

This presentation was live at:



Smart Buildings

SHOW

18-19 October 2023 • ExCel London

BUILDING THE FUTURE

EXPLORING THE LAYERS OF SMART BUILDING CONNECTIVITY

CHRIS DERHAM
BUSINESS DEVELOPMENT DIRECTOR NETWORK DIVISION - ALE UK
OCTOBER 2023

AGENDA

2

**Come and see
us at Stand B50**

-
- ▶ What is a Smart Building?
 - ▶ Why invest in Smart Building Technology

- ▶ Challenges

- ▶ Technology Layers and use cases

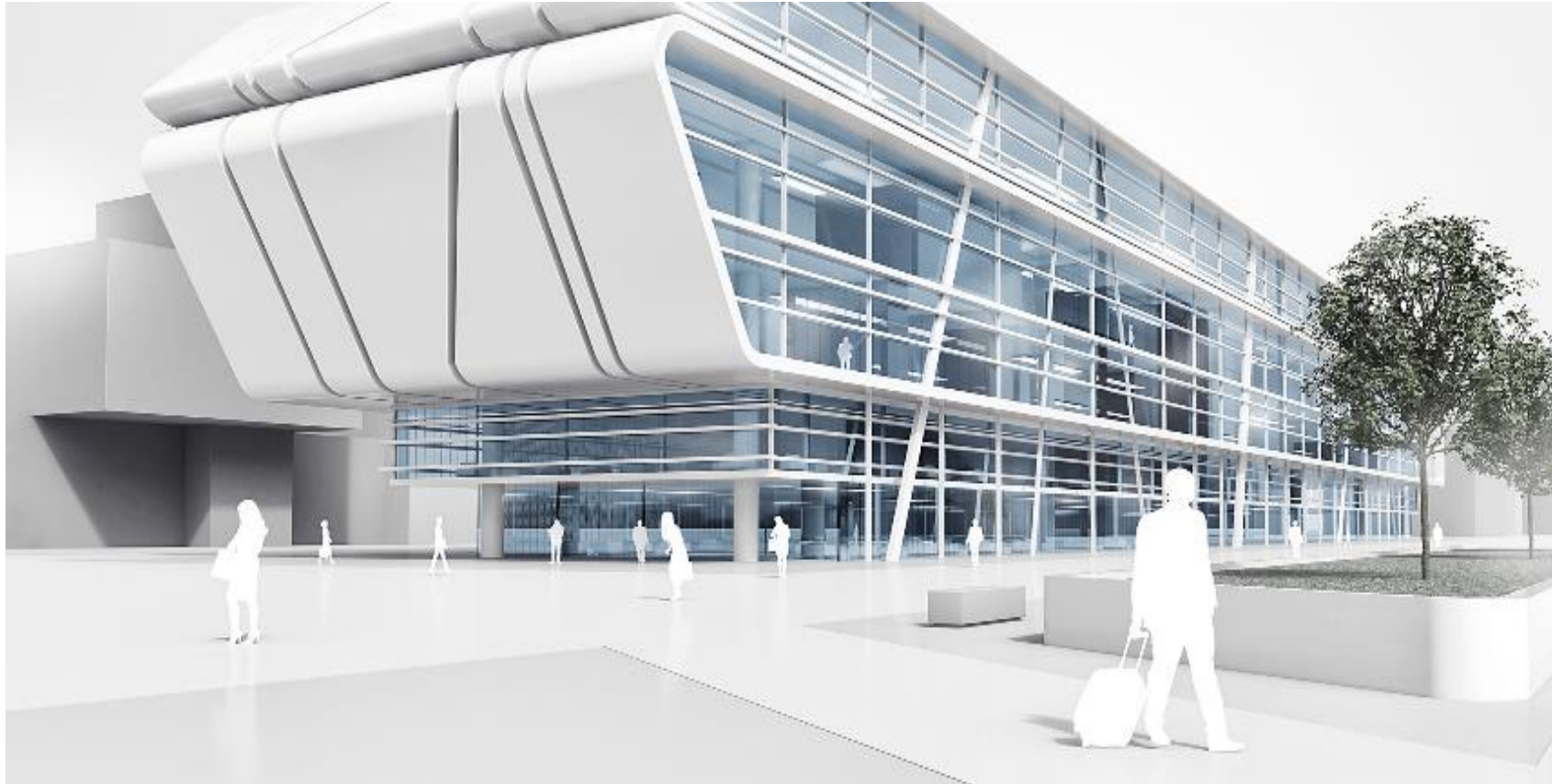
- ▶ Summary

WHAT IS A SMART BUILDING?

3



SMART BUILDINGS DEFINITION



PUBLIC & PRIVATE
RESIDENCIAL
OFFICES
SHOPPING CENTRES
HOTELS
HOSPITALS
AIRPORTS
SCHOOLS
CONFERENCE CENTRES
STADIA
FACTORIES
WAREHOUSES
MIXED USE BUILDINGS
...

