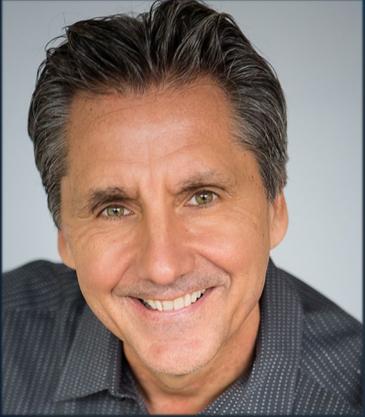


CLOUD BASED DATA-DRIVEN OPERATIONS & MAINTENANCE

April 6 | 10:45am-11:30am





JIM
YOUNG
Realcomm
MODERATOR



REBECCA
CHRISTIANSSEN
Microsoft



CHRIS
HALLENDY
Resolute
Building
Intelligence



RAJAVEL
SUBRAMANIAN
Facilio



BRIAN
TURNER
Buildings
IOT



JIM YOUNG
Co-Founder & CEO

Realcomm

CRE Tech 5.0 Reaching New Heights in Commercial and Corporate Real Estate Innovation



Phase 1

1980-1995



Property Management
Accounting
Lease Admin
Building Automation
IWMS
Asset Management

Phase 2

1995-2002



Dot Com
The "Internet"

