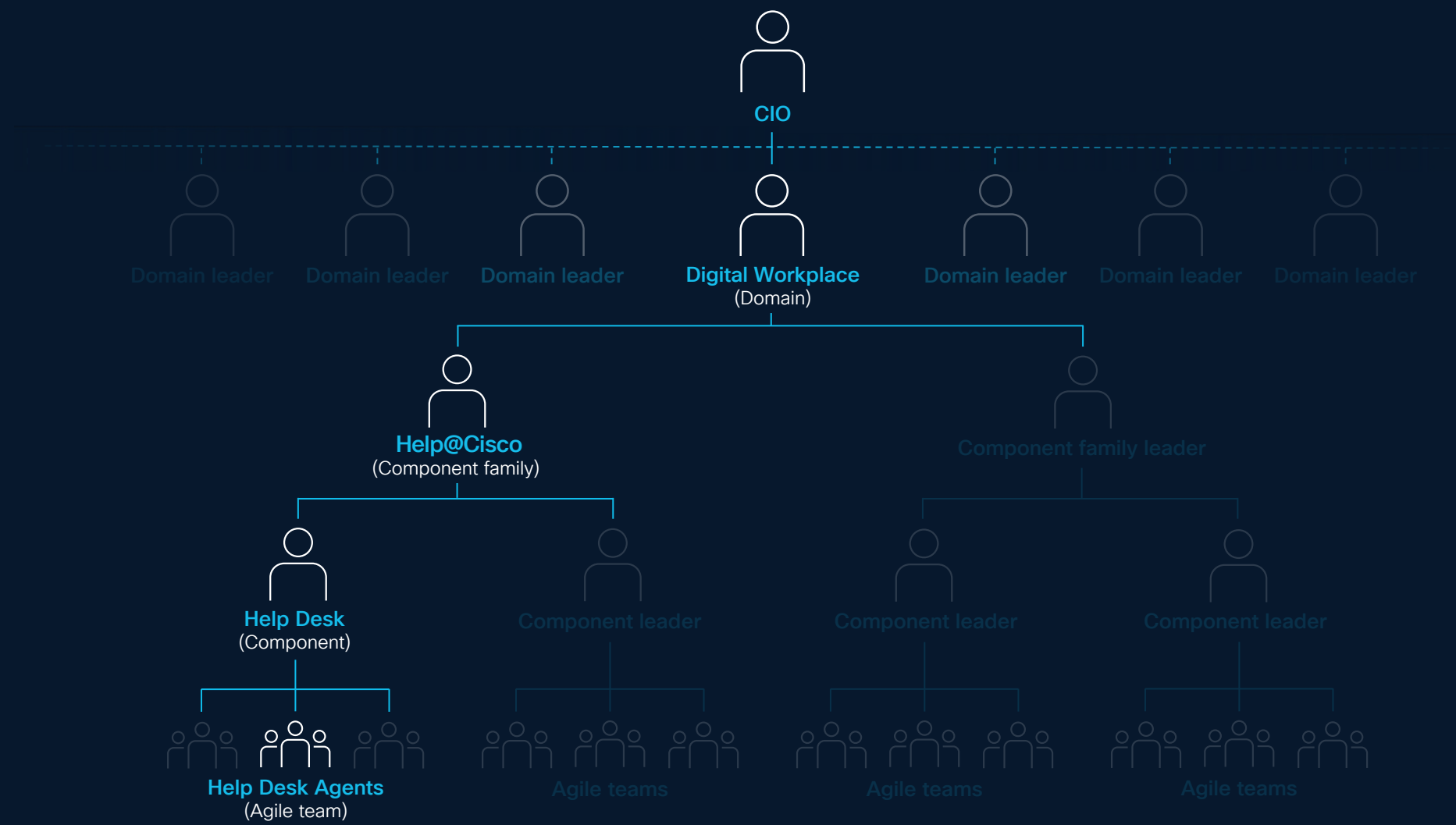
Component

A group of Agile Teams that share common skills to deliver value.

Agile team

A small group of people with the skills needed to deliver value efficiently.

Example



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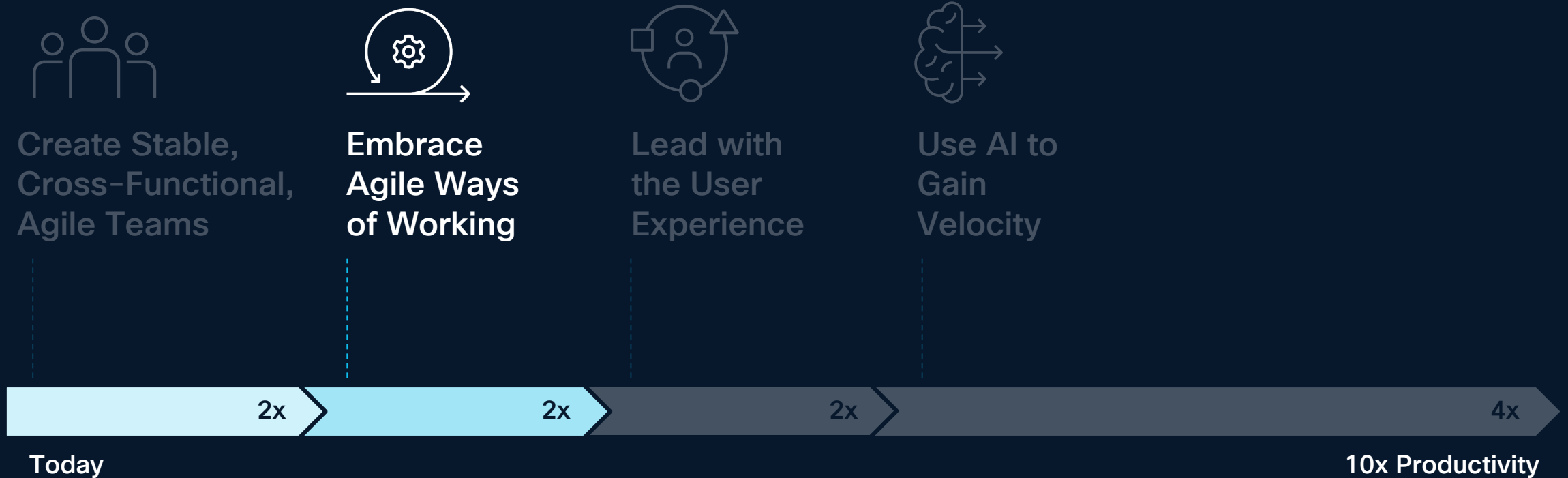
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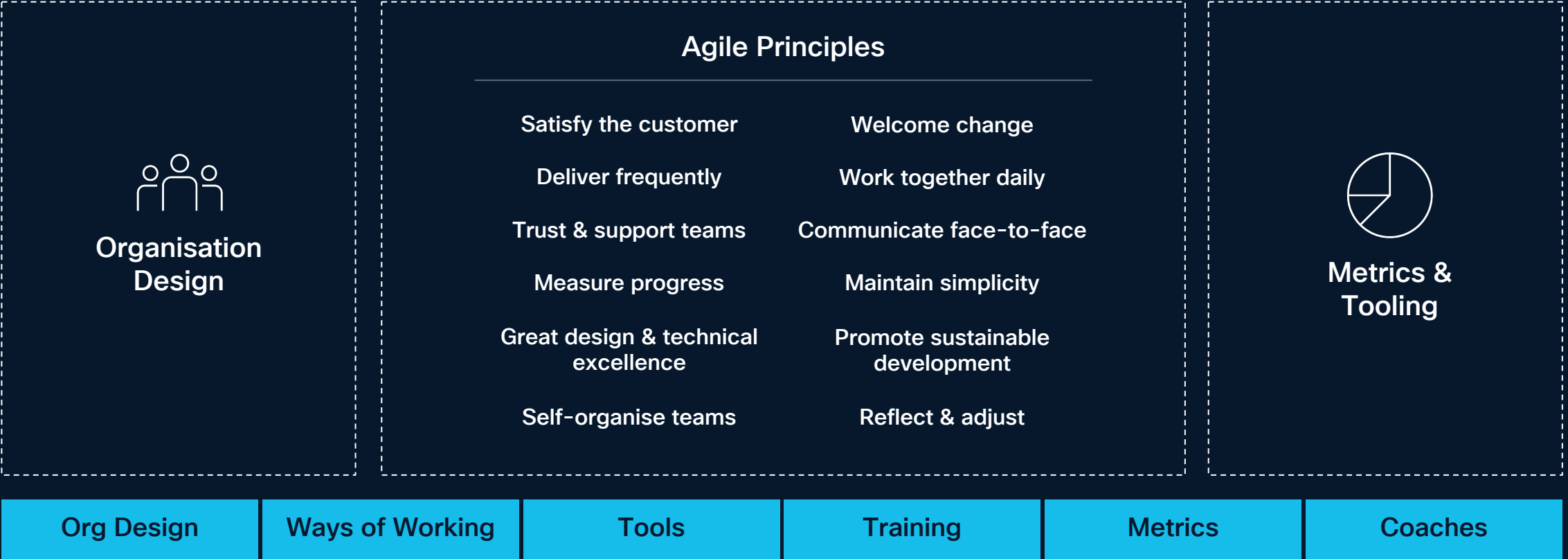
Agile team

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Checklist in Action - The Agentic AI Survival Guide



Our Agile Ways of Working



IT Agility Transformation Team

Where Our Work Comes From

There are **two types of priorities** in Cisco IT's backlog



Business Priorities

Set by the BEs/ELT

If the work falls within a specific functional area, it is directed to the Functional IT Backlog, else, it goes into the PLT Backlog.

