Enterprise Networking
Rica Lai (Specialist)

5G

WiFi6

Empower

Mobility

Different Solutions will Require Different Access

Wi-Fi 6 / BLE 5

Wii-Fi 6 / ZigBee / BLE 5

5G / NB-IoT / Wi-Fi 6

5G / LoRaWAN / Wi-Fi 6

Sensors

Devices

Machines

Challenges

Users

Management

Security

Analytics

Wi-Fi 6 Enhancements

1024-QAM (802.11ax)

Increased Speed

MU-MIMO: Multiple Users

Higher Density & Capacity

Improved Security

OFDMA

Reduced Latency

Greater Range

20 MHz

Power Efficient

Comparing 5G for Enterprise

Wi-Fi6 Continues to be Successful

Unlicensed

Anyone can deploy anywhere

Cost

Lowest cost MB per m^2

Capacity

High density deployments and carrier offload

Clients Support

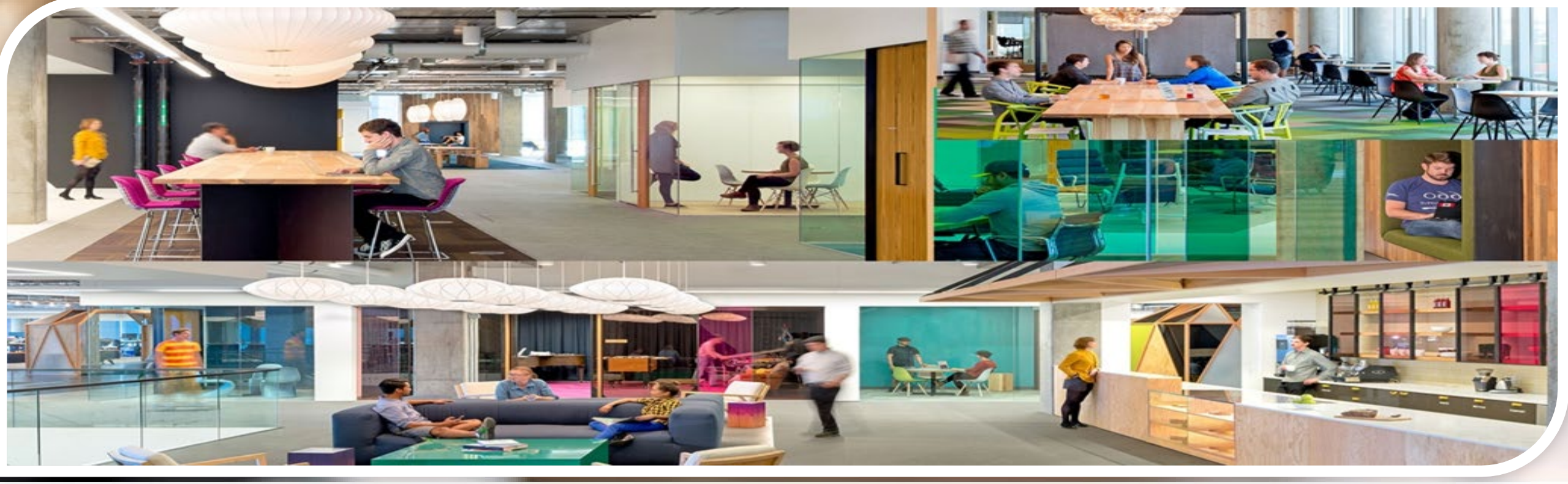
Wi-Fi is less expensive for client device manufacturers

Ownership and Control

Maintain network control and own analytics data

Backwards Compatibility

5G networks only support 5G clients



Sensor | Wireless Access Points | Wireless Controllers | Campus Switches | Routers | SD-WAN | Datacenter Switches | Policy/ Security | Management Platform | Assurance | Location