Phase 3

2002-2009



Post Dot Com
Survival of the Fittest

Phase 4

2009-2016



Social
Mobile
Analytics

Cloud
IoT
Cyber

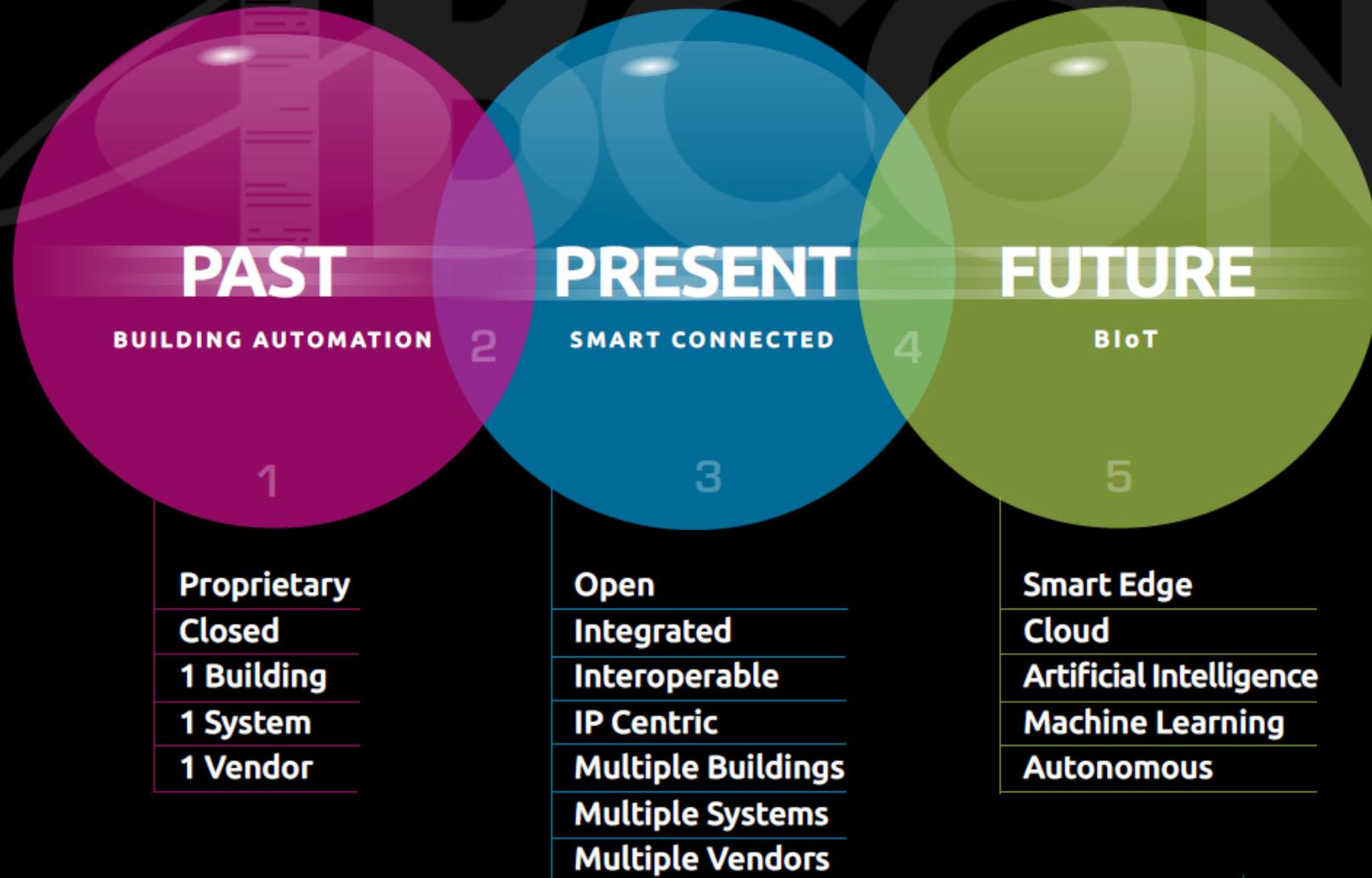
Phase 5

2016- ?



AI/Machine Learning