- Digitally connected
- Operational automation
- Intelligent Space management

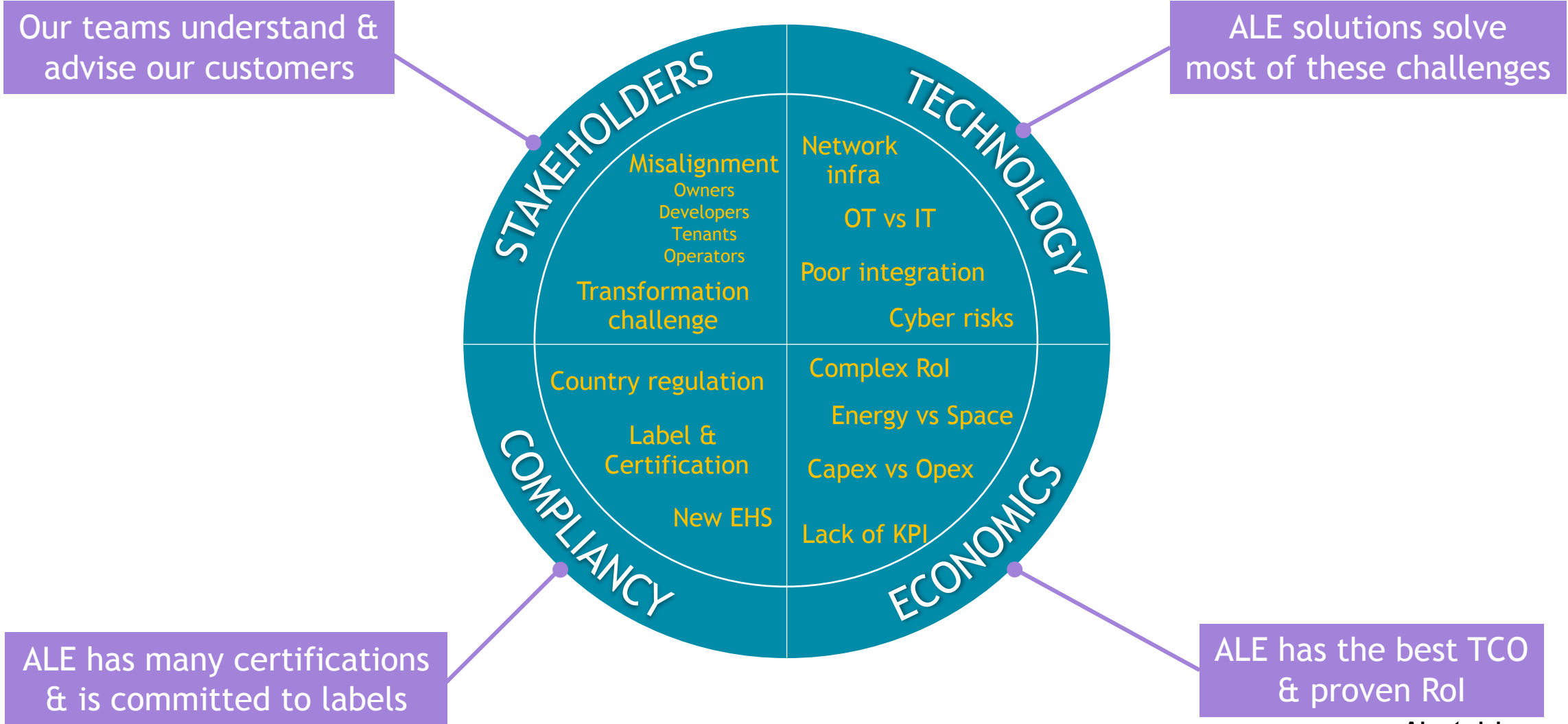
- + User experience
- + Productivity efficiency
- + Physical & cyber security

WHY INVEST IN SMART BUILDING TECHNOLOGY?



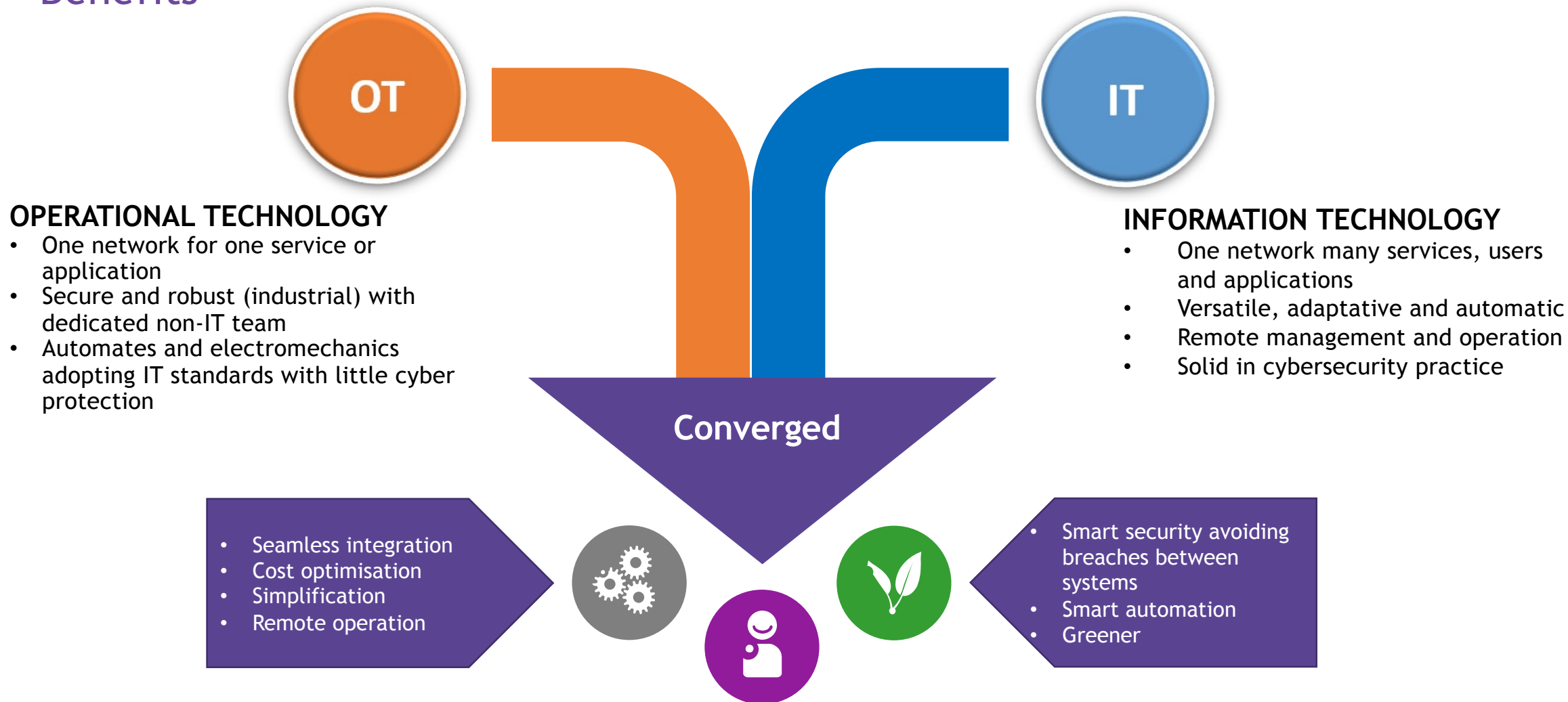
WHAT ARE THE MAIN CHALLENGES ?