ISE | Cisco DNA Center | Meraki Dashboard | DNA Spaces

Prime Infrastructure

Integration

+ MORE

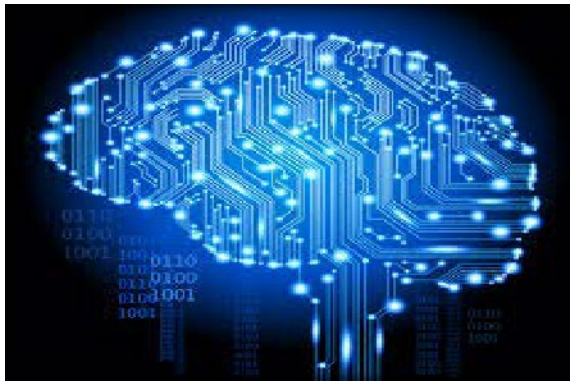
IoT | Automation | mM Segmentation | ETA Security Analytics | Network Assurance

IBN-WiFi6 Case Study: Business Values

Security

- Enable agile network segmentation
- Quarantine end points causing security threats
- Mitigate the spread of malware attacks across the network

Experience



- High-speed access to DC and Internet resources
- Reliable platform for demanding Cloud-based or on premise applications

Savings

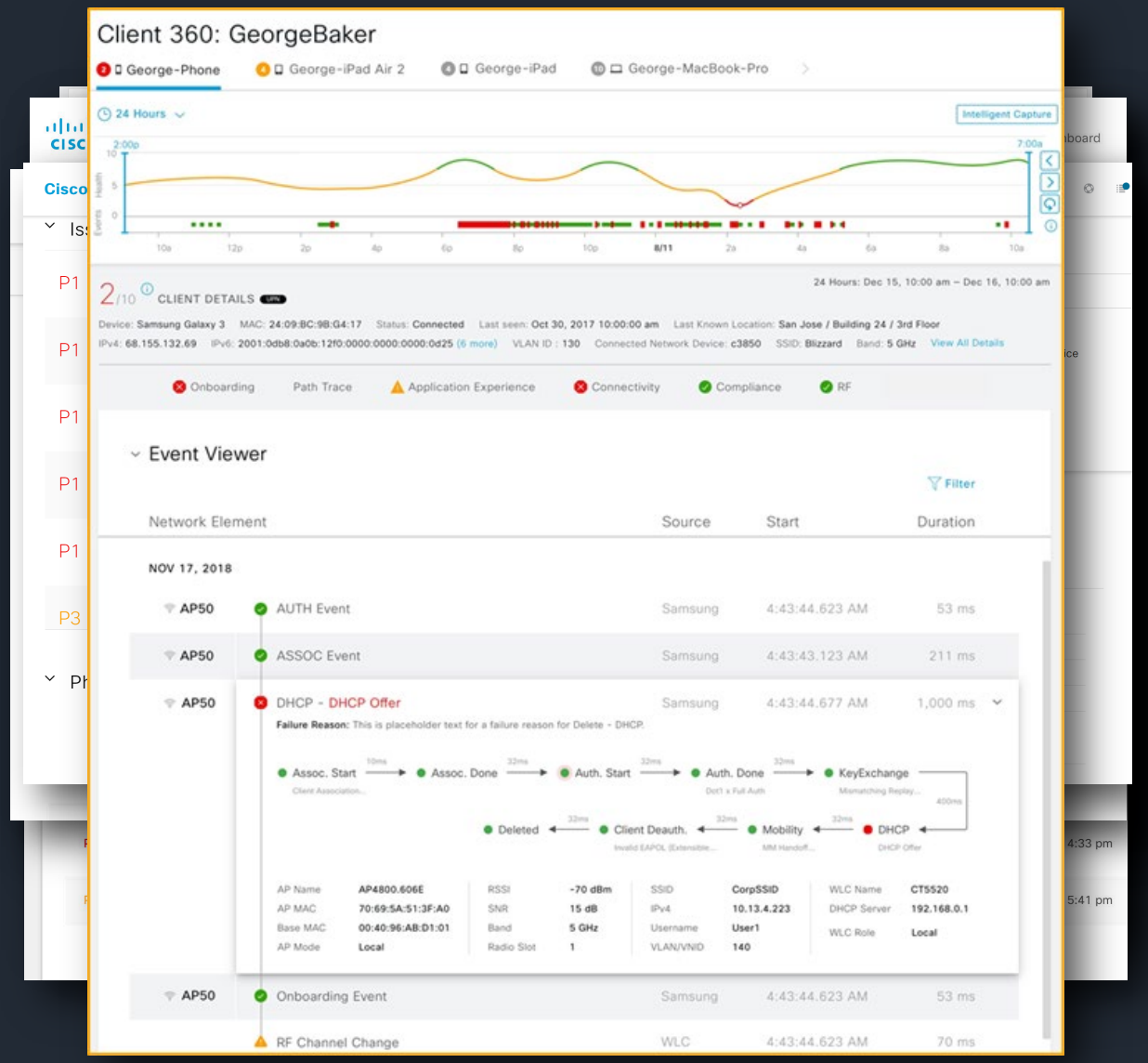
- Cost saving when connecting new IOT devices
- Manpower saving to support many more network devices