Blockchain
Augmented Reality
Robotic Automation
Autonomous Vehicles
3D Printing
Unmanned Aerial Vehicles (Drones)

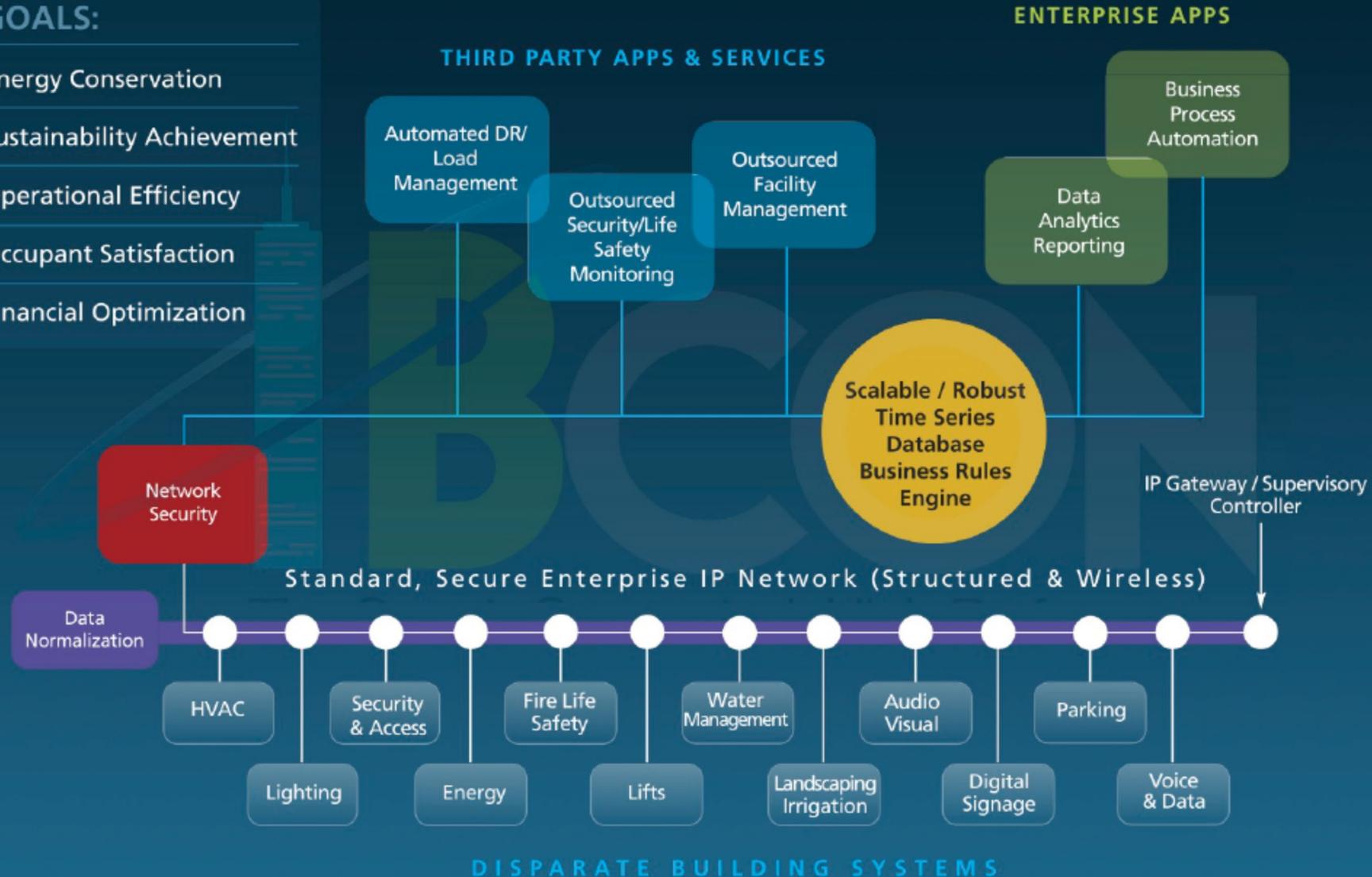
BUILDING AUTOMATION TO THE BUILDING INTERNET OF THINGS