ALE AND AZTEQ - YOUR TRUSTED PARTNERSHIP TO SOLVE THEM



OT* AND IT* CONVERGENCE

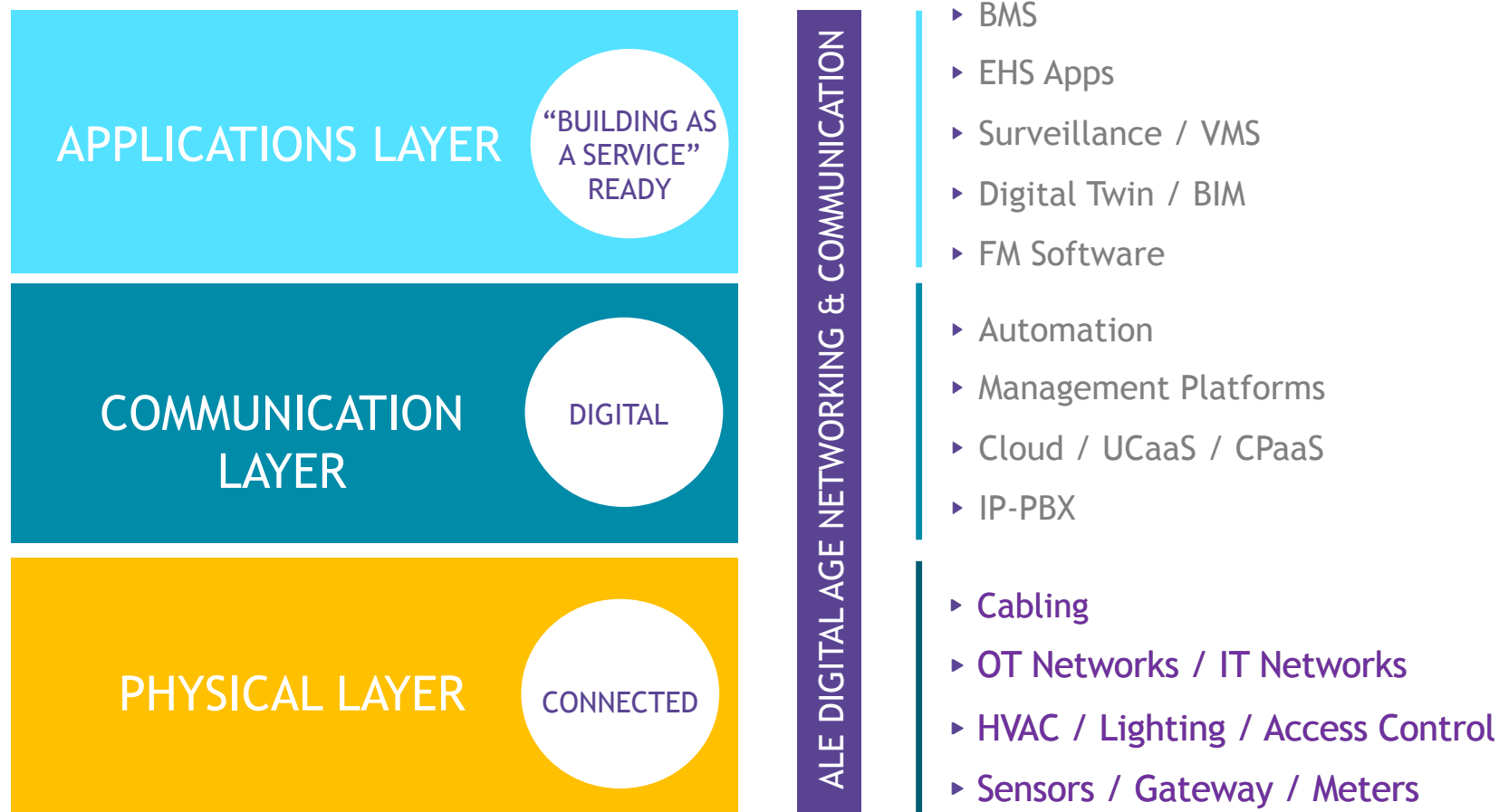
Benefits



* OT: Operational Technology - IT: Information Technology

TECHNOLOGY LAYERS

SMART BUILDINGS TECHNOLOGY LAYERS



WHAT IF ?



