# The Future Ready
## IoT Platform on Azure

*Unleash the Power of Scalable & Secure IoT with EIC PROPEL™*

# The IoT Landscape – Opportunities & Challenges Ahead

Navigating the complexities of IoT to drive business value.

## The IoT is Evolving

### Are you ready?

The IoT landscape is undergoing rapid transformation. Enterprises require a **secure, scalable, and intelligent** platform to manage connected assets, process real-time data, and unlock AI-driven insights. EIC PROPEL™ is the **catalyst for IoT evolution**, delivering **next-gen connectivity, security, and intelligence.**

## Foundation for EIC PROPEL™

### To explore?

**Unify IoT**

Connect any device, integrate with Azure, and process any data.

**Scale Effortlessly**

Handle millions of assets seamlessly

**Enhance Security**

End-to-end encryption, zero-trust model, and compliance-ready architecture.

**Accelerate Business Growth**

Real-time analytics to optimize operational efficiency.

## EIC PROPEL™

### Why now?

o **75% of IoT projects fail** due to complexity and lack of standardization.

o Enterprises struggle with **device diversity, fragmented data, and security risks.**

o EIC PROPEL™ solves these challenges with an **end-to-end, fully managed Azure-based solution.**

# What is **EIC PROPEL™** ?
## Vision, Overview & Driving Force

The backbone of a scalable, intelligent, and secure IoT ecosystem.

## The Driving Force Behind EIC PROPEL™

### Our Vision

*To empower enterprises with an **intelligent, scalable, and secure** IoT platform that accelerates digital transformation and delivers real business value.*

### Overview

***EIC PROPEL™** is an **IoT Platform** that helps businesses **connect, manage, and optimize IoT assets at scale** through real-time edge to cloud connectivity, seamless remote device management, automation and intelligent data insights – all governed through a robust security framework.*

### The Industry Challenge

- Legacy IoT platforms are **fragmented, complex, and difficult to scale**.
- Security remains a **major roadblock** for IoT adoption.
- Lack of **real-time decision-making**