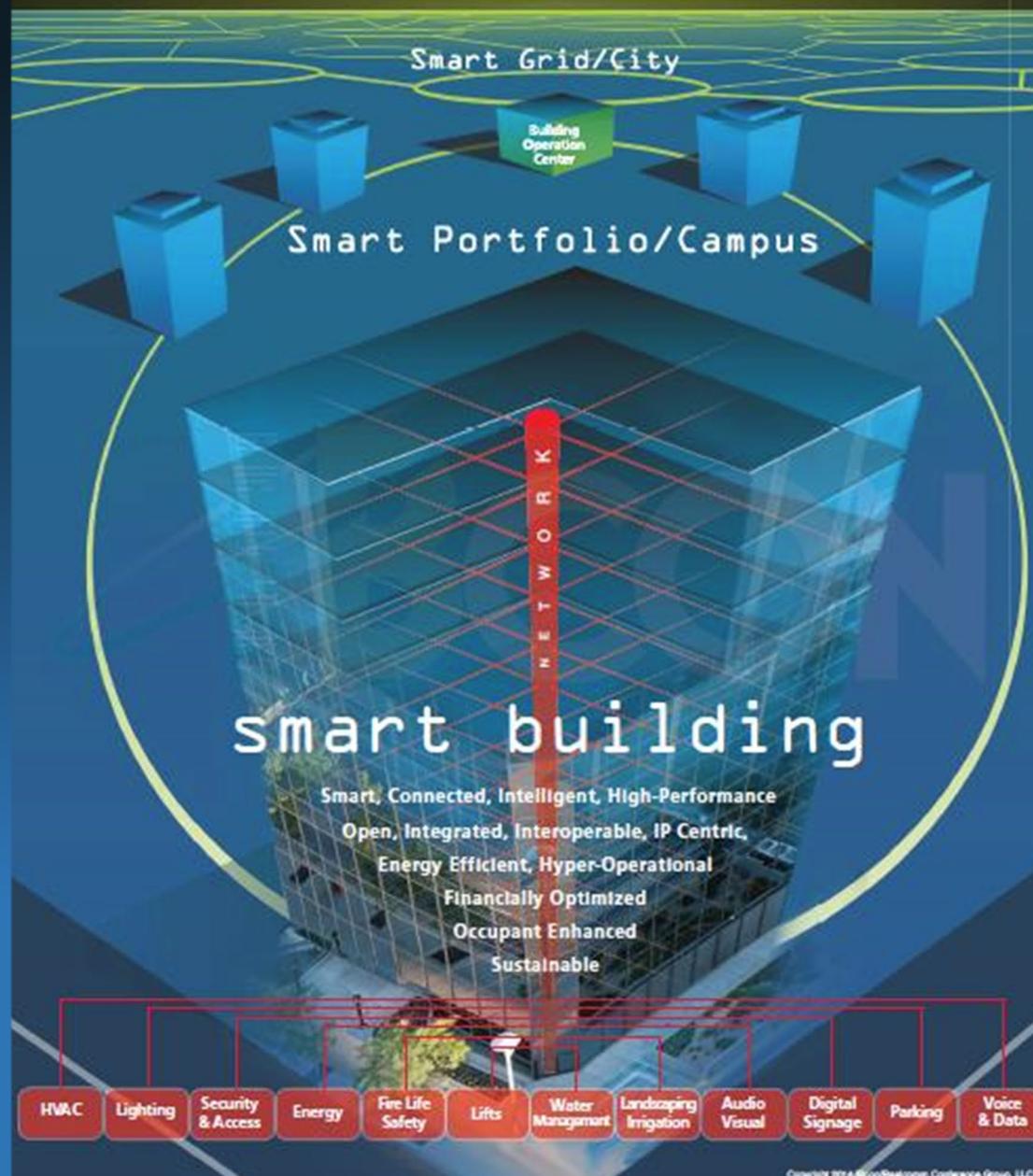




GOALS:

- Energy Conservation
- Sustainability Achievement
- Operational Efficiency
- Occupant Satisfaction
- Financial Optimization



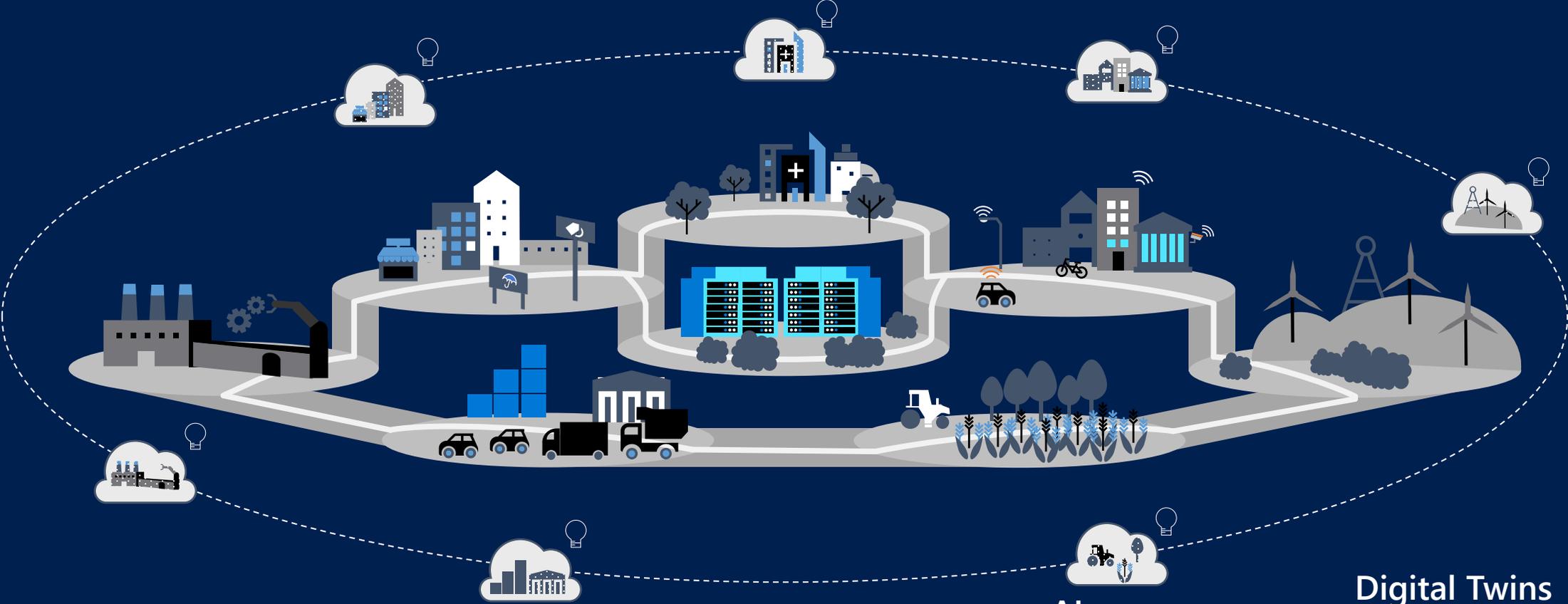




REBECCA
CHRISTIANSEN
Director of IoT Sales



Digital innovation is enabling new opportunities



Cloud

Globally available, unlimited compute resources

IoT

Harnessing signals from sensors and devices, managed centrally by the cloud

Edge

Intelligence offloaded from the cloud to IoT devices

AI

Breakthrough intelligence capabilities, in the cloud and on the edge

Digital Twins

Create living replicas of any physical environment, track the past and predict the future

Smart Places IPS



Think big, start small, go fast...