Efficiency

- Faster provisioning time for wired and wireless points request
- Automate network provisioning to eliminate manual efforts and enhance operational efficiency

Day-2 Operation Assurance Highlights

- Wireless and Wired Sensor
- Network Health Scores
- Executive Summary Report
- Wired Client Event Viewer
- Auto Resolve Issues
- Apple & Samsung Client Analytics



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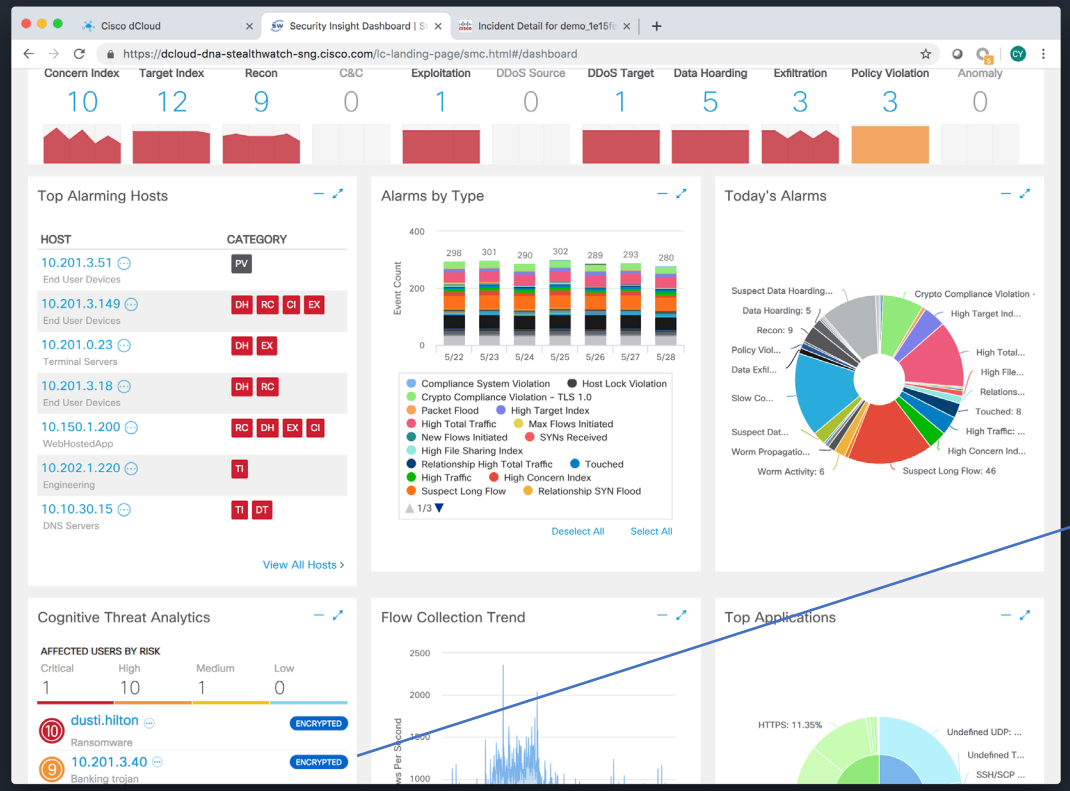
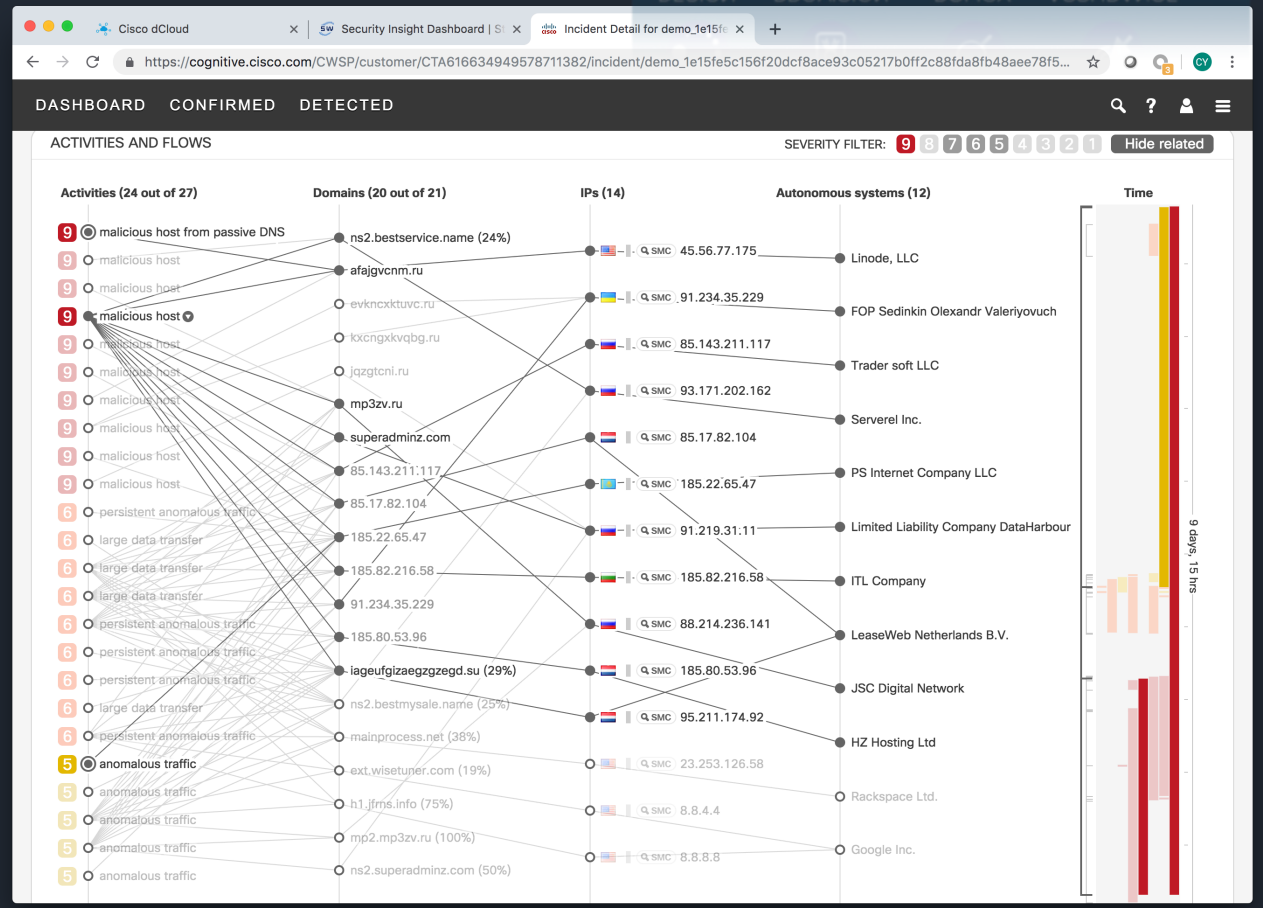
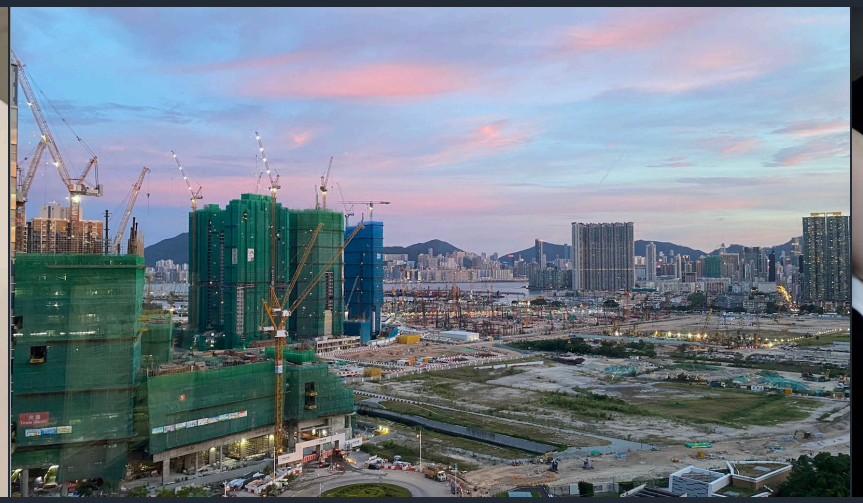
Network as Sensor