Lower Energy

+



Less Material

+

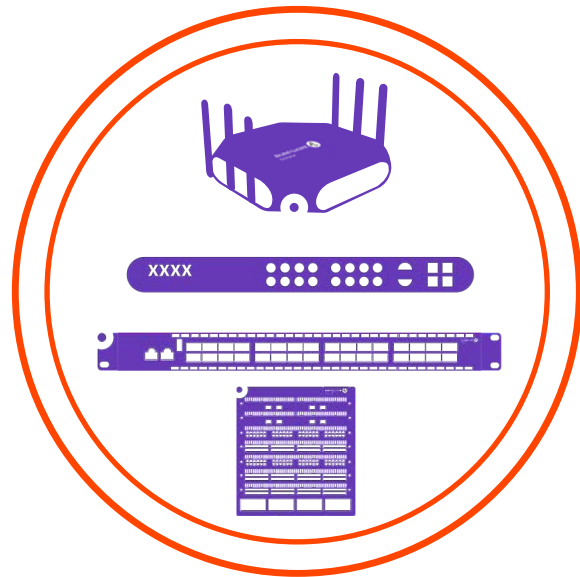


Lower Cost

=



PHYSICAL LAYER ACCESS OPTIONS

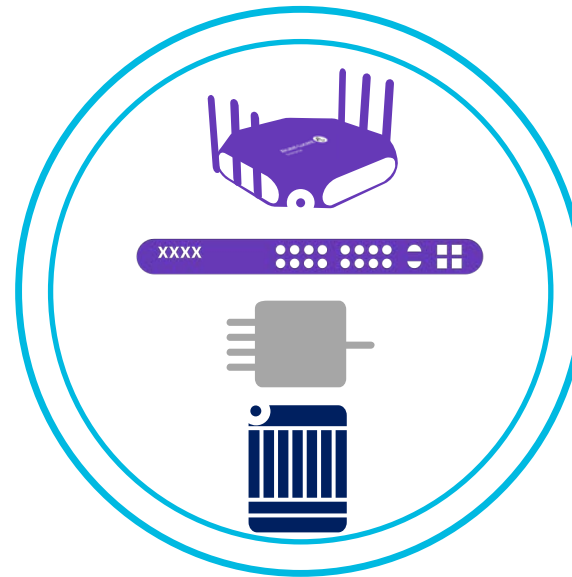


Classic

ISO 11801 Cabling

All Active Infrastructure

2/3 tiers

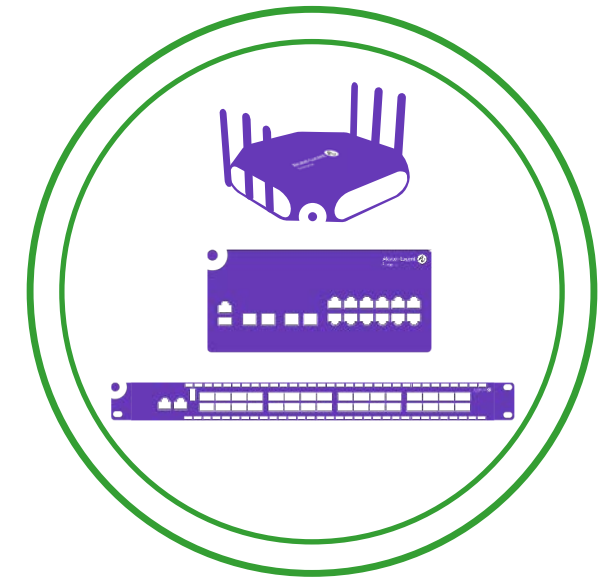


HPOL

XGS/GPON

Passive Fibre Distribution

Active Access



FTT-ACP

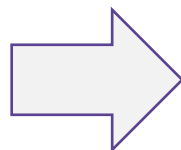
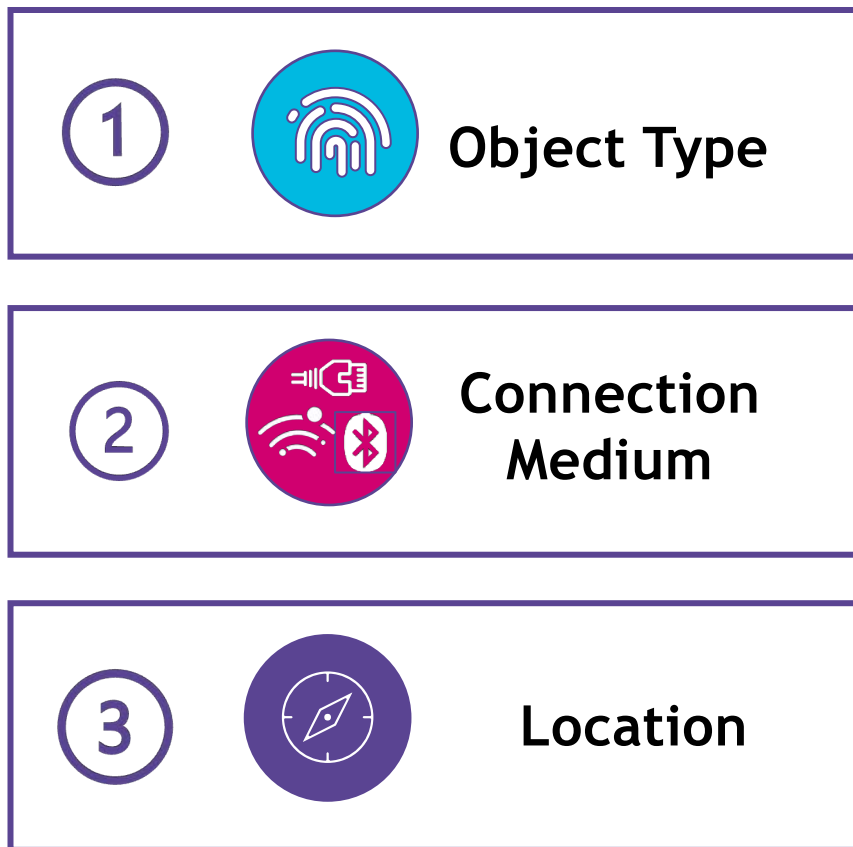
Fan-less Access