Key use cases



Sustainable Buildings

Digital Twin and Operations, Smart FM
Building Equipment and Services management
Smart Energy, Water & Waste Management



Workplace Services

Space Utilization, Office Hoteling, Wayfinding
Employee Experience, Collaboration & Innovation
Smart Lobby, Smart Parking



Health, Safety and Wellness

Return to work experience
Healthy buildings = Healthy people
Safety and security



CHRIS HALLENDY
CEO

RESOLUTE ®
BUILDING INTELLIGENCE

Optimizing HVAC System Performance

Analytics-powered software backed by extensive engineering expertise

We are big data, software & building experts

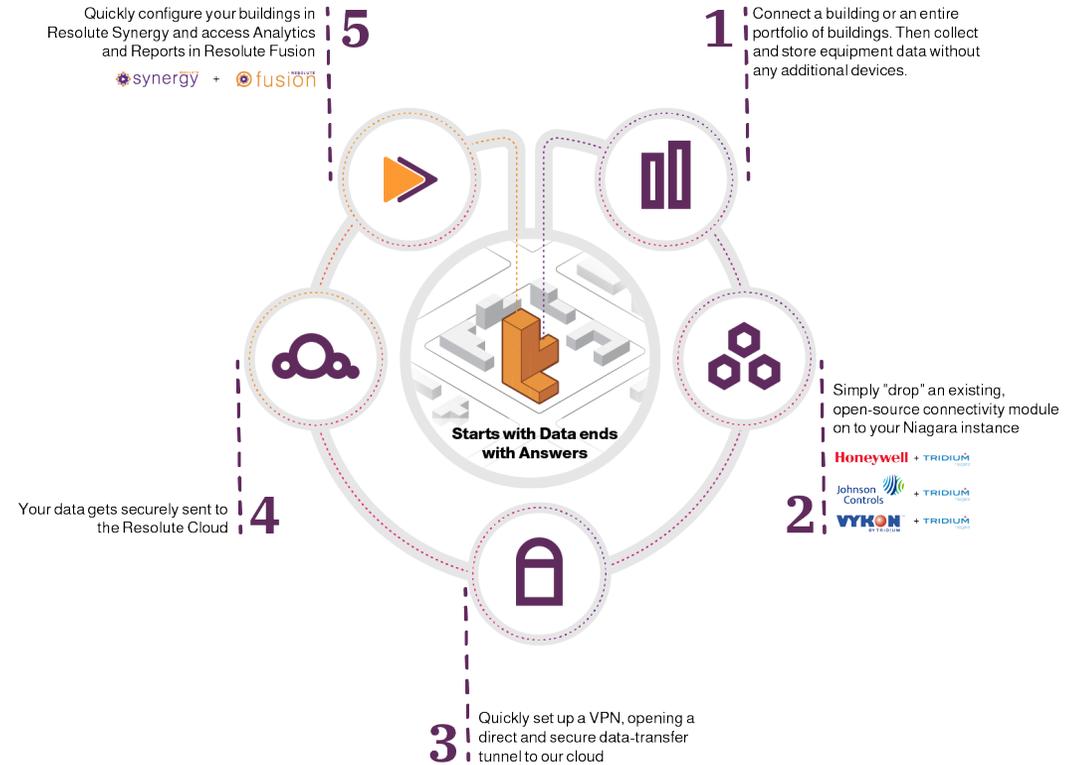


Accelerating Time to Value

Connect. Configure. Use. All in a single day!