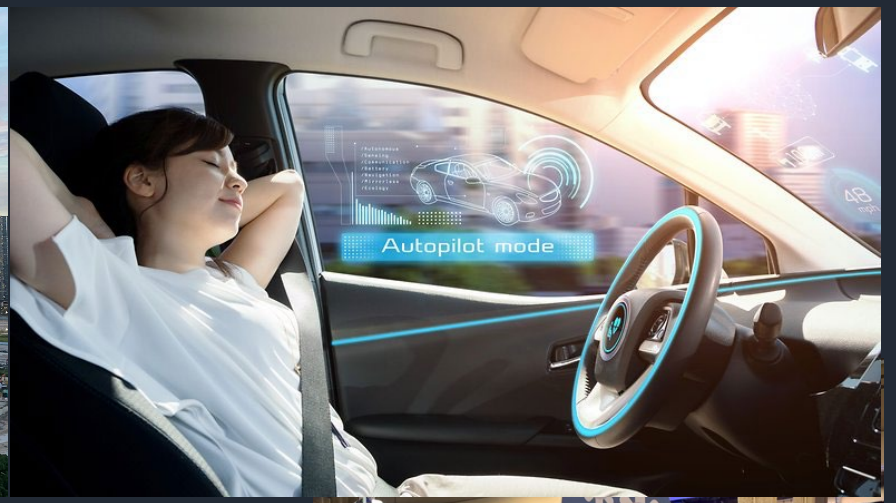
ETA Security Analytics





5G Emerging Use Cases



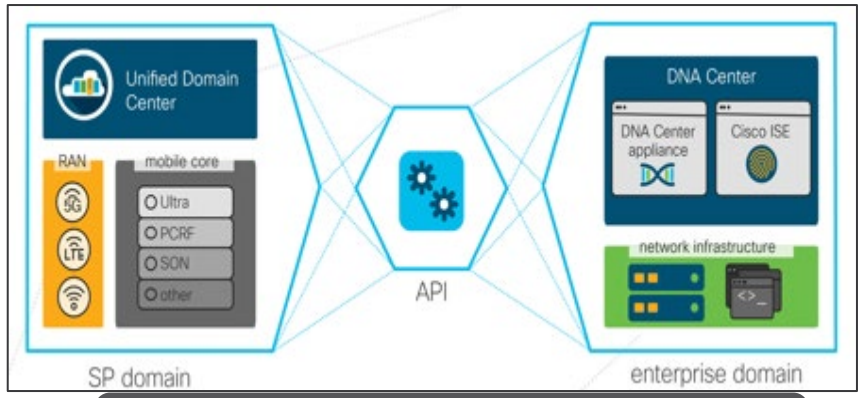


5G Enterprise Use Cases for CY21

Mobile SD-WAN

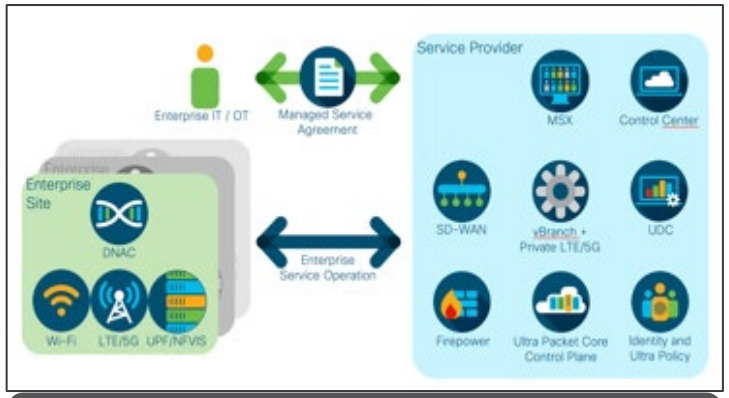
Consistent Policy Model

Unified Domain Center



Correlated Policy Carrier to Enterprise

Private LTE & 5G