Fibre Ring Architecture

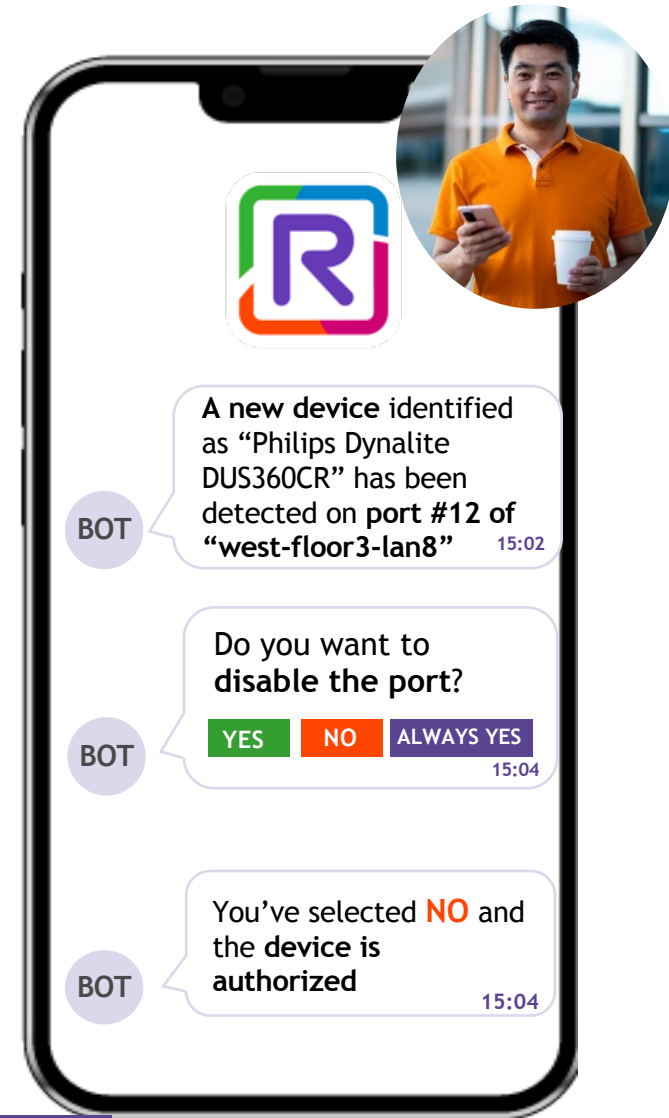
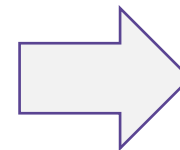
No wiring closet

IOT SECURITY & MANAGEMENT

12

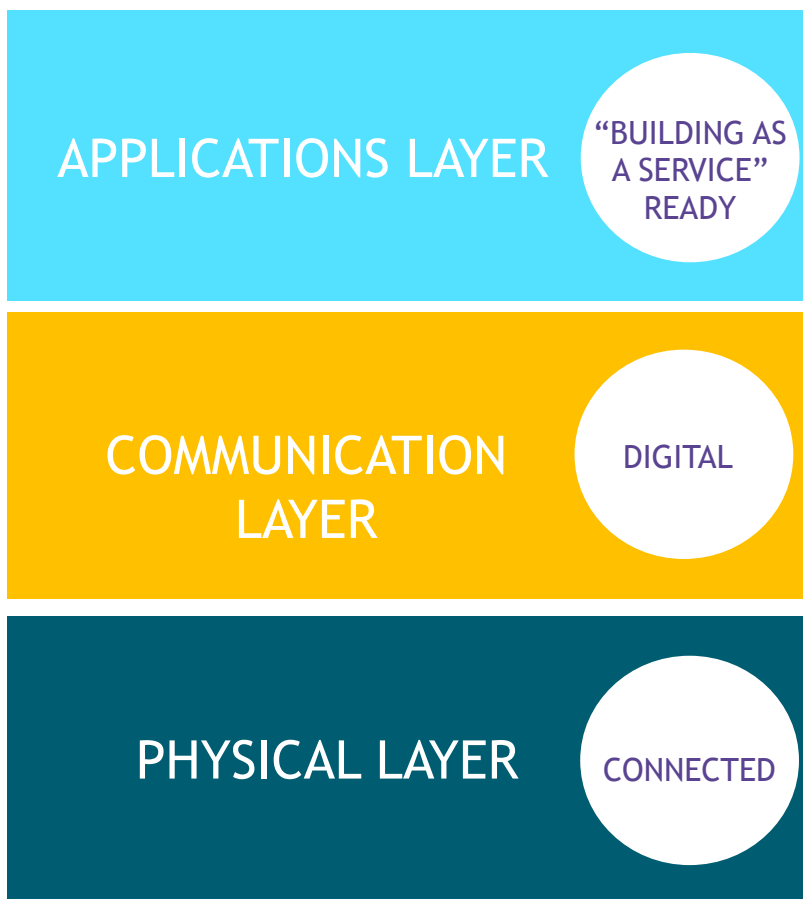


Inventory



The end of shadow IOT !

SMART BUILDINGS TECHNOLOGY LAYERS



ALE DIGITAL AGE NETWORKING & COMMUNICATION

- BMS
- EHS Apps
- Surveillance / VMS
- Digital Twin / BIM
- FM Software
- Automation
- Management Platforms
- Cloud / UCaaS / CPaaS
- IP-PBX
- Cabling
- OT Networks / IT Networks
- HVAC / Lighting / Access Control
- Sensors / Gateway / Meters

