Hewlett Packard Enterprise

安全優先的**AI** 驅動智能網路運營

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副總經理, HPE Aruba Networking Taiwan

CC sm ISC2

CISSP® ISC2

CISM®
Certified Information Security Manager®
An ISACA® Certification

當提到Aruba 時會想到?

ARUBA networks

aruba a Hewlett Packard Enterprise company

HPE **aruba** networking

Wi-Fi 7 Indoor

730/755 Series

Wi-Fi 6E Indoor

610 Series

630 Series

650 Series
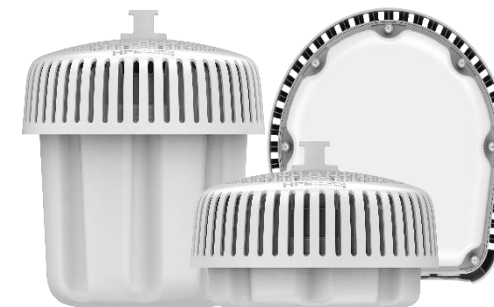
Hospitality

600H Series

Remote

AOS 10 BASED

600R Series

Wi-Fi 6E Outdoor & Hazardous

670 and 670EX Series

Wi-Fi 6 Outdoor & Hazardous Loc.

518 Series

560 Series

570 Series

Wi-Fi 6 Indoor

500 Series

510 Series

530 Series

550 Series

Wi-Fi 6 Hospitality

500H Series

Wi-Fi 6 Remote

AOS 10 BASED

500R Series

560EX Series

570EX Series

580/580EX Series

2024 Gartner® Magic Quadrant™ for Enterprise Wired and Wireless LAN Infrastructure

Gartner連續18年蟬聯
領導象限具備遠景與完整解決方案

HPE Aruba Networking CX Switch portfolio - access to core to data center

Data Center

Core

Aggregation

Access

Ruggedized

CX 4100i

CX 10000

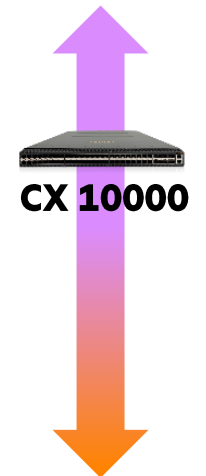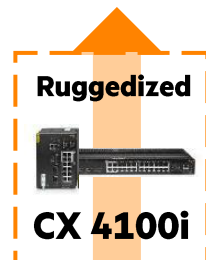## HP ProCurve boasts first commercial Ethernet switch in space

By Liz Tay

Jun 13 2008 3:33PM

The recently-docked Columbus section of the International Space Station is claimed to host the first commercial Ethernet switch in space.