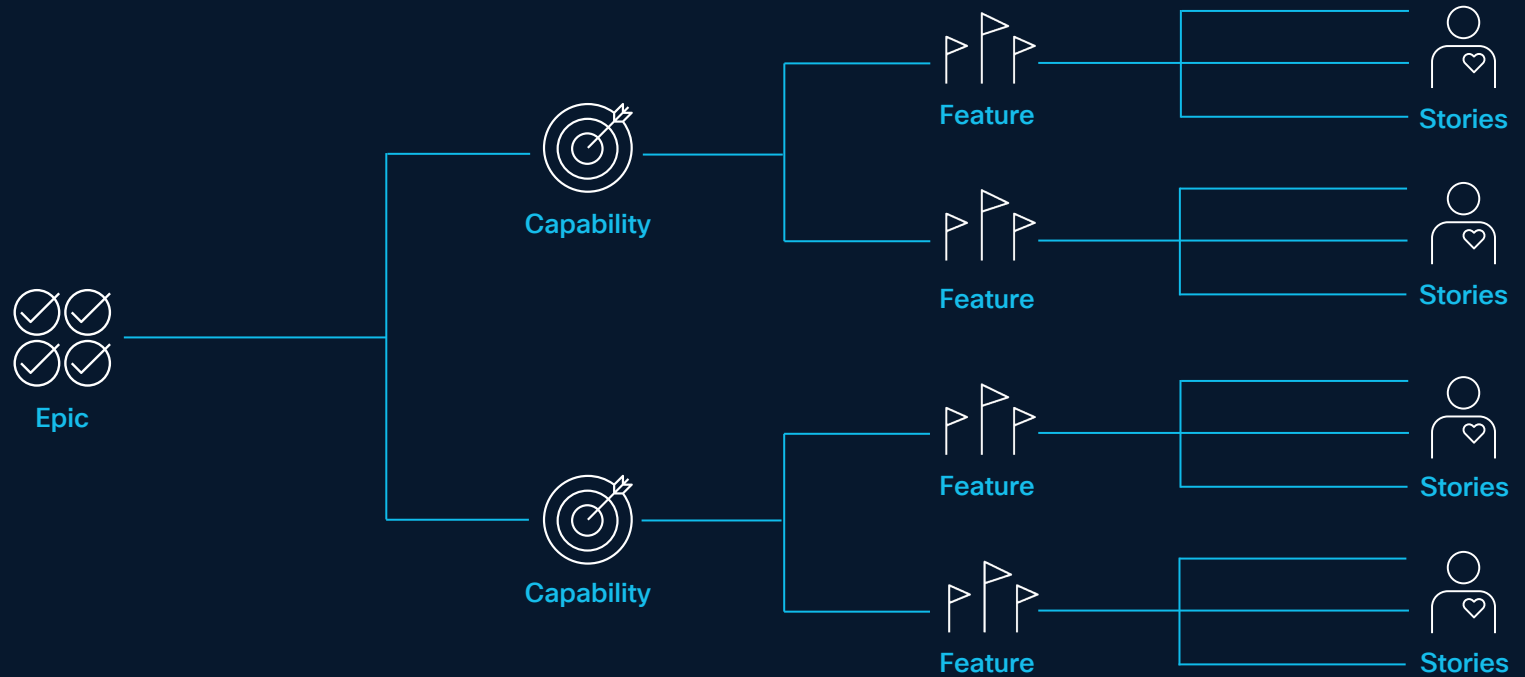
Cisco IT Priorities

Set by CIO, Fletcher Previn

These belong in the **Core IT Backlog**, and is the work initiated by IT, for IT, to keep tools and systems operational and secure.

How Our Work is Organised

Work is broken down from larger goals (epics) to smaller tasks (stories).



Key Terms

Epic

Large piece of work that aims to achieve multiple business goals.

Capability

A singular goal of the epic that provides tangible business value.

Feature

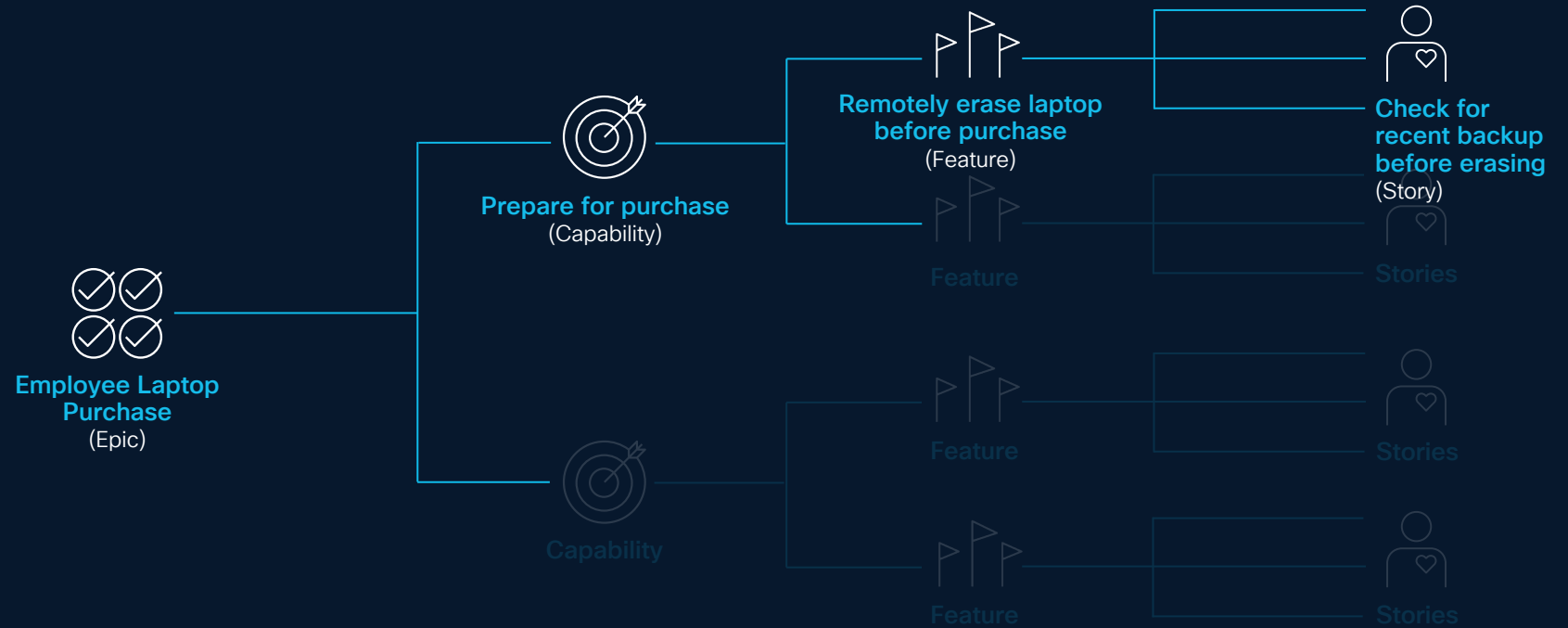
New or improved functionality that enables the goal of the capability.

Story

A part of a feature that provides value to the user.