SAFE & RESILIENT COMMUNICATIONS SYSTEMS

Service continuity



Mission-critical
communications

Compliance



Secure Hybrid
Cloud

Hybrid Cloud scalability



Smooth
transformation

* Ongoing renewal

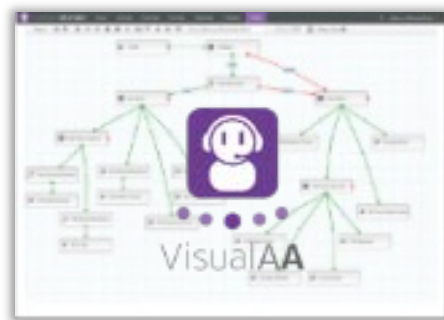
DIGITAL ENGAGEMENT

Website



Click to Connect

Voice welcome



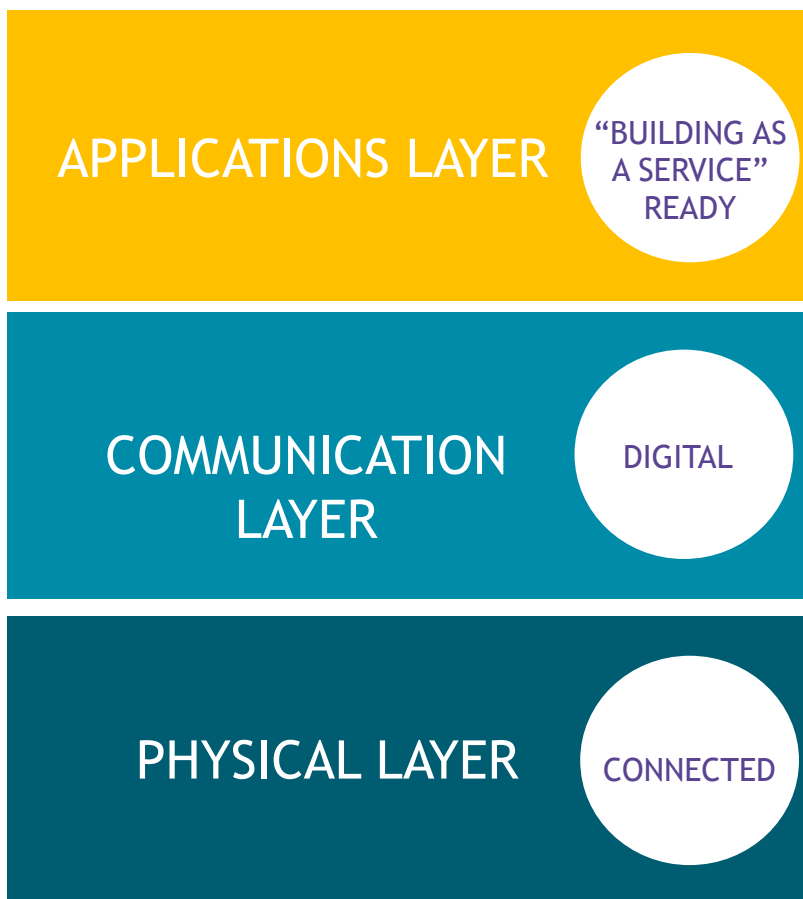
Welcome and
Customer Experience

CPaaS Integration



App and Business
Process Integration

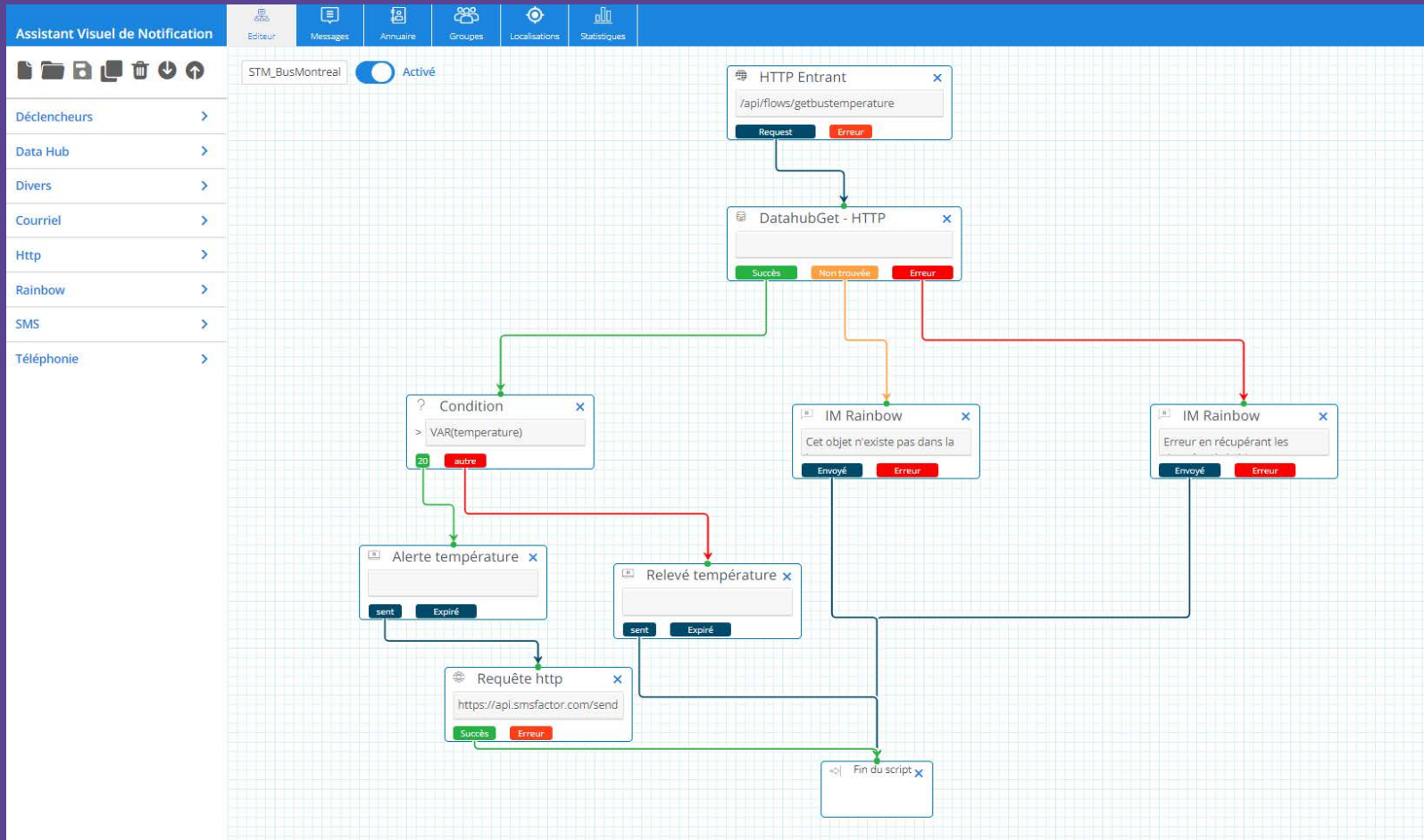
SMART BUILDINGS TECHNOLOGY LAYERS



ALE DIGITAL AGE NETWORKING & COMMUNICATION

- BMS
- EHS Apps
- Surveillance / VMS
- Digital Twin / BIM
- FM Software
- Automation
- Management Platforms
- Cloud / UCaaS / CPaaS
- IP-PBX
- Cabling
- OT Networks / IT Networks
- HVAC / Lighting / Access Control
- Sensors / Gateway / Meters