SPONSORED BUSINESS CONTENT

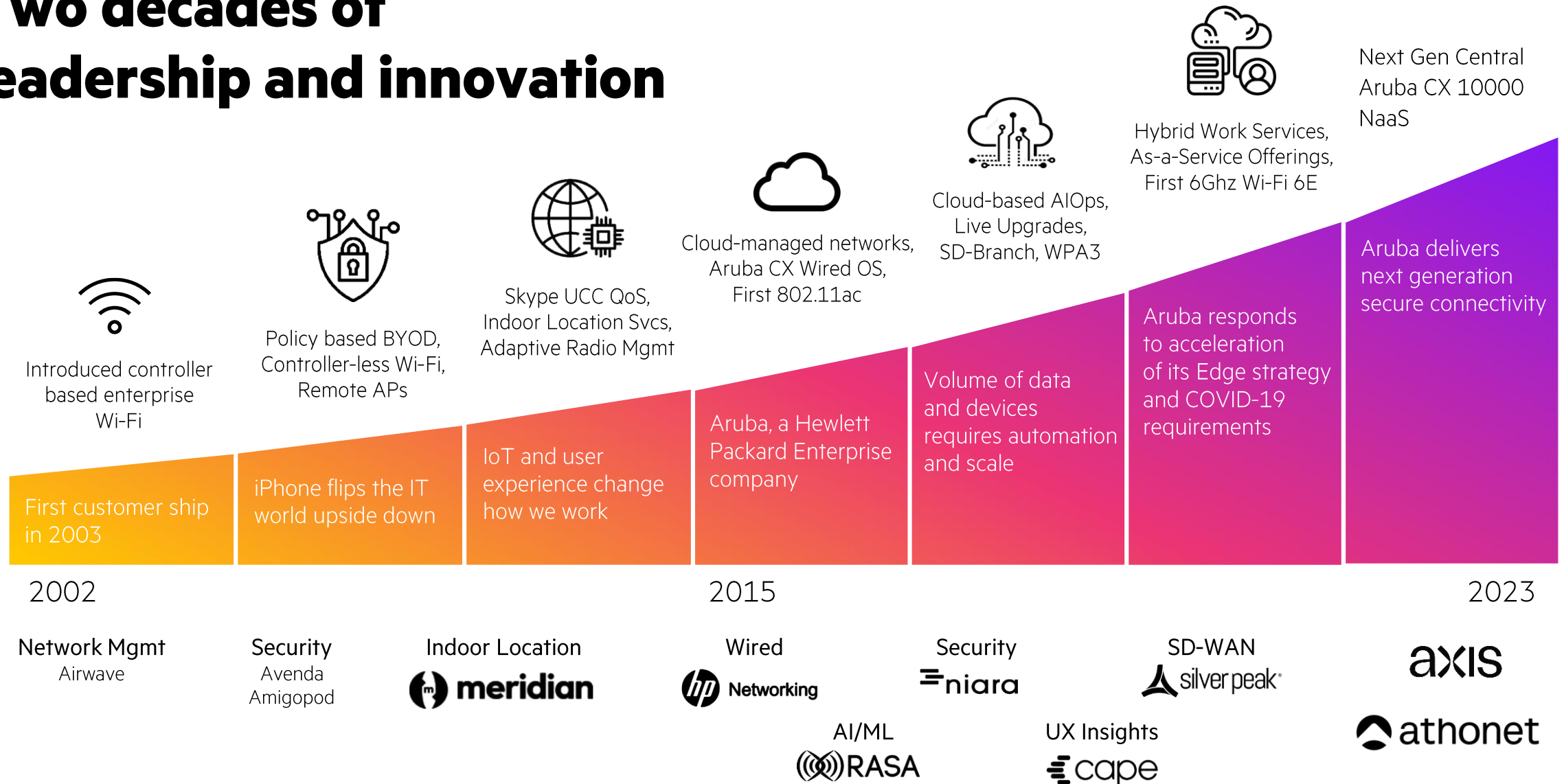AI for smarter decisions and better business outcomes. Learn more.

ddx

Dianomi

RELATED ARTICLES

End-to-End Portfolio for the Enterprise

Two decades of leadership and innovation

Introduced controller based enterprise Wi-Fi

First customer ship in 2003

Policy based BYOD, Controller-less Wi-Fi, Remote APs

iPhone flips the IT world upside down

Skype UCC QoS, Indoor Location Svcs, Adaptive Radio Mgmt

IoT and user experience change how we work

Cloud-managed networks, Aruba CX Wired OS, First 802.11ac

Aruba, a Hewlett Packard Enterprise company

Cloud-based AIOps, Live Upgrades, SD-Branch, WPA3

Volume of data and devices requires automation and scale

Hybrid Work Services, As-a-Service Offerings, First 6Ghz Wi-Fi 6E

Aruba responds to acceleration of its Edge strategy and COVID-19 requirements

Next Gen Central Aruba CX 10000 NaaS

Aruba delivers next generation secure connectivity

2002

2015

2023

Network Mgmt
Airwave

Security
Avenda
Amigopod

Indoor Location
meridian

Wired
hp Networking

AI/ML
RASA

Security
niara

UX Insights
cape

SD-WAN
silver peak

axis

athonet

你是我的最初，你是我的最終
你是我的唯一

Deliver what users and stakeholders expect

Student Priorities
- ✓ Performance and roaming
- ✓ College experience
- ✓ Home-like residence hall

Faculty Priorities
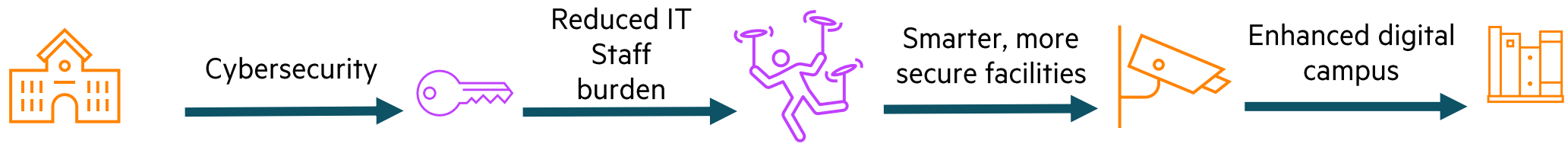- ✓ Save time
- ✓ Secure data
- ✓ Teach students in all modalities