Example

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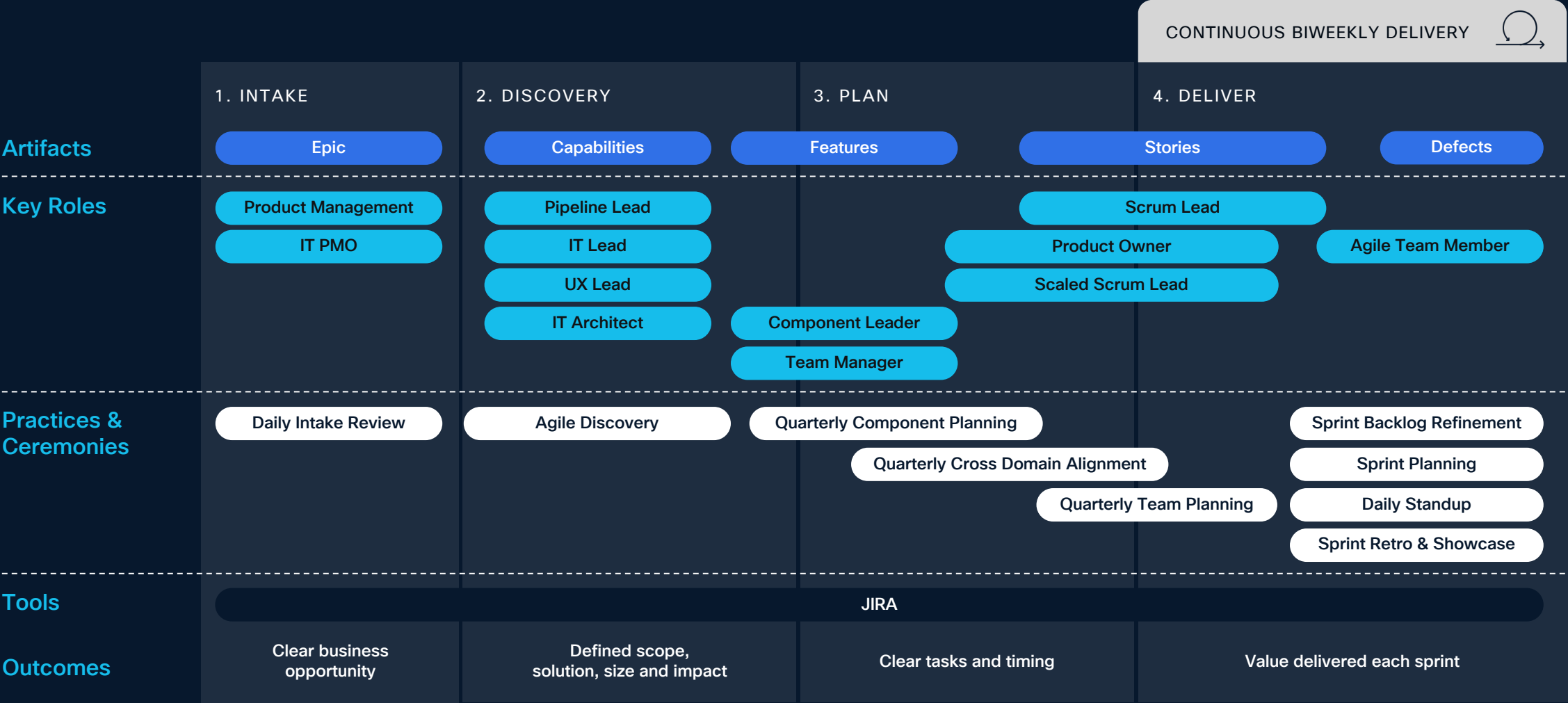
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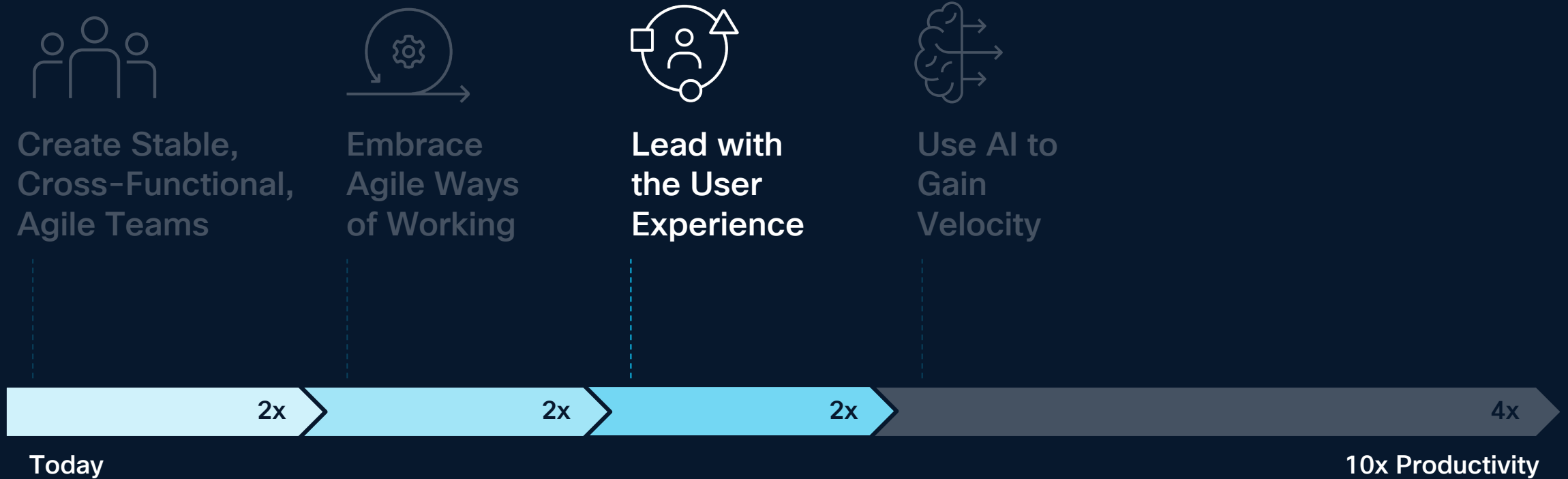
Story

A part of a feature that provides value to the user.

How Work Flows from Epics to Stories

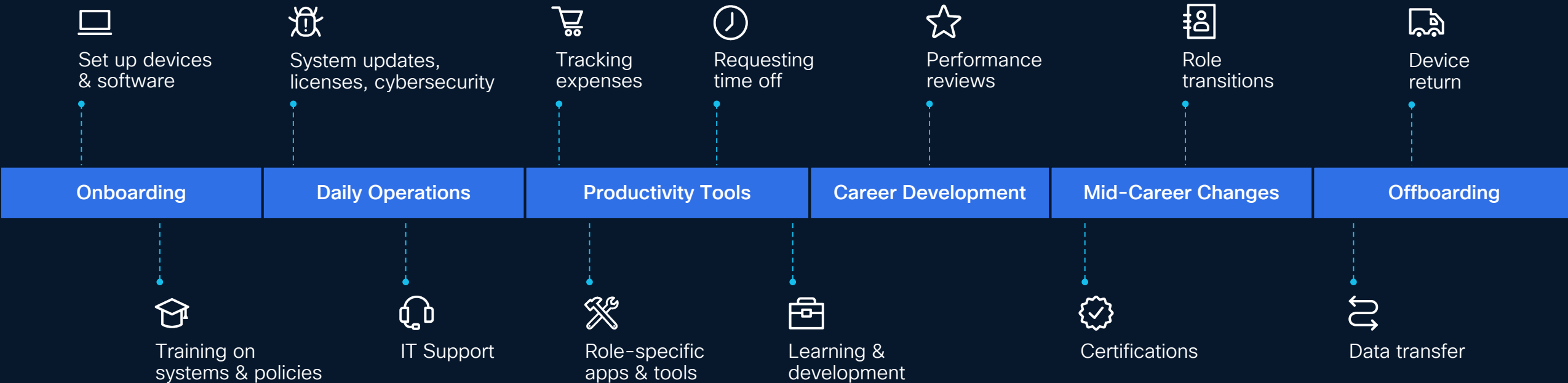


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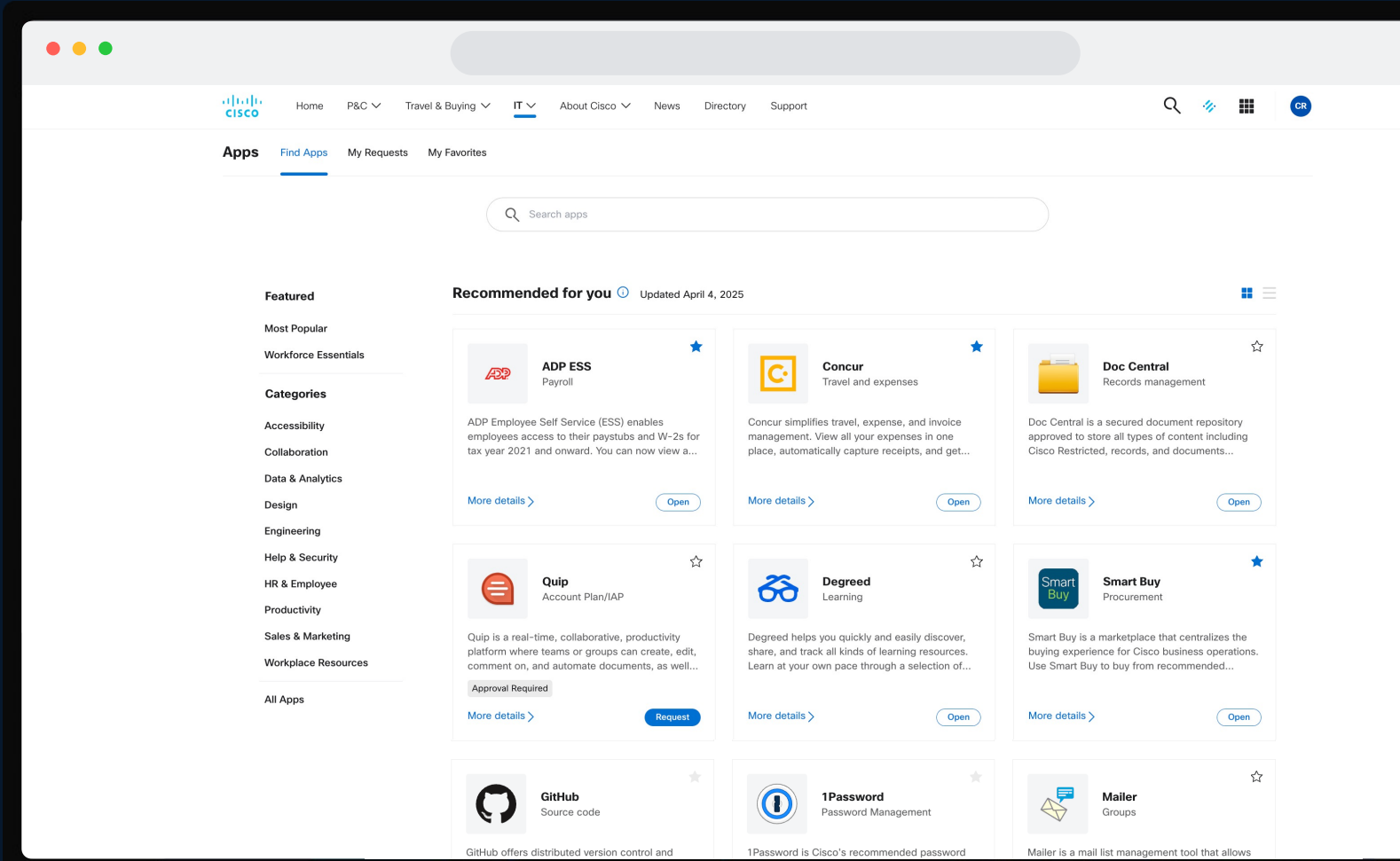