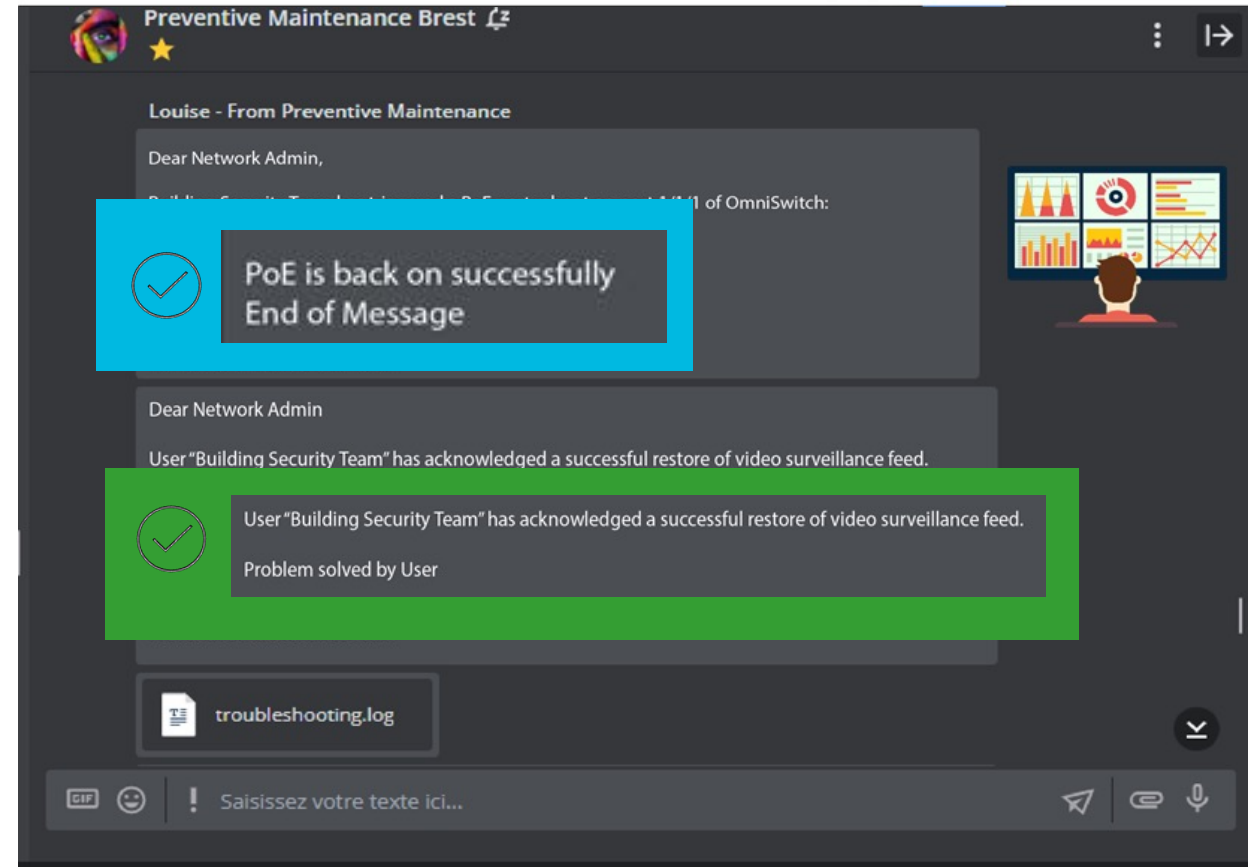
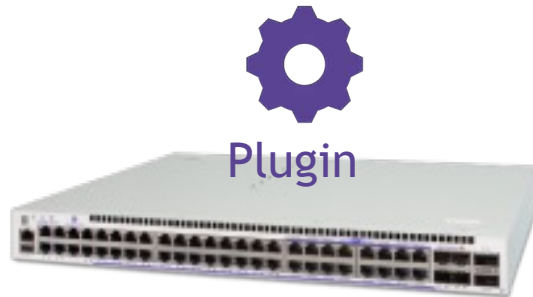
APPLICATION INTEGRATION - LOW CODE / NO CODE WORKFLOW