### How EIC PROPEL™ Solves This

- **One Unified Platform** – Manage **all IoT assets** from a single dashboard.
- **End-to-End Security** – Built-in **zero-trust architecture**.
- **Seamless Azure Integration** – Works with **Azure IoT, Synapse, Data Explorer**.
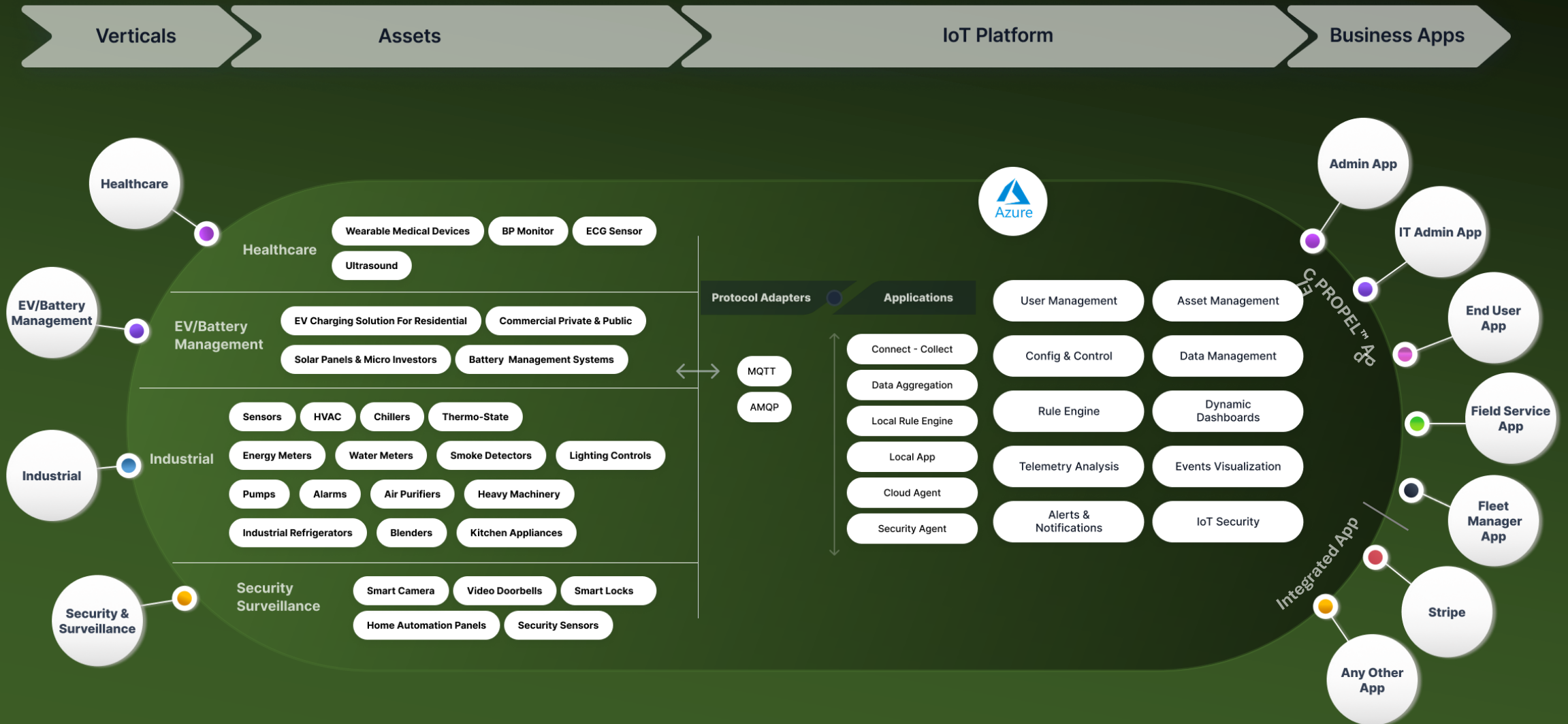- **Future-Ready** – Architecture supports implementation/integration for Predictive AI, ML and Generative AI use cases

### Objective- Business & Technical Goals

- **Business Goals:** Drive **operational efficiency, reduce downtime**, and **optimize asset utilization**.
- **Technical Goals:** Provide a **scalable, secure, and future-ready** platform with seamless **Azure integration**.

# The EIC PROPEL™ Ecosystem - A Unified IoT Framework

A seamless, connected IoT ecosystem designed for agility and efficiency.

**Verticals** → **Assets** → **IoT Platform** → **Business Apps**

**Verticals:**
- Healthcare
- EV/Battery Management
- Industrial
- Security & Surveillance

**Assets:**

Healthcare
- Wearable Medical Devices
- BP Monitor
- ECG Sensor
- Ultrasound

EV/Battery Management
- EV Charging Solution For Residential
- Commercial Private & Public
- Solar Panels & Micro Investors
- Battery Management Systems

Industrial
- Sensors
- HVAC
- Chillers
- Thermo-State
- Energy Meters
- Water Meters
- Smoke Detectors
- Lighting Controls
- Pumps
- Alarms
- Air Purifiers
- Heavy Machinery
- Industrial Refrigerators
- Blenders
- Kitchen Appliances

Security Surveillance
- Smart Camera
- Video Doorbells
- Smart Locks
- Home Automation Panels
- Security Sensors

**IoT Platform (Azure):**

Protocol Adapters
- MQTT
- AMQP

Applications
- Connect - Collect
- Data Aggregation
- Local Rule Engine
- Local App
- Cloud Agent
- Security Agent
- User Management
- Config & Control
- Rule Engine
- Telemetry Analysis
- Alerts & Notifications
- Asset Management
- Data Management
- Dynamic Dashboards
- Events Visualization
- IoT Security