Leveraging the power of Niagara



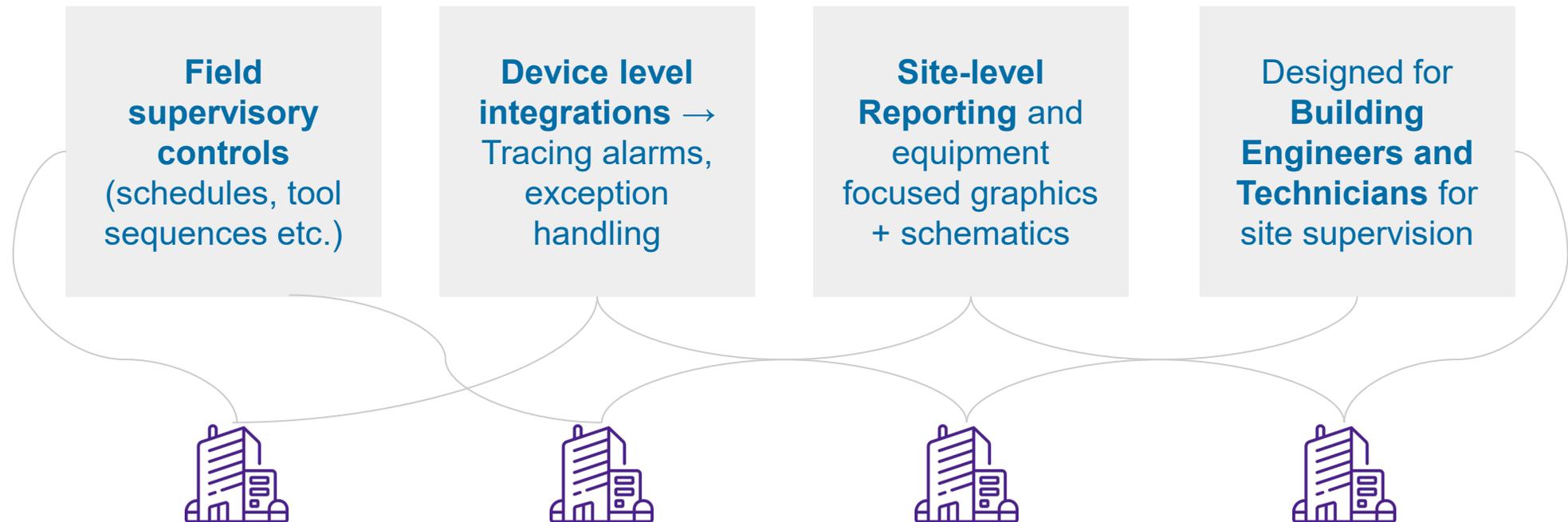


RAJAVEL
SUBRAMANIAN
Co-Founder & CPO

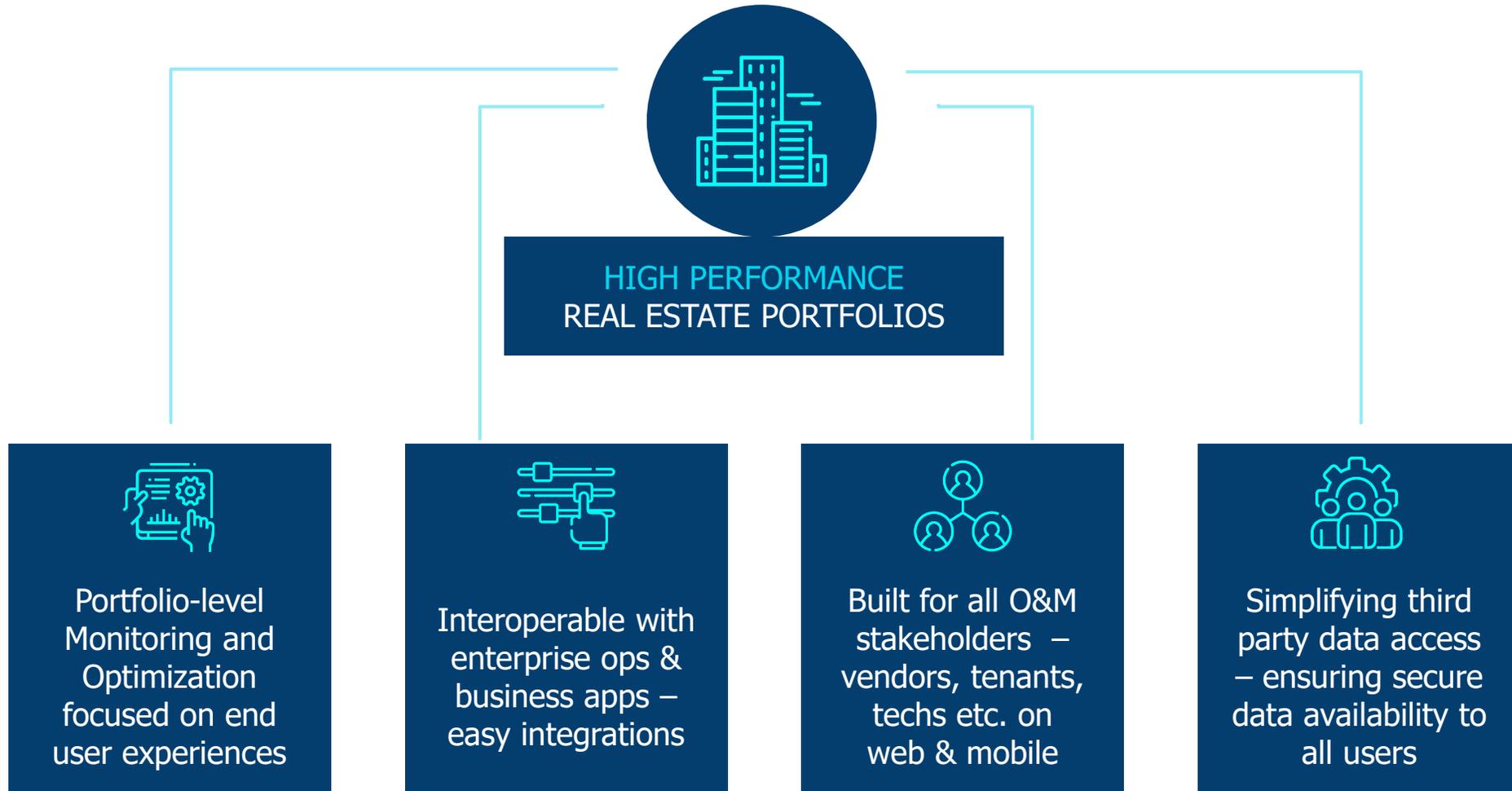
facilio

Today, site level BMS systems are often stitched together to form a supervisory system 'on cloud'.

But site level functions are limited.



The truth is, Enterprise needs are entirely different from site-level capabilities.





Utilise a cloud supervisory control platform that augments, not replaces existing BMS/Niagara/Site supervisory infrastructure



Use Cases for Cloud Supervisory Controls



Portfolio-level Visibility

- Portfolio-level benchmarking
- Sustainability Reporting
- BI and FDD



Energy Efficiency

- Setpoint Optimization
- Automated Demand Response
- Ramp up/down Optimization etc.



Enterprise-wide Optimization

- Condition based & Predictive Maintenance
- Meeting Room Automation
- Occupant Apps and Kiosks
- Tenant Self Service Scheduling
- Billing Automation
- Independent Data Layer

Site level Supervisory Controls

Device integrations (field devices, controllers etc.)

Alarm & Exception handling

Equipment & site-level Reporting

Graphics & Schematics

Field Supervisory Controls
(Ex. Equipment sequences & schedules)

Desktop / Web Access

Catered for building engineers and technicians

Cloud Level Supervisory Controls

Application integrations (ERP, CMMS, CRM, BI etc)

Fault Detection & Diagnostics

Enterprise reporting & BI

Advanced Data Visualization
(BIM / floor plan overlays)

Portfolio scale Optimization (energy/system performance,
dynamic scheduling, occupancy experience apps, CCC etc)