VIDEO SURVEILLANCE PLUG-IN



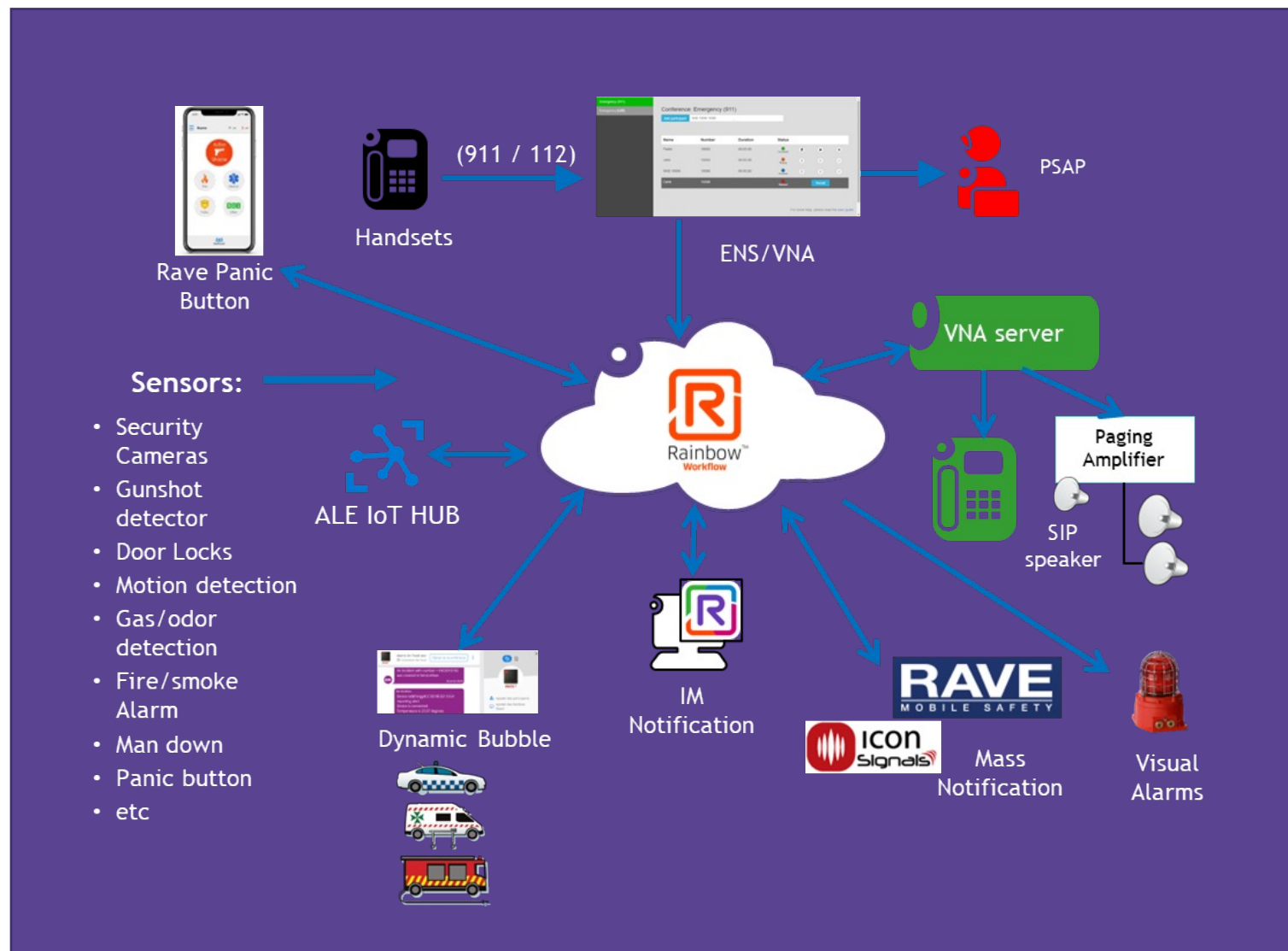
- Switch and port lookup
- MAC address lockdown
- POE power cycle
- Monitoring



SOLVING 70% OF CAMERA PROBLEMS WITHOUT DISPATCHING A TECHNICIAN

PUBLIC SAFETY

- Incident response
- Lockdown / Evacuation
- Mass notification
- Crisis Management
- Martyn's Law



November 23



NEXTGEN SMART BUILDINGS

Making buildings smarter, sustainable & human centric



SEAMLESS CONNECTIVITY

- *Bring connectivity, communication & collaboration between objects, applications & people*
- *Federating systems into one single intelligent network*

OPERATIONAL EFFICIENCY

- *Automate and manage a secured resilient network*
- *Automate workflows and communications*
- *Ensure flexibility & agility*
- *Simplify Facilities Management*

SUSTAINABILITY

- *Contribute to the Net Zero goal by monitoring ambient, space occupation, and consumption.*
- *Efficient network design optimising cabling and power.*

HUMAN CENTRICITY

- *Offer a people-centric approach thanks to collaborative & cognitive solutions*
- *Monitor and optimise the EHS (Environment, Health and Safety)*

SUSTAINABILITY

GO GREEN IS AT ALE'S
HEART



Energy efficient products by design

Eco - friendly solutions and architectures

ALE “Go Green” program focus

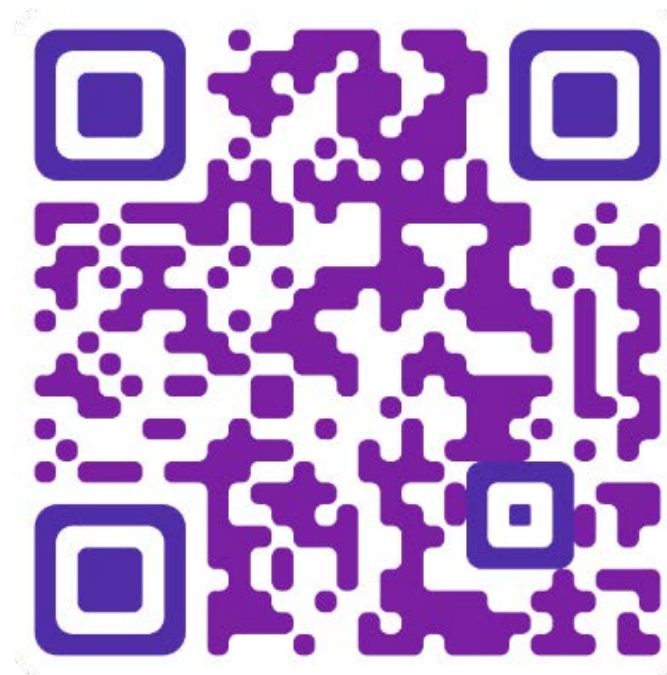


* Awarded EcoVadis 2023 Silver Medal

THANK YOU



CHRIS DERHAM
BUSINESS DEVELOPMENT DIRECTOR, ENTERPRISE
NETWORKS



www.al-enterprise.com

**Come and see
us at Stand B50**





Smart Buildings

SHOW

9-10 October 2024 • ExCeL London

We look forward to seeing you in 2024