Facilities Priorities
- ✓ Cost savings
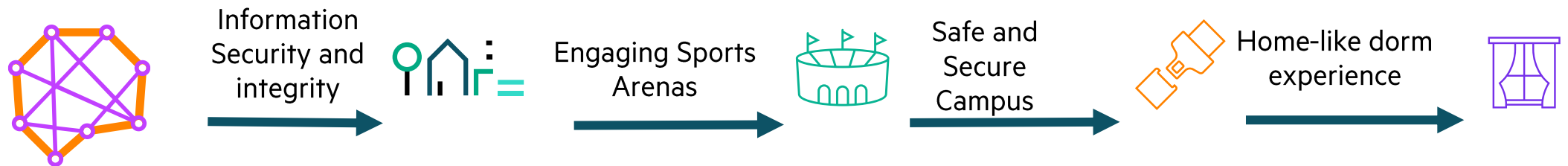- ✓ Eefficient operations
- ✓ Safe Campus

# Network enabled higher education outcomes and use cases

Driving Outcomes

Cybersecurity → Reduced IT Staff burden → Smarter, more secure facilities → Enhanced digital campus

Enabling Use Cases

Information Security and integrity → Engaging Sports Arenas → Safe and Secure Campus → Home-like dorm experience

Designed for the modern IT operator
Resiliency and agility for new campus demands