**Business Apps (EIC PROPEL™ App / Integrated App):**
- Admin App
- IT Admin App
- End User App
- Field Service App
- Fleet Manager App
- Stripe
- Any Other App

# EIC PROPEL™ Architecture – Built for Enterprise IoT

From Edge to Cloud – A Zero-Trust, High-Performance IoT Framework.
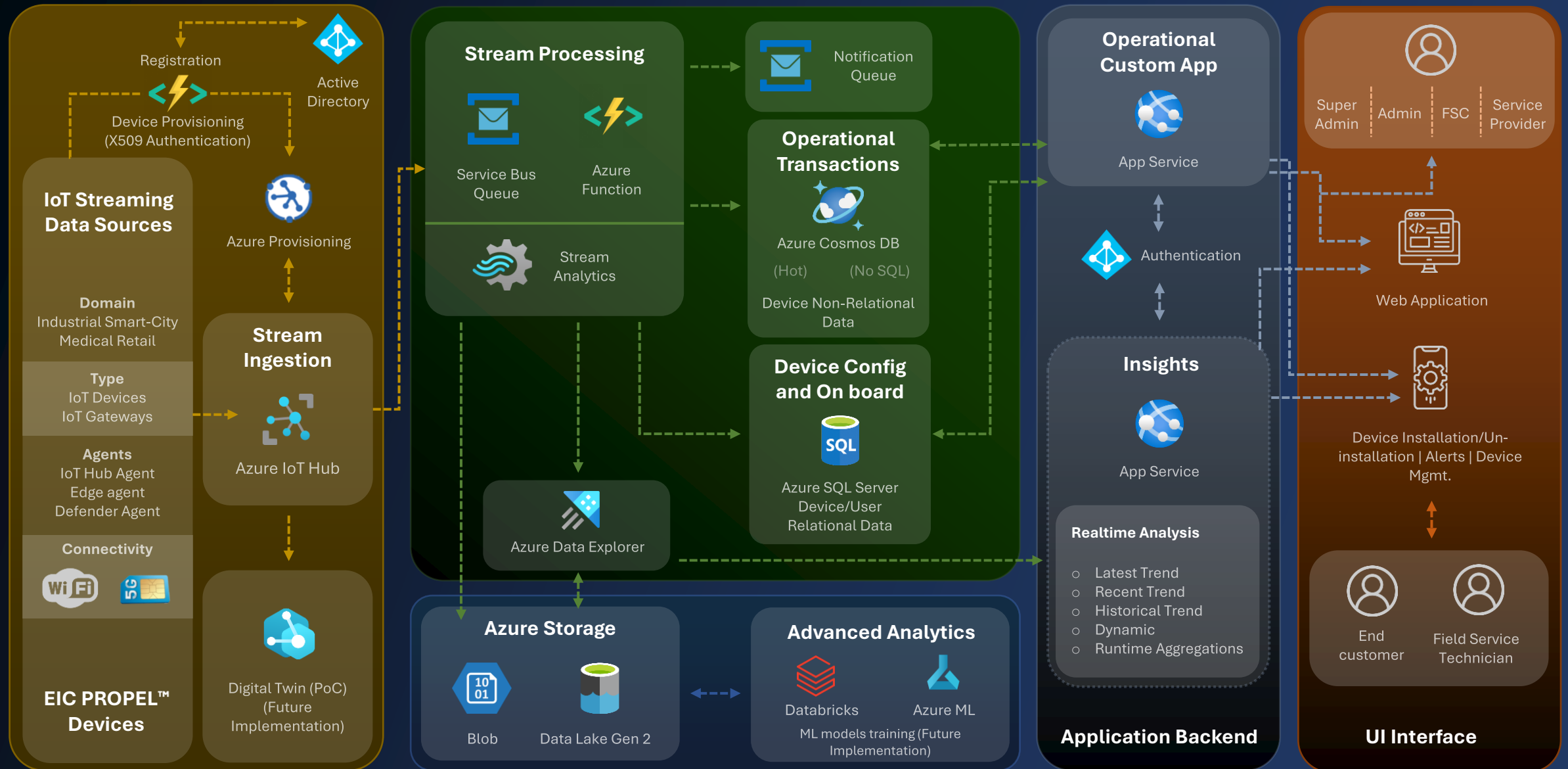
# Secure & Scalable IoT Infrastructure –
## Security, Compliance & Performance

Enterprise-grade security meets high-performance scalability.