Prioritising the Core Experiences that Touch **All Employees**

Quality of Life IT focus areas



One place to
go to get Apps



Creating the Best Hybrid Work Experience for Our Employees

Cisco IT Hybrid Worker Bundle



Only Cisco has the End-to-End Technology to Fully Solve Hybrid Work



Hybrid Worker Bundle (HWB)

HWB V3 (Coming 2026)

- Highly sustainable packaging (shipper doubles as box, capsules made of paper pulp, no tape or glue)
- User choice (minimizing waste)
- Capsules provide versatility and extra protection
- Sleek, modern design





Research Triangle Park, US



San Jose, US



New York, US



Singapore



Atlanta, US



Bedfont Lakes, UK

More HelpZone Kiosks Opening Globally

In the Agent Era, Design and Experience will emphasise...

Empathy

Bringing understanding of user feelings, needs, perspective in a way that creates an emotional response.

Context

Embedding situational awareness and relevance of the broader environment, nuances, progress along journey, etc.

Creativity

Adding original thinking, novel ideas, and unexpected connections – transforming basic output into surprise and delight.

Taste

Applying a discerning sense of style and aesthetic judgment to outputs for the sake of harmony, sophistication, and alignment.

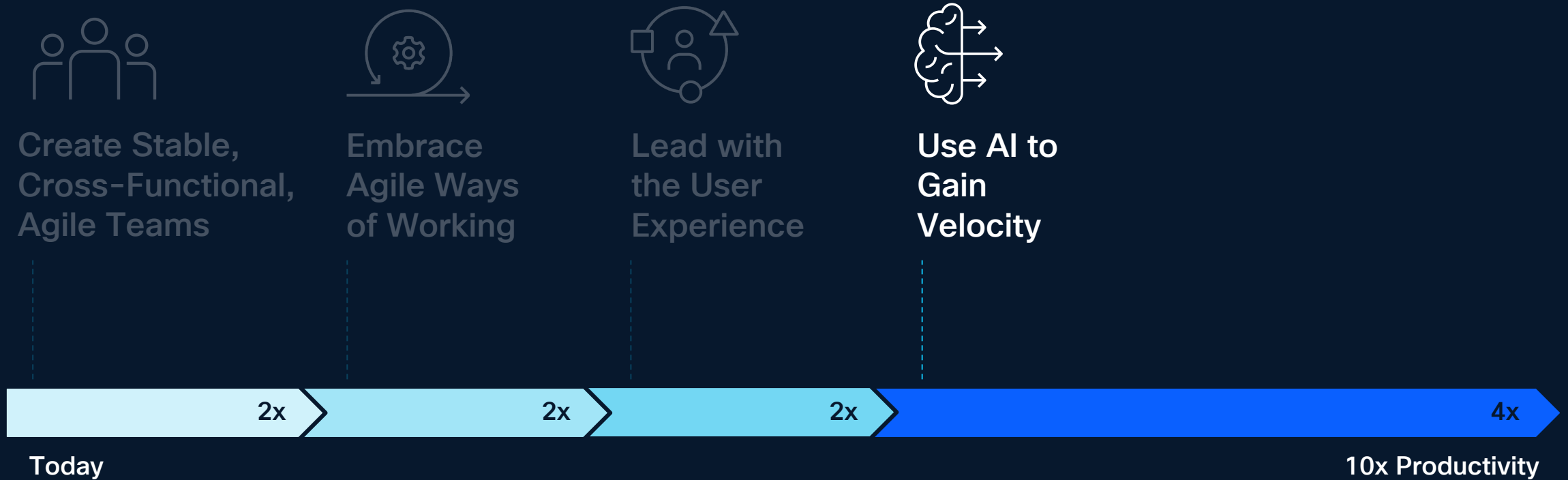
Judgment

Defining what good looks like. Weighing ethical implications, business objects, and long-term impact.

Storytelling

Structuring and connecting outputs into an engaging narrative that guides, aligns, and conveys meaning to stakeholders.

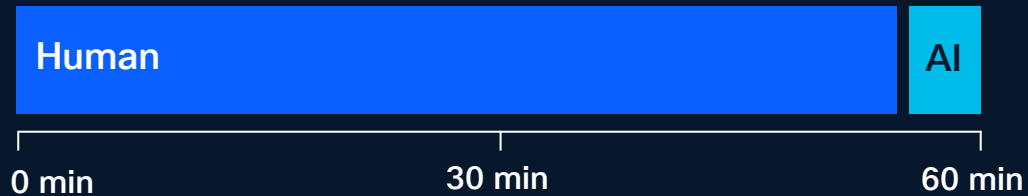
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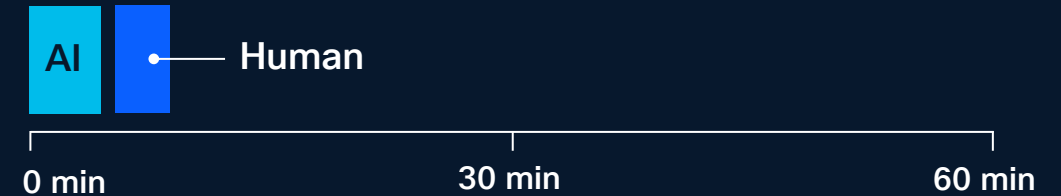
Reversing the Order of AI-Driven Work

A simple tweak is yielding big gains

Human generates,
AI refines

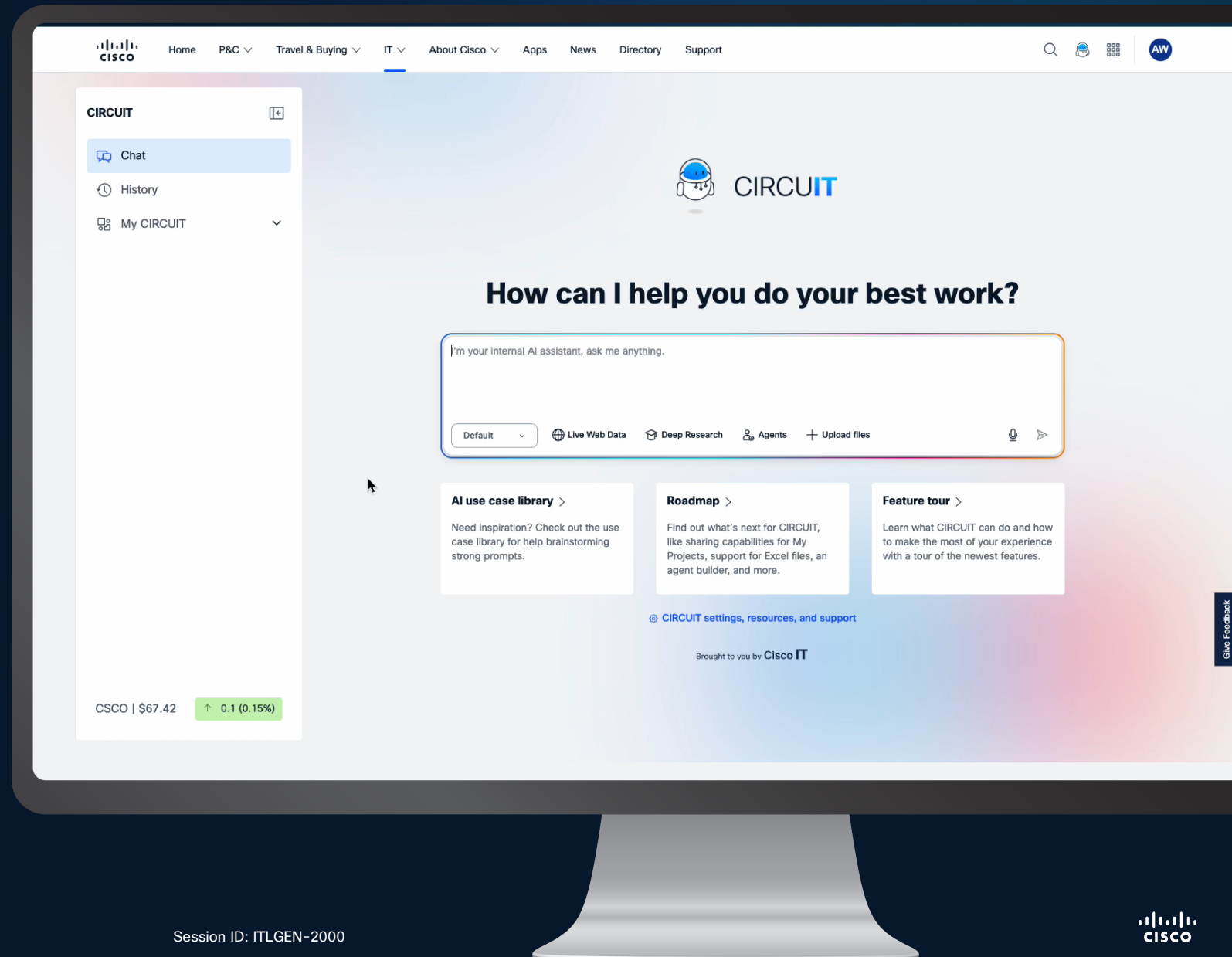


AI generates,
human refines



What is CIRCUIT?