HPE Aruba 網路為所有裝置和使用者提供安全可靠的連接，動態增強整個校園到家庭網路的資料安全性，並以家庭般的簡單性改善學生體驗。
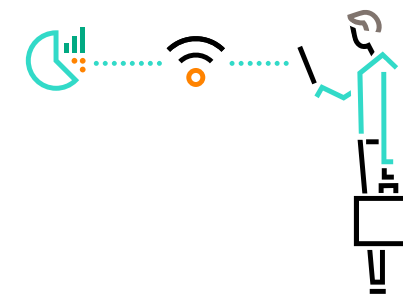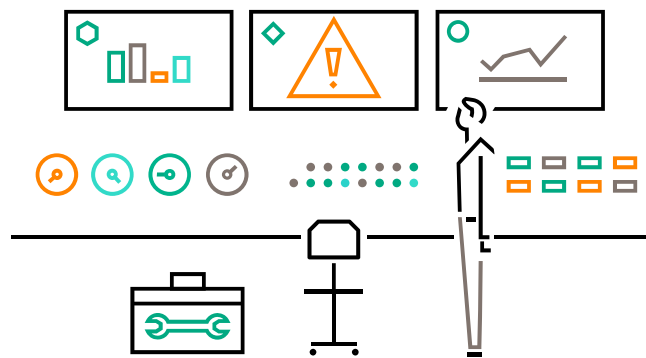
Unify & simplify
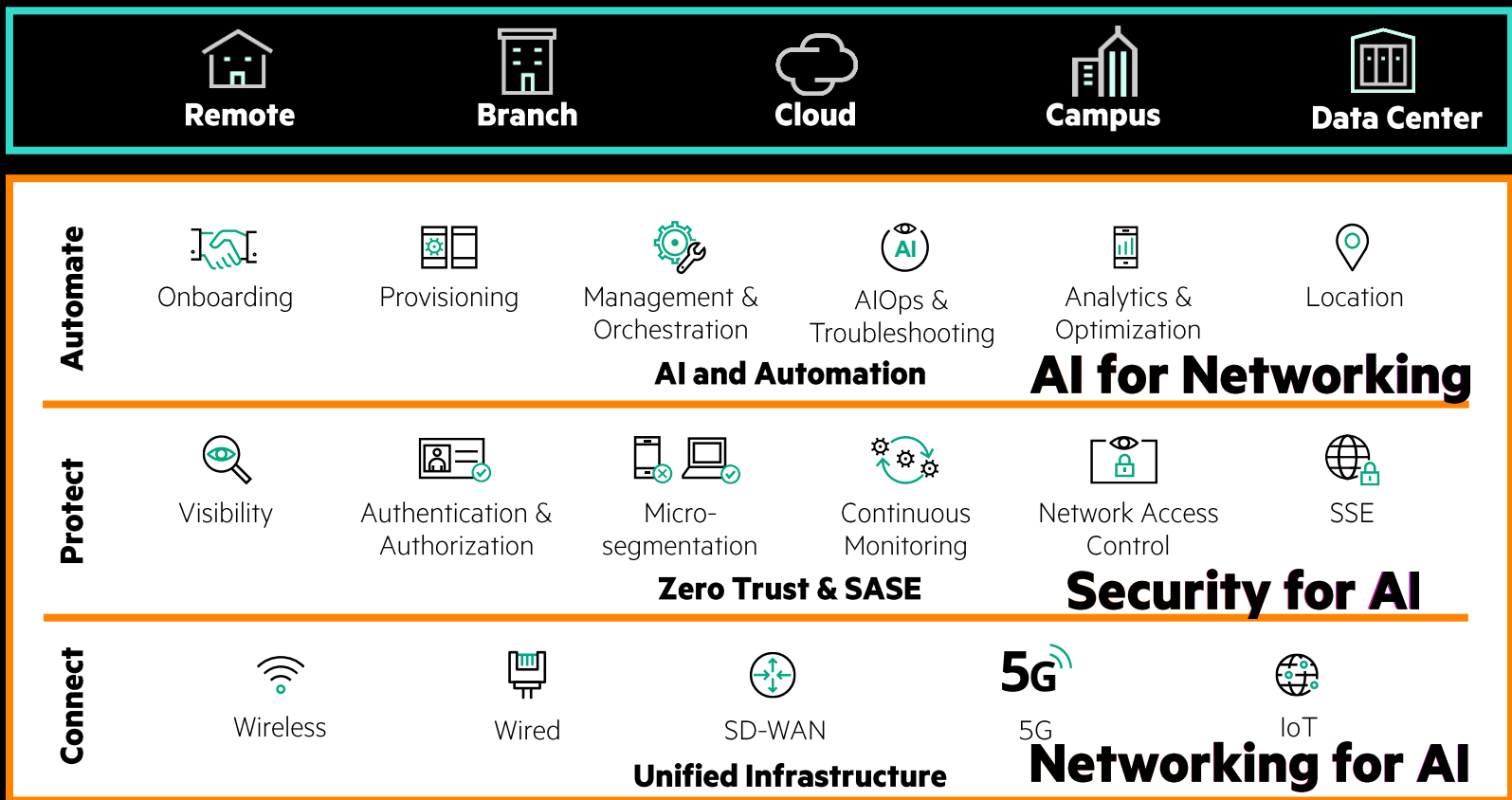Access across locations, users and IoT

Automate & secure
IT operator experiences with AIOps

Choice
Your network, your way with agile NaaS

安全至上，AI 驅動智能網路

HPE Aruba Networking Security-First, AI-Powered Framework

Remote · **Branch** · **Cloud** · **Campus** · **Data Center**

Automate
Onboarding | Provisioning | Management & Orchestration | AIOps & Troubleshooting | Analytics & Optimization | Location

AI and Automation — **AI for Networking**

Protect
Visibility | Authentication & Authorization | Micro-segmentation | Continuous Monitoring | Network Access Control | SSE

Zero Trust & SASE — **Security for AI**

Connect
Wireless | Wired | SD-WAN | 5G | IoT

Unified Infrastructure — **Networking for AI**

HPE GreenLake for Networking

Powered by HPE Aruba Networking Central

網路維運的未來

AI for Networking Empowering IT teams for an accelerated, AI-driven future

**Accelerating GenAI for Networking Realising greater efficiencies**

Network as a Zero Trust security solution

Growing significance of 數位體驗監控 (DEM)