## Scalable & High-Performance Architecture

- **Edge-to-Cloud Processing** – Secure, real-time data ingestion, processing, and analytics using **Azure IoT Hub, Data Explorer, and CosmosDB.**

- **Event-Driven Microservices** – EIC PROPEL™ is powered by a **scalable event-driven architecture,** ensuring **low-latency processing and distributed parallel execution.**

- **Multi-Tenancy & Role-Based Access** – Supports **isolated tenant** with granular **RBAC (Role-Based Access Control).**

## Enterprise-Grade Security & Compliance

- **Zero-Trust Security Model** – Implements identity-based access controls (IAM, MFA, and OAuth2.0) for role-based authentication.

- **Customer-Owned Deployment** – EIC PROPEL™ acts as an **accelerator, allowing enterprises to** build and manage their own IoT platform on Azure **with full control over infrastructure and costs.**

- **X.509 Certificate-Based Authentication** – Device provisioning and communication security with **certificate-based authentication.**

- **Regulatory Compliance** – Fully aligned with **OWASP, NIST, GDPR, ISO 27001, and HIPAA** standards.

## Resilient Data Management & Disaster Recovery

- **Multi-Layered Data Storage Strategy** – **Hot, Cold, and Archive** storage options for cost optimization.

- **Immutable Audit Logs** – Comprehensive logging for **audit trails, forensic analysis, and compliance validation.**

## Secure IoT Device Management

- **Firmware Over-The-Air (FOTA) Updates** – Secure **code-signed OS & firmware updates** with rollback capabilities.

- **Dynamic Policy Enforcement** – Centralized **device policy management, access restrictions, and automated compliance enforcement.**

*EIC PROPEL™ ensures that IoT deployments are not just powerful but also secure, scalable, and compliant, making it a trusted choice for enterprises.*

# EIC PROPEL™ Features – The Building Blocks of a Smarter IoT Platform

A Feature-Rich, Enterprise-Grade IoT Accelerator for Seamless Operations.

- One-time setup of child devices, peripherals, and configuration widgets
- Rule-based fault codes, notifications, and automation triggers
- Visualization tools for real-time telemetry insights

- Provision, tag, and manage assets dynamically
- Inventory whitelisting and access control

- Multi-level dashboards for assets, fleets, and tenants
- Real-time telemetry visualization and anomaly detection
- Notifications via Email, SMS, WhatsApp, Teams

- End-to-end encryption for data-in-transit and at-rest
- X.509 certificate-based authentication

**Asset Modelling**

**Asset Operations**

**Asset Life Cycle Management**

**Data Management & Analytics**

**Dashboards & Notifications**

**Field Support & Future Compatibility**

**IoT Security**

- Secure OS & firmware updates with code signing
- Support for bulk operations and remote device control
- Edge computing for real-time rule execution

- Run rules on cloud & edge for automation
- Real-time aggregates & batch processing for deep analytics
- Support for HOT-COLD-ARCHIVAL data storage

- Field support app for initial provisioning and remote diagnostics
- Microservices-based, extendable IoT architecture for scalability
- API-driven platform
- EIC PROPEL™ is an enterprise-grade IoT platform designed for scale, security, and efficiency.

# EIC PROPEL™ Led Service Offerings – A Complete IoT Solution

From strategy to execution - your trusted partner in IoT success.

**IoT Strategy & Consulting**

Tailored IoT roadmaps for enterprises looking to modernize their infrastructure.

**Application Development & Customisation**

Building custom dashboards, integrations, and business logic.

**AI/ML/ Generative AI Integration**