Cisco's next-generation, enterprise-ready AI assistant, purpose-built to transform how employees work.



CIRCUIT Strategy: Your Next Generation AI-Powered Assistant

Multiple LLMs Available

The newest AI models from Open AI, Claude and Google provide the most current information. GPT models including GPT-5, Gemini Models & Claude Models.

Enterprise AI Agent/ MCP Registry & Voice to Text

Bring your Agents & MCP Servers (Connectors) with Enterprise Security.

Agent Studio (WIP). Speech to Text.

Code generation & PPT generation

Production-grade software coding with front-end capabilities that dramatically accelerate the time it takes developers to write code. Any conversation can be exported as PPTs.

Orchestration with Cisco Private Data and Public Internet Data

No need to inform the tool what data source you need; simply enter your prompt and it will do the magic for you. No more toggling!

Custom Workspaces & Image Analysis and File Upload

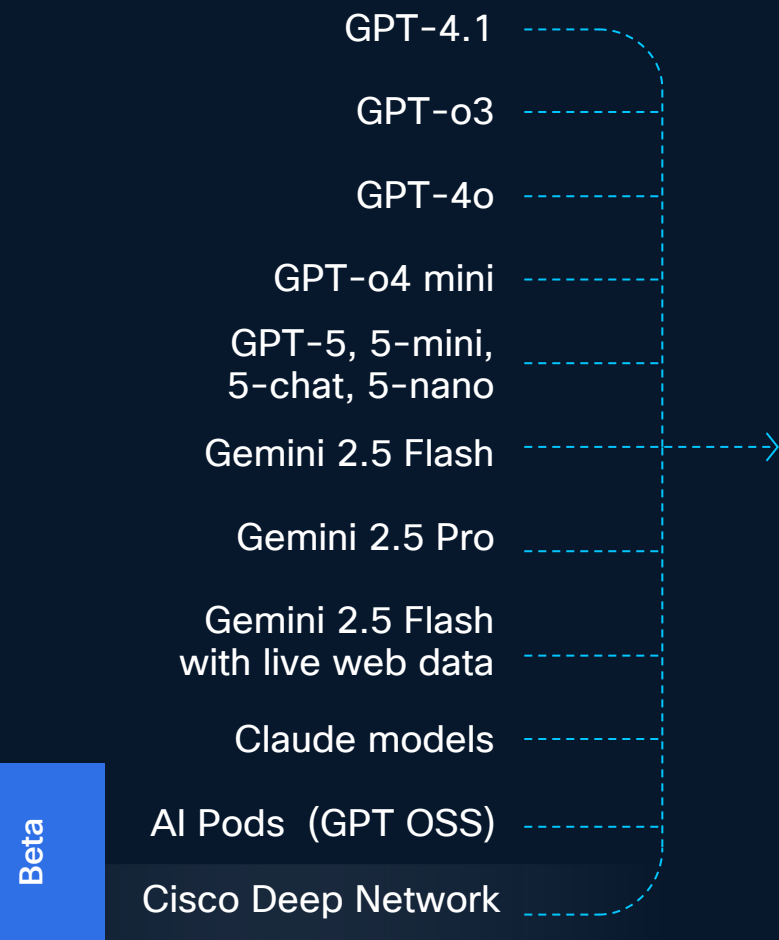
Upload your own custom content to perform analysis and prompts directly using RAG (Retrieval-Augmented Generation). File upload has evolved to offer image and CSV file analysis.

Unlimited Deep Research

Applies deep logic to your prompts to get you the most detailed, intelligent answers from web and Cisco's internal knowledge bases.

Hybrid LLM / AI Agent Router

External sources



CIRCUIT

Internal sources



Model



CIRCUIT has quickly become the #1 used AI app by employees

Launched June 18, 2025

92K+

CIRCUIT users in Cisco

~96K

Interactions per workday
in Q4

73%

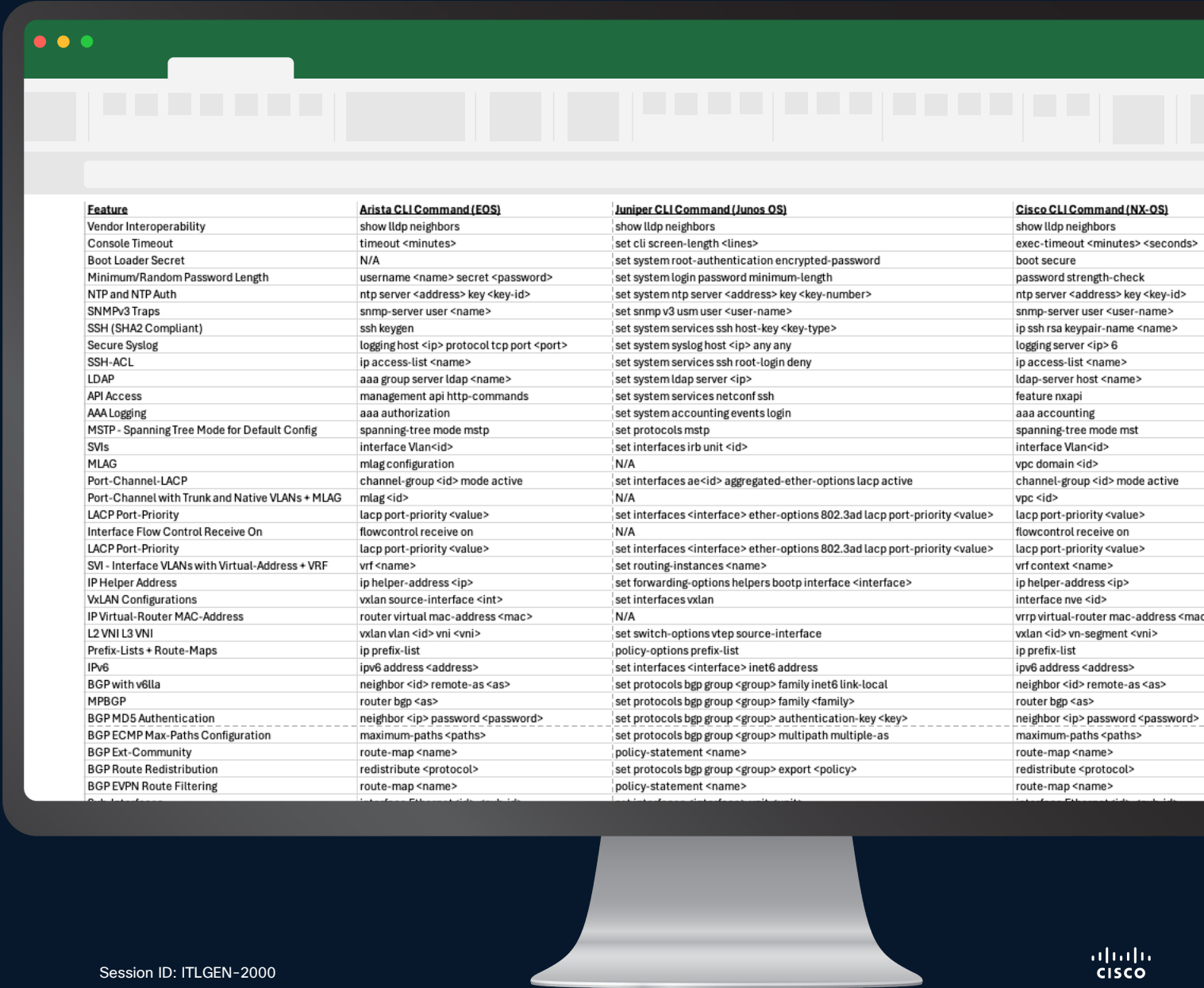
Users report CIRCUIT
increases productivity