Sustainability

By 2026, 60% of network operations personnel will rely on **Generative AI** for Day 2 management, up from less than 5% in early 2024[1]
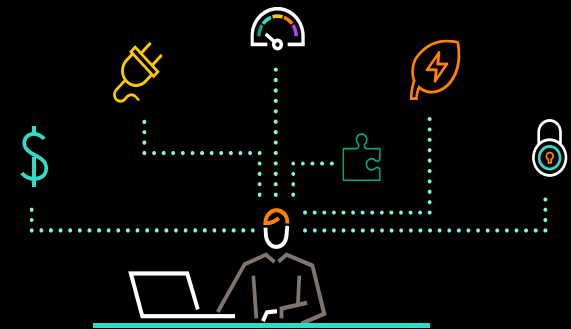
46% ITDMs say **cybersecurity concerns** impact their organizations' willingness to invest in innovative technologies[2]
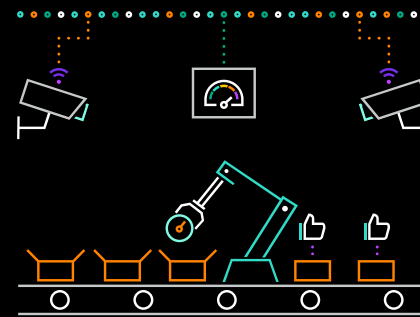
Digital Experience Monitoring becomes a strategic investment area, with deployments expected to rise from 60% to **90%** in 2027[3]

83%[4] of business leaders say **sustainability** activities create value of their organization

[1]Gartner: Prepare for Generative AI in Network Operations , Mar 2024
[2]The innovation vs. risk conundrum. Hewlett Packard Enterprise. 2023
[3]Gartner Market Guide for Digital Experience Monitoring, Nov 2023
4 2022 sustainability survey :use Sustainability to drive vlaue and mitigate disruption ,Sept 22

AI-powered: Aruba Next-Generation Cloud-Native Central Platform

有數據才有**AI**

Reduce manual configuration and administrative work	Enhanced Visibility & Anomaly detection	Improve the user experience

15%+ **Improve network performance**

Up to **99%** Accuracy of analysis for known clients, unknown rate of <5%

95% Calls to IT help desk assistance are reduced due to HPE Aruba network Wi-Fi usage issues

Industry-leading data lake

Wireless   Wired   SD-WAN   5G   IoT

Unified Infrastructure

180K+ Central accounts	**~6M** devices under mgmt	**~1B** endpoints served	**30+** Industry verticals

AIOps For Improved Troubleshooting And Issue Resolution

- Automation is reduced MTTR (Resolve) and MTTI(Identify)，Improve IT efficiency

POWERFUL FEATURES

AI Search with GenAI | **AI insights** | **AI assurance indicators** | **Client insights** | **Incident Detection**

Gen AI
Large Language Models (LLMs)

Classification AI
Clustering, Correlation, Regressions

POWERFUL RESULTS

Faster MTTR

63%
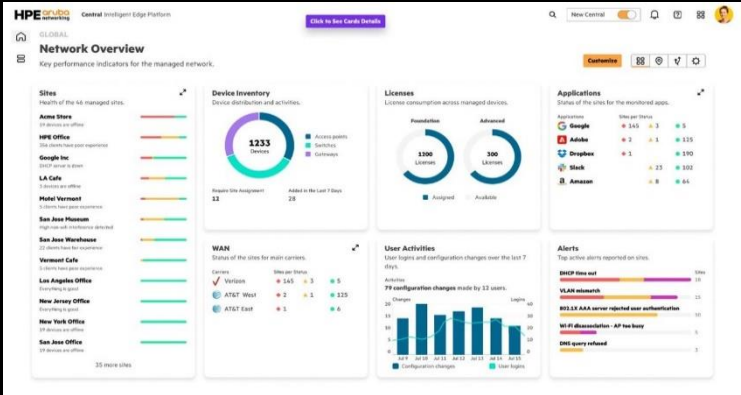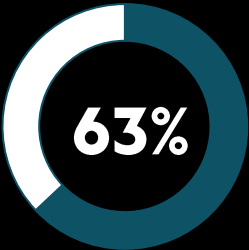
Of surveyed customers resolve network or user issues at least **50% faster**

Fewer support tickets

38%
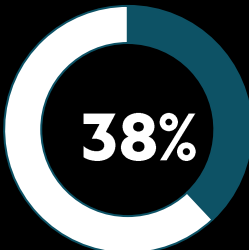
Of surveyed customers have reduced IT trouble tickets by at least **50%**