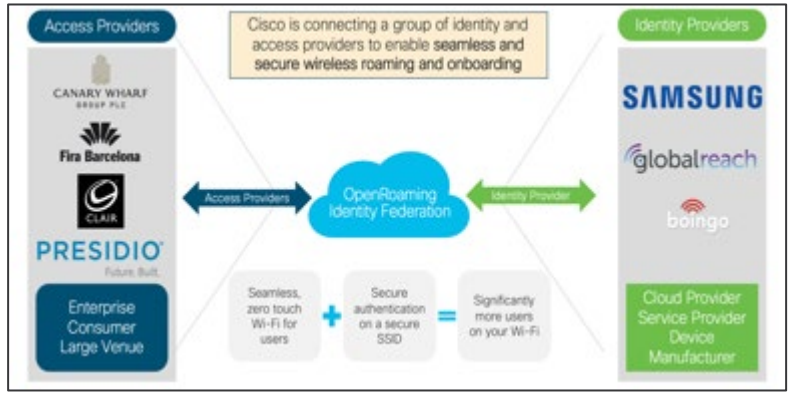


Managed Wireless Assets

Wi-Fi6 LTE/5G OpenRoaming

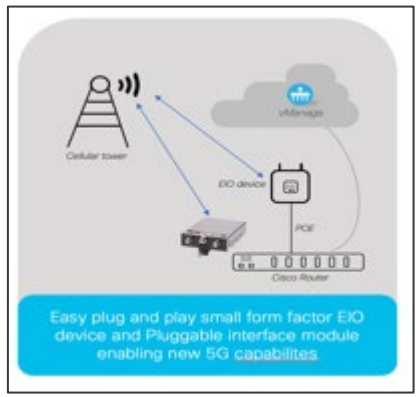
Ubiquitous Coverage

OpenRoaming



Single Sign-On

5G CPE



Fixed Wireless Access

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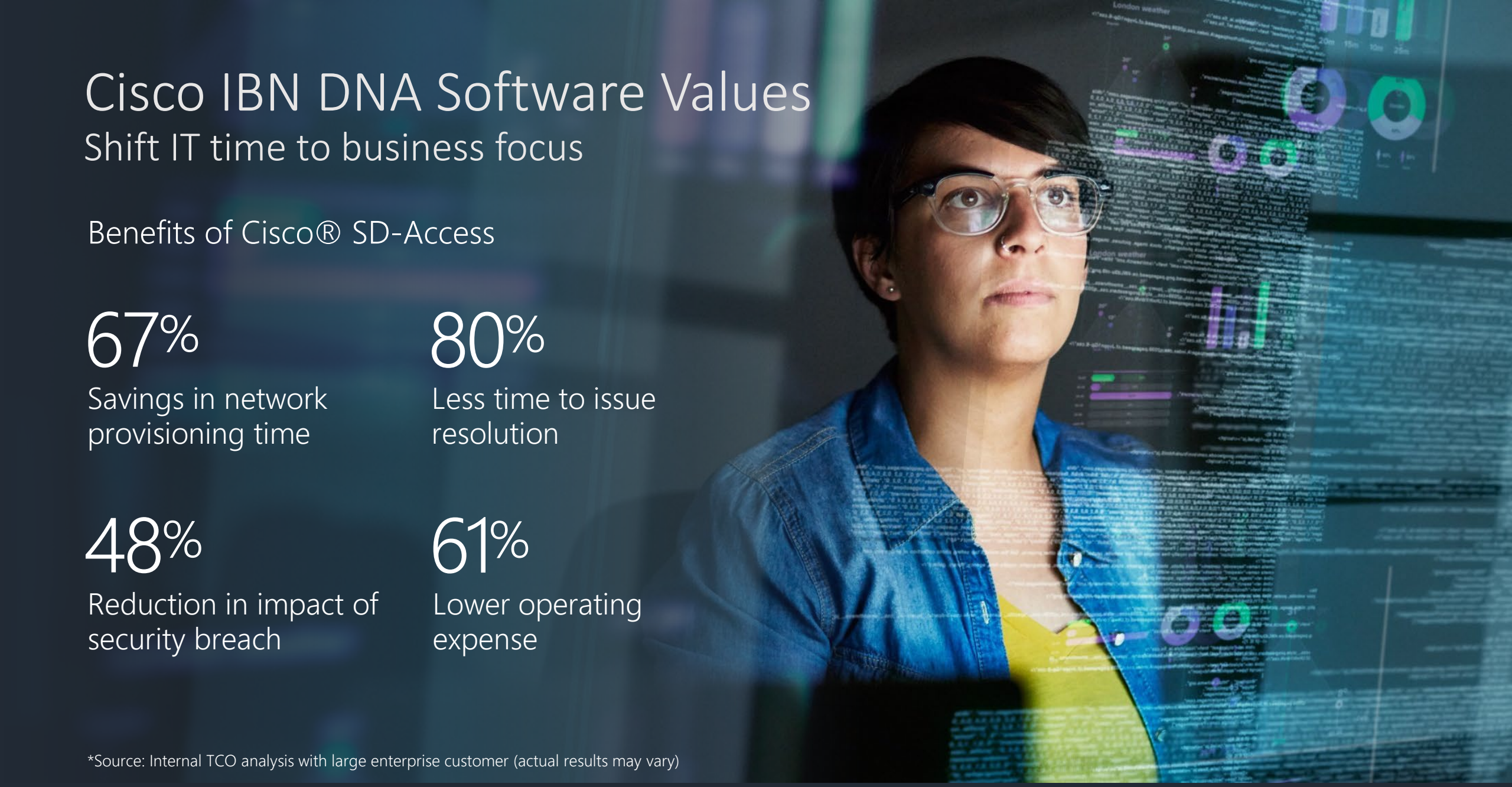
Cisco IBN DNA Software Values

Shift IT time to business focus



Benefits of Cisco® SD-Access

67%
Savings in network provisioning time

80%
Less time to issue resolution

48%
Reduction in impact of security breach

61%
Lower operating expense

*Source: Internal TCO analysis with large enterprise customer (actual results may vary)

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