5hrs

Average time saved per
week by Cisco workforce

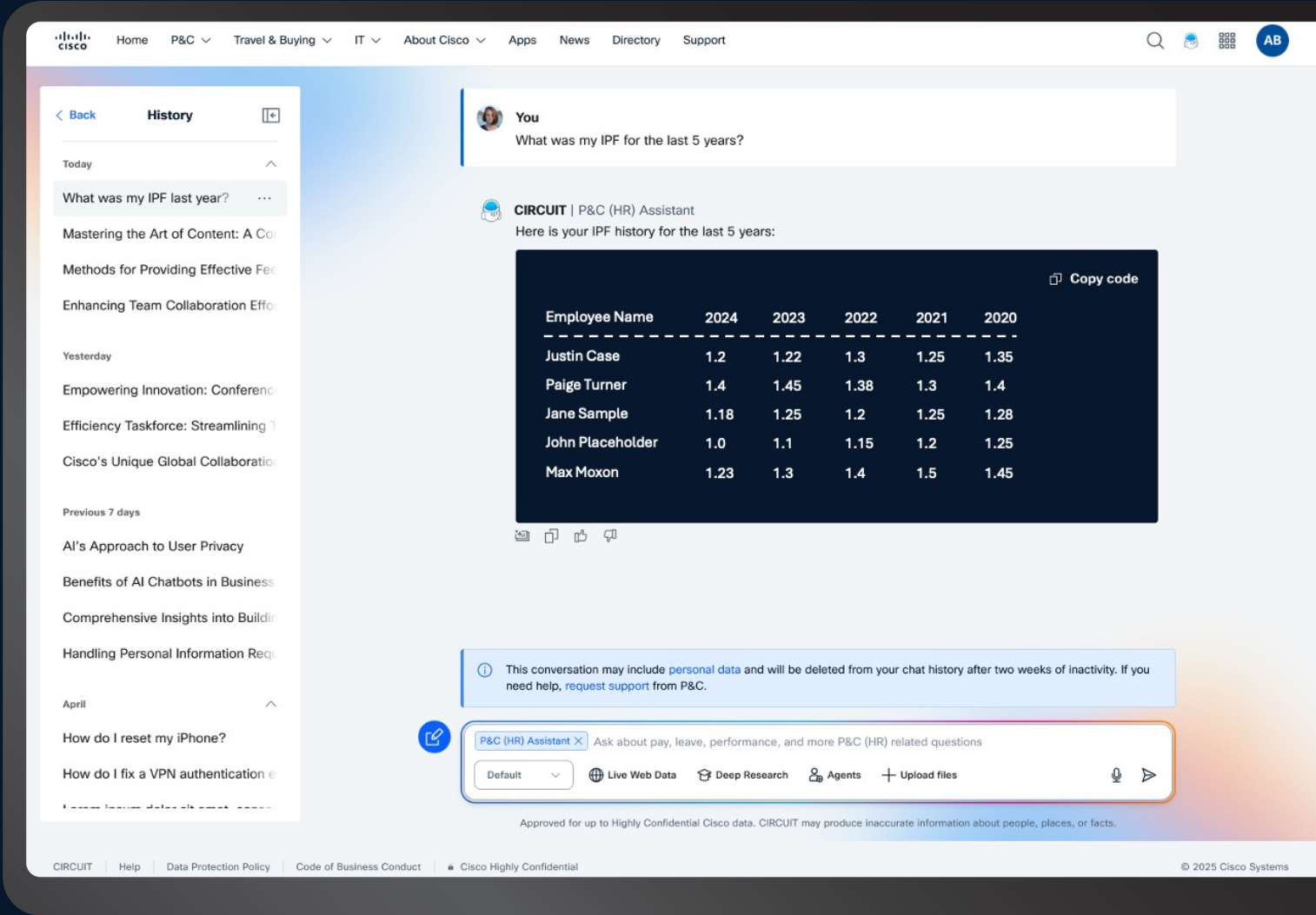
CIRCUIT Prompt

“Generate a 3-column command comparison of Arista 7280TR, Juniper PTX10008, and Cisco Nexus 9808 of the following features in a table format”



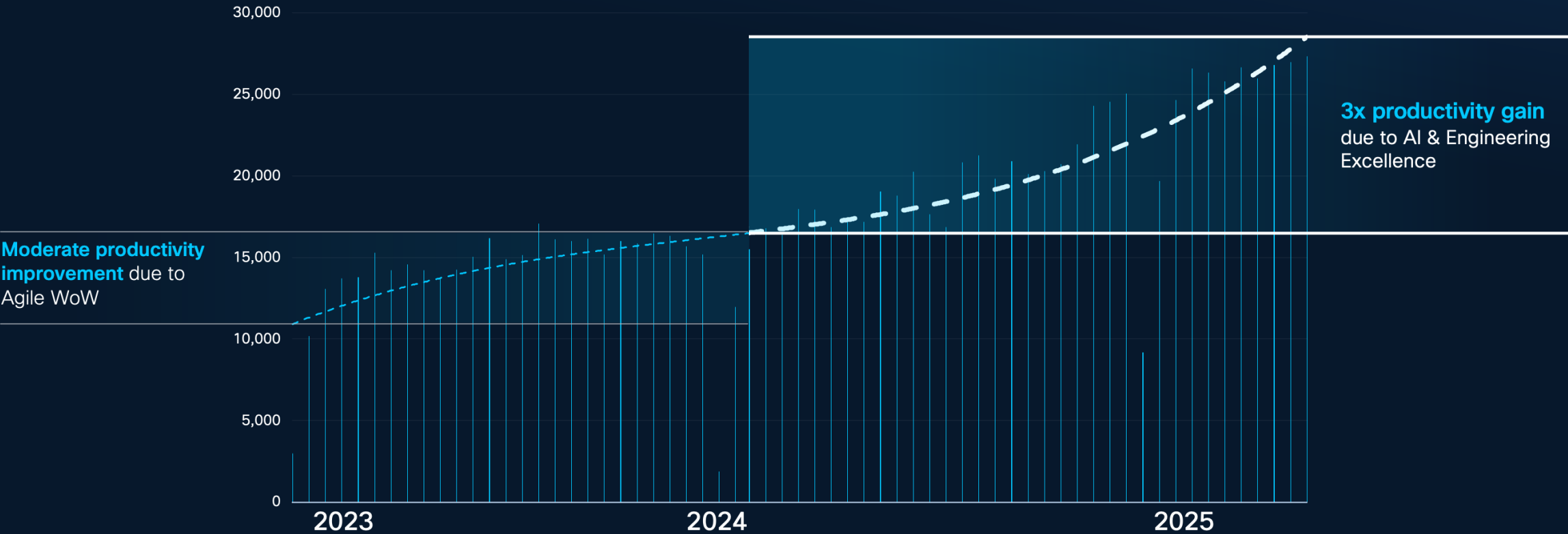
CIRCUIT Prompt

“Show my team’s IPF history for the past 5 years”



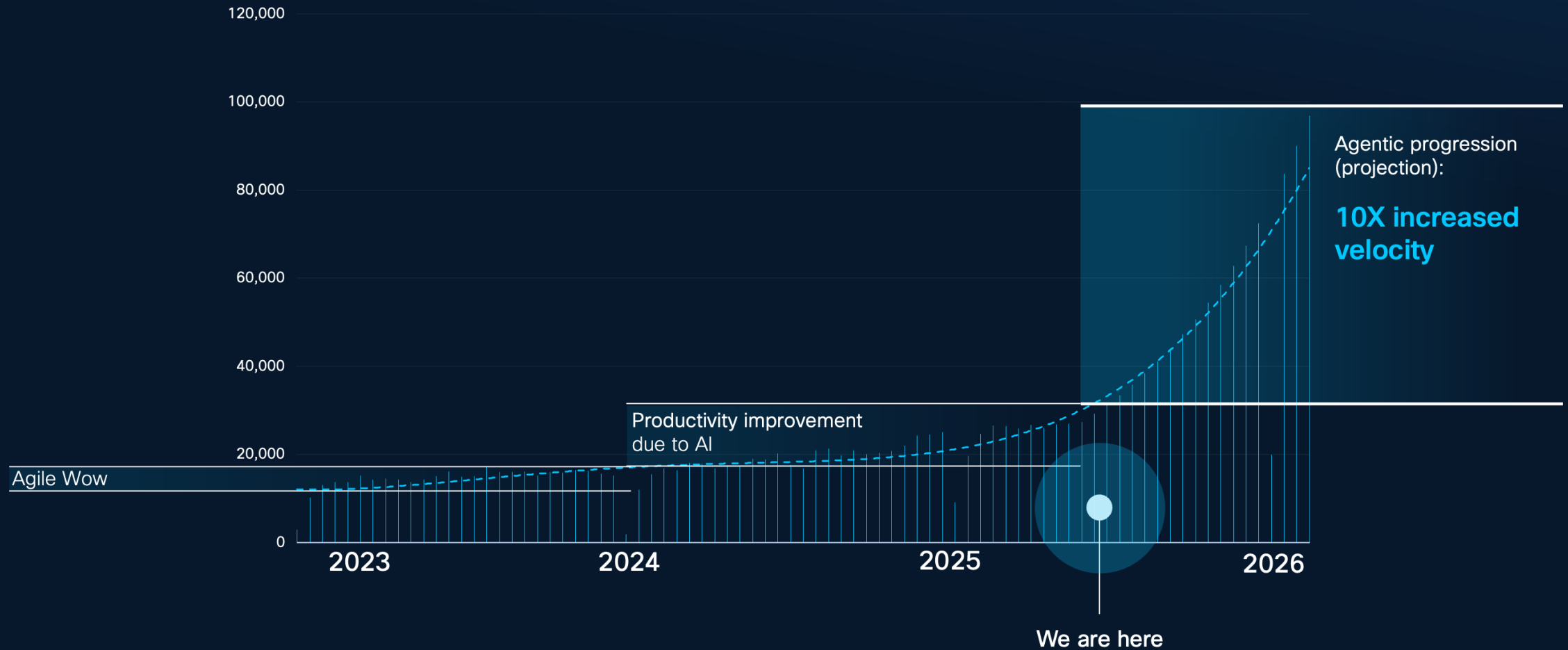
AI-Driven Productivity Gains in IT Software Development Teams

Modest productivity gains until SW development teams embraced AI-coding techniques, achieving 3x boost (and climbing)



Get Ready for the Era of Abundance of Software Development Resources

Software engineering will no longer be the bottleneck for speed of innovation (the path from 3x to 10x throughput)



AI for Autonomous IT Bug Fixes and Vulnerability Remediation

Moving from 2 years to 10 weeks (10x improvement in speed)

Before

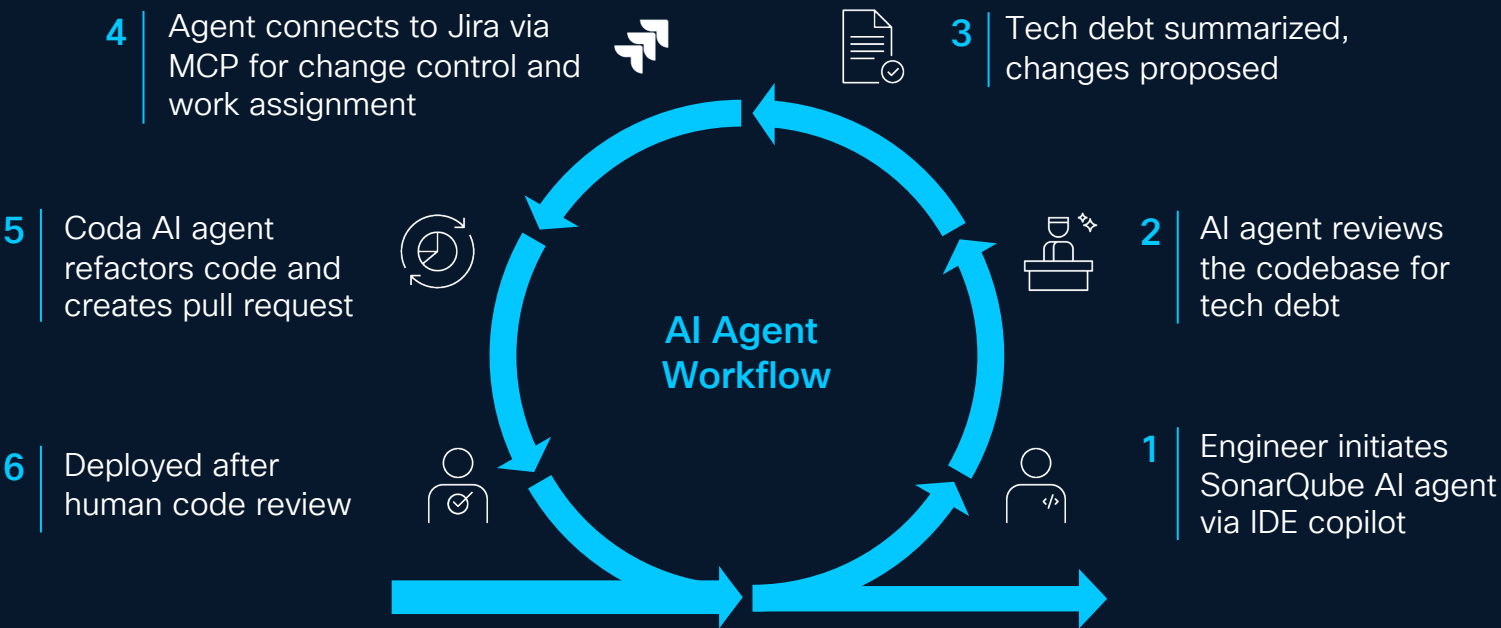
2 years of effort needed to resolve 27K technical debt issues



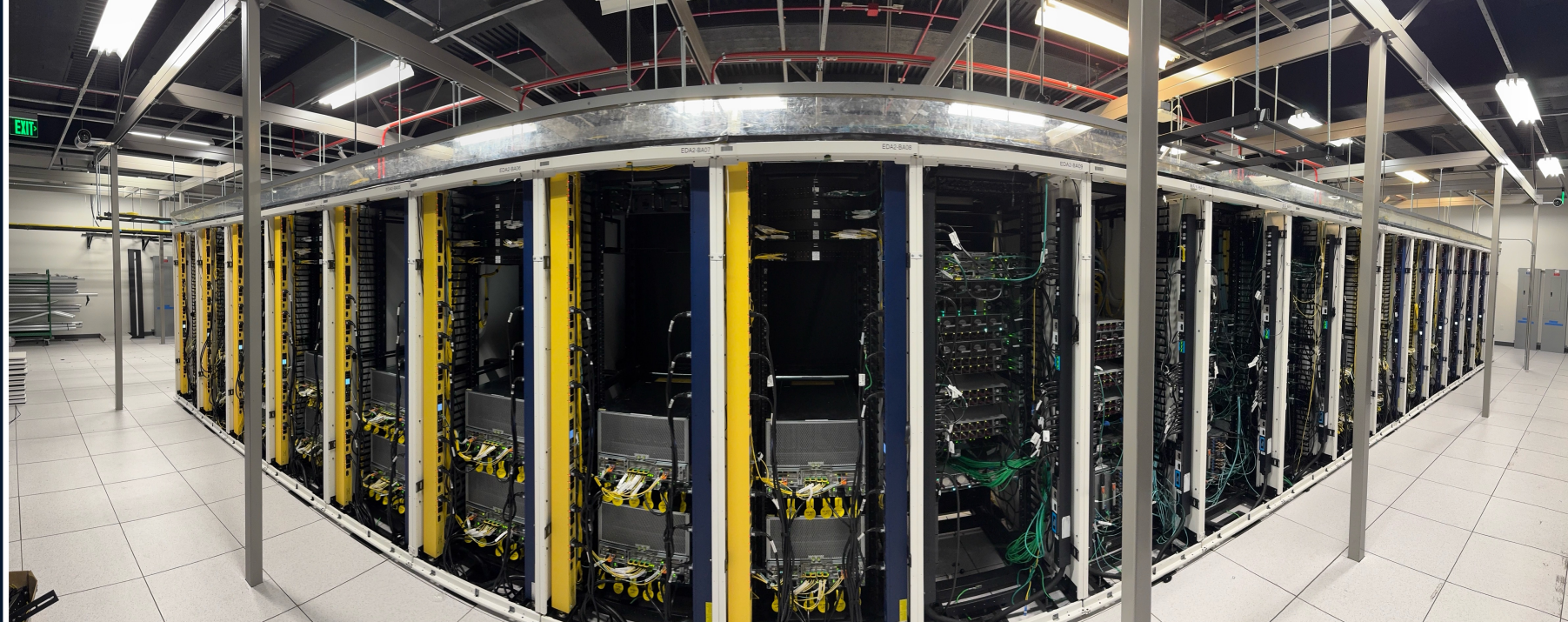
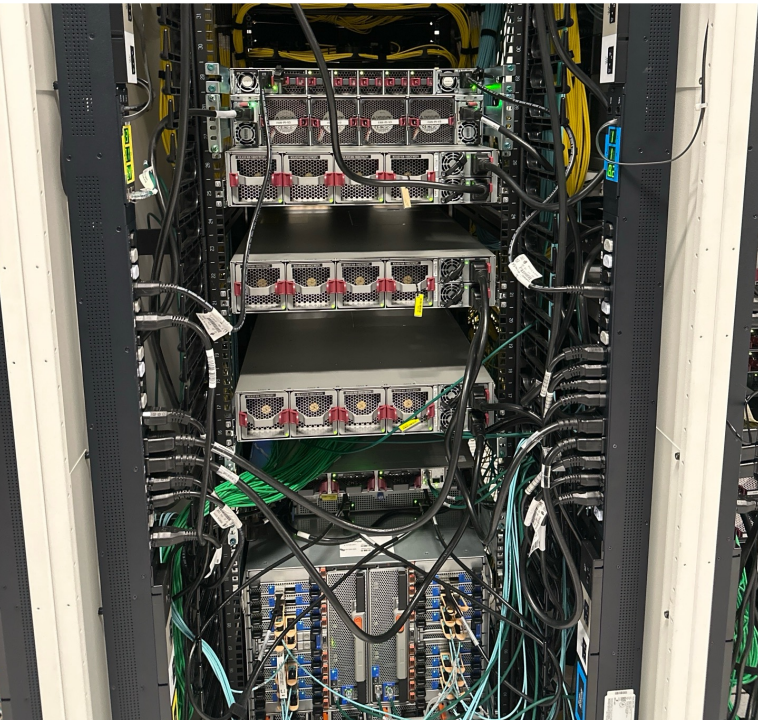
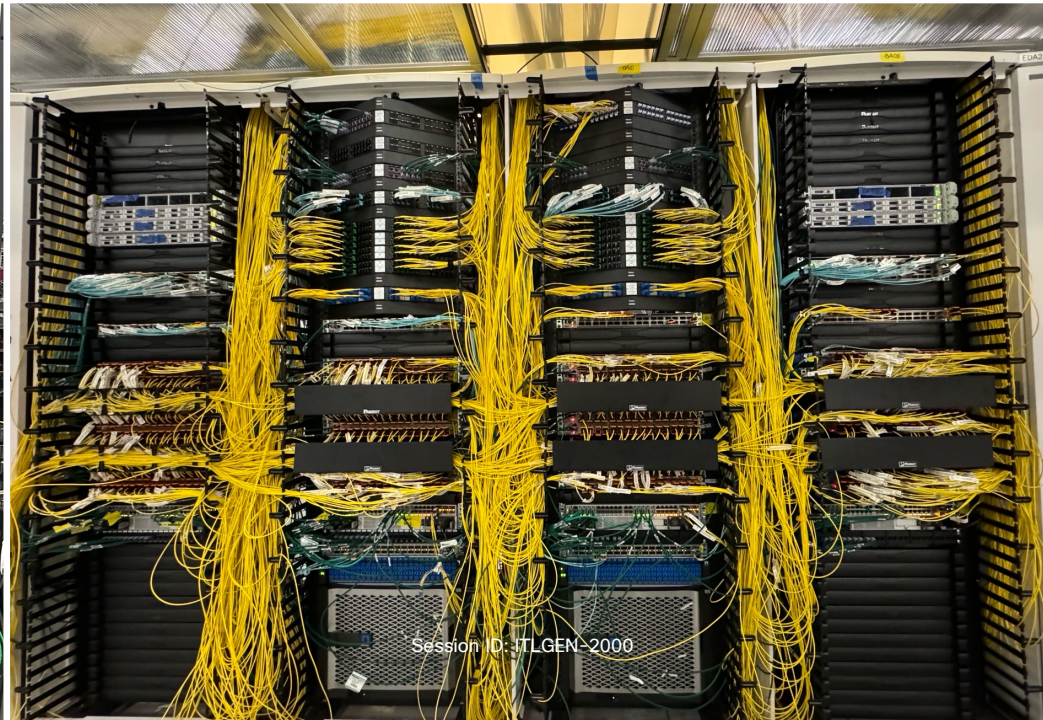
Engineer searches large a large code base for code quality and technical debt and manually codes and tests each individual fix.

After

27K technical debt issues resolved in 10 weeks using autonomous AI agents



Cisco IT is Leading the Way



WiFi: AI RRM

- Adjust RRM based on initial profile to improve client experience
- Provide recommendations based on actual observed usage
- Allows preview of RF changes by running simulations
- Remember baseline and historical patterns

24 Hours

Band

5GHz

2.4GHz

6GHz

AI RF Profile: Standard_AI_RRM

Next RRM Run: 2 m 20 s

SUMMARY		RF PERFORMANCE SUMMARY			RF COVERAGE SUMMARY		AI RF PROFILE SIMULATOR
129	80	90 / 100	5 %	47	High	High (38 dB)	Run RRM Simulation
Total AP Count	Total Clients	RRM Performance	APs with High CCI	RRM Changes	AP Density	Connectivity	

Insights

Consider changing the configured Busy Hours for RRM to be more effective.

Consider changing the configured Channel Width for improved performance.

Review Cisco AI Recommendations for KRK04 and Band 5GHz

The AI RF profile associated with this building will be updated with accepted recommendations. These changes will be pushed to the devices when the deployment task is initiated. Simulation does not support the configuration updates on Observed Busy Hour, Flexible Radio Assignment and Data Rates configurations.

Observed Busy Hours

09:00 AM (UTC)

05:00 PM (UTC)

→

05:30 AM (UTC)

04:00 PM (UTC)

Based on analyzing the wireless client association and usage patterns, we recommend this busy hour interval.

Channel Width

20 MHz

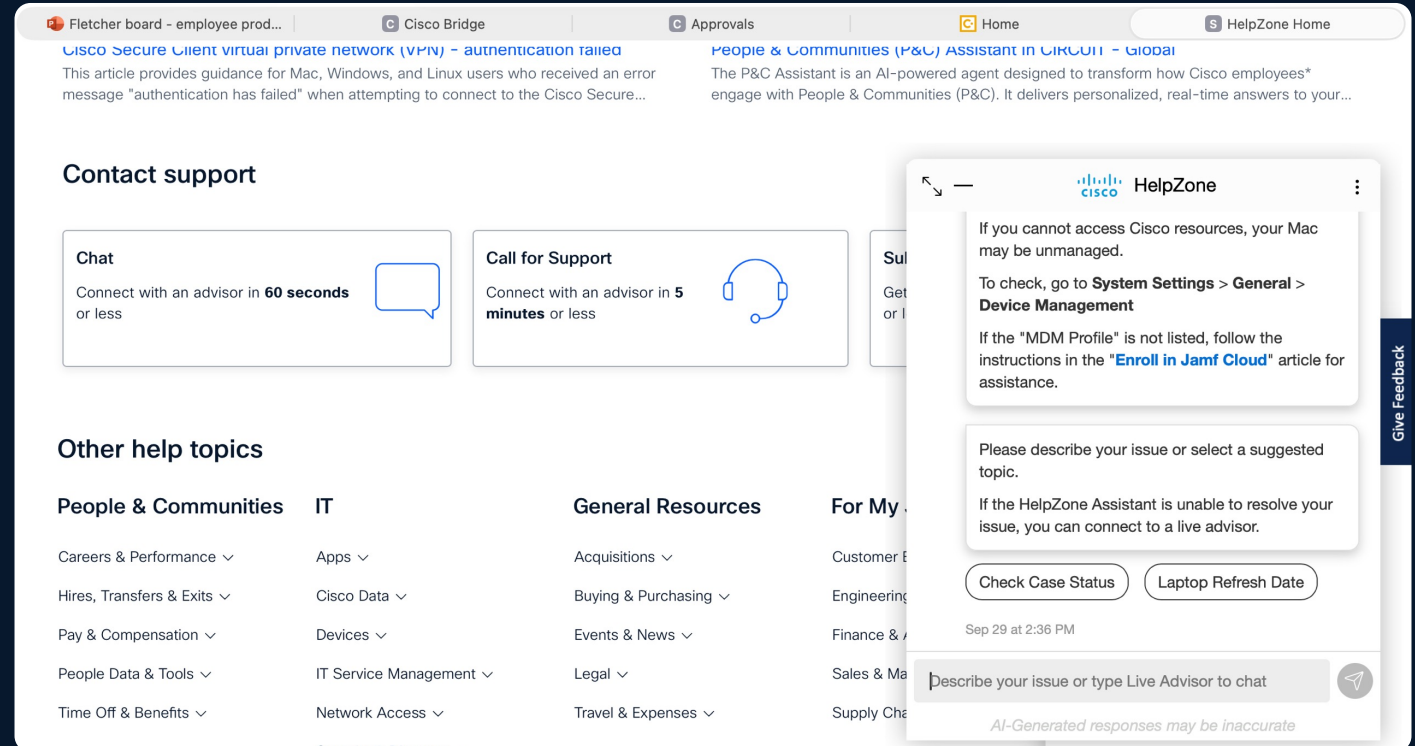
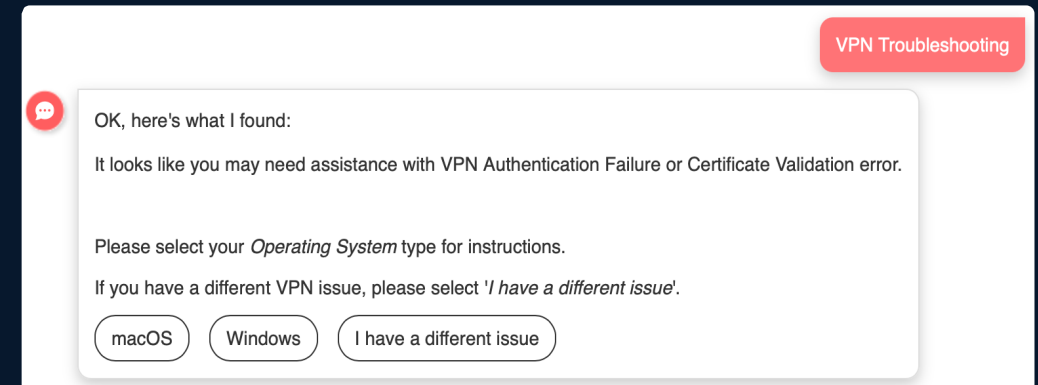
→

DBS with Max width of 320MHz

Based on analyzing your neighbor density and client types, we recommend using Dynamic Bandwidth Selection (Max Channel Width of 320 MHz)

AI for IT Support is Now Handling 34% of All Help Desk Cases

- Constantly improving with the goal of handling 50% of cases by end of Q2 and 70% by the end of FY26 for the support cases with AI
- 90% reduction in network-related cases
- AI deployed to validate user identities with visual ID verification



Key Takeaways for Delivering Great IT



**Lead with
user
experience**



**Clearly
communicate
strategy,
vision, &
values**



**Prioritize a
culture of
professional
pride**



**Create
emotional
safety for
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**Measure
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**AI as a force
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**The best way to predict the future is
to invent it yourself.**