Operator-centric, 直觀的用戶體驗
簡化第0天到第 N 天的操作

ZTP & 'Solar system' navigation

Define, discover and profile
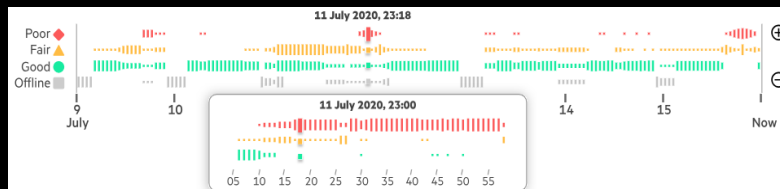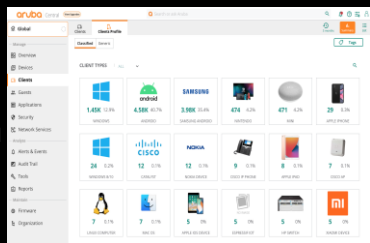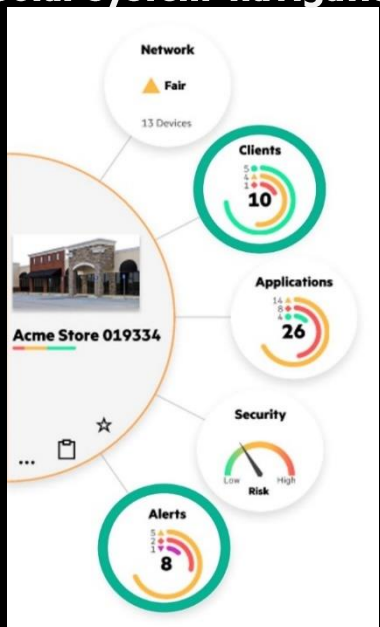
Industry-first network 'time travel'

AI Insights and updates&troubleshoot

Configure and provision

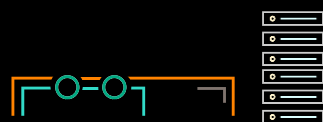**Monitor, AI Green AP and Sustainability**

Onboard infrastructure

Manage policies& Audit Trill

DAY 0

DAY N

Edge

Campus and Data Center

Public Cloud

Meet the newest member of your IT Team
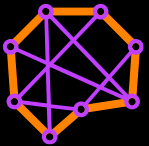
A CONVERSATIONAL CO-PILOT PREVIEW

✓ Privacy Enabled Security PII & CII protected

✓ LLM trained with public HPE data

✓ Contained and hosted on HPE Greenlake Cloud Platform

✓ HPE Artificial Intelligence (AI) Ethics Council

Aruba Central

GLOBAL
Network Ov
Access your network

Central Assistant

Start a conversation, by asking anything ...

I have some headless IoT devices that do not support 802.1X. I don't want them to use the same ... >

Tell me about the AI power-save recommendation for access points. >

Are there any ongoing issues in my network? >

do any of my sites qualify for this feature? >

whcih alert should i work on first? >

Ask anything...

Sites
Sites by health.

API- Test- TME
High 2.4 GHz frame retries

EET-Warehouse HOU
High 2.4 GHz noise floor

EE-DC1
Power supply failure on 1 d

EET-Warehouse ATL
High 2.4 GHz frame retries

SJCCP
3 devices are offline.

EET-HQ-Campus
Power supply failure on 1 d

Toronto (YYZI) - Bra
Low signal strength noticed

DC-Site-01
Power supply failure on 2 d

EET-Oakmead-Camp
1 device is offline.

EET-Alpharetta-Cam
Low receive rate noticed on

Application與AI 驅動的用戶端分析
Define, Discover and Profile what's Connected to the Network

陳九妹 – **Network Operator**

學校那麼多用戶的流量可視性與部署了許多物聯網設備，但在識別和保護這些設備方面遇到了困難

Only solution with AI-powered IoT profiling and **behavior analysis** for segmentation accuracy

Traffic flow visibility for high classification efficacy and enhanced protection

Advanced filtering and custom group tagging aid in policy creation and enforcement