Web, Mobile, Kiosk based access

Catered for O&M executives, managers, occupants



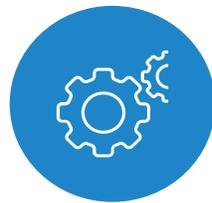
BRIAN TURNER
CEO

buildings IOT

Smart Building Solutions

1. Solutions Architecture & Master System Integration

Design, plan and integration on-premise and cloud-connected building systems



2. Systems Contracting

Project management, installation, and configuration of building systems



4. Digital Services

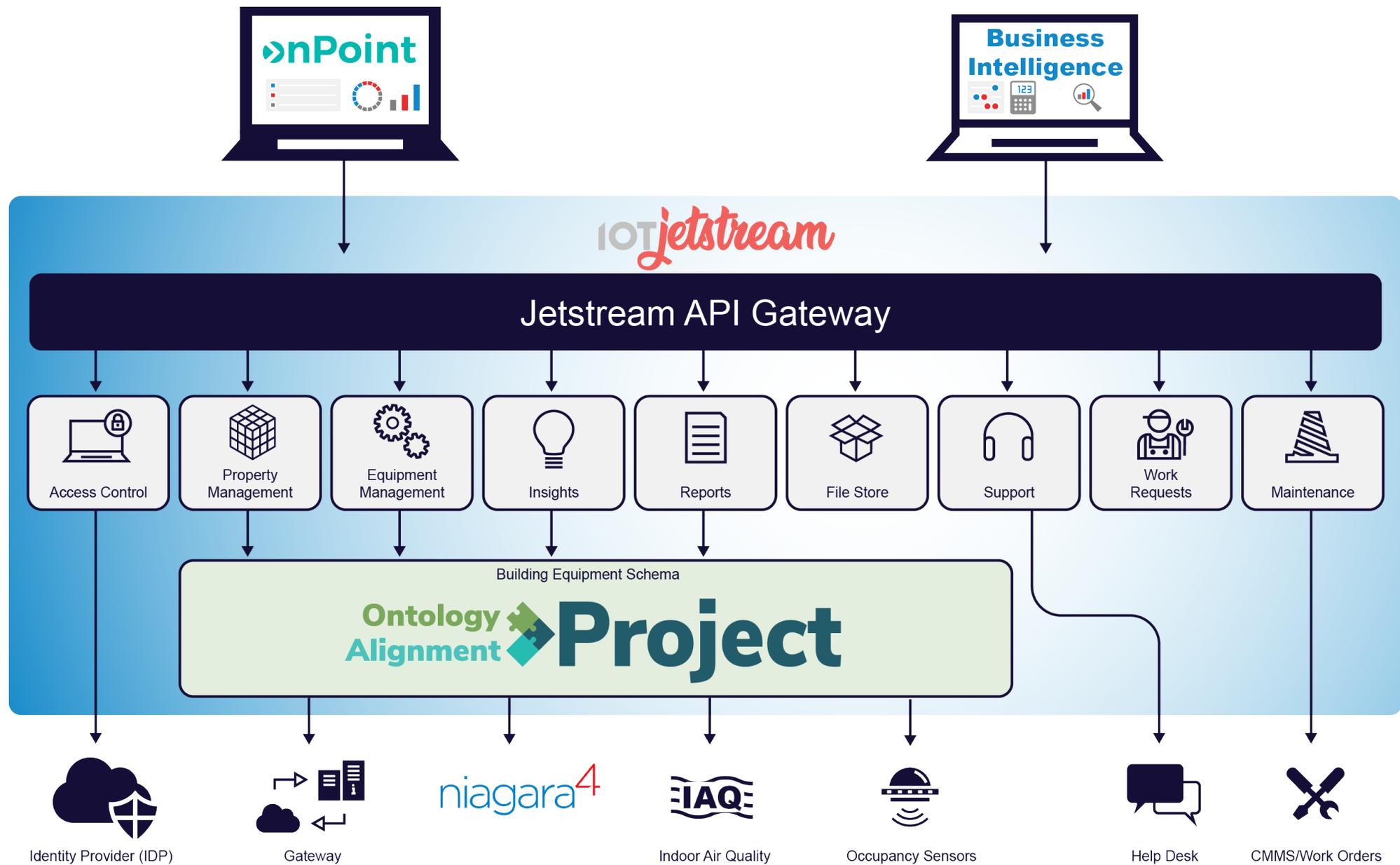
Platform consulting, digital twin data management, preventive and predictive maintenance for building systems



3. Smart Building Management SaaS

World-class analytics and enterprise building management software as a service







NS2022

ACCELERATING INNOVATION