AI 驅動的建議

Free up valuable IT cycles and reduce risk with proactive optimization insights
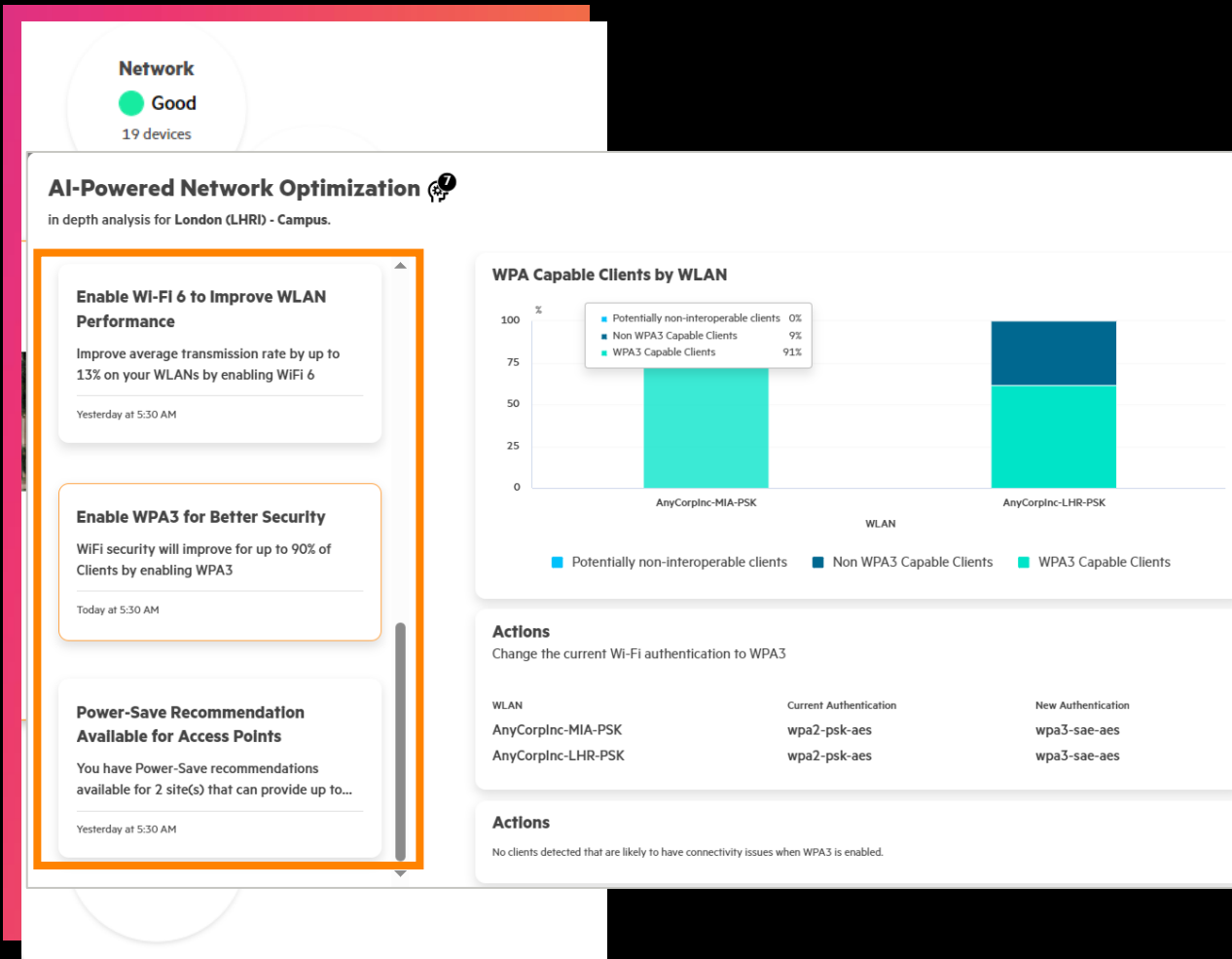
- **Custom, actionable recommendations** at a global/per-site basis

- AI/ML models trained and re-trained **weekly** on **data from anonymized peer groups** with similar environments

- **Examples –**

  - 802.11ax recommendations for Wi-Fi performance

  - AP power save recommendations to support sustainability efforts

  - WPA3 insights for improved security posture and **more!**

Foundation ?

Aruba User Experience Insight (UXI)

Securely powering the Edge for Innovative organizations

500K

Customers served across Americas, Europe, Middle East, Africa, Asia Pacific, and Japan

100+

130 WW R1[1] Universities POWERED BY HPE Aruba Networking

Security Certifications Strong Enough for Governments

Common Criteria, FIPS, and DODIN-APL Certified Solutions[2]

Thank you

Security First, AI-Power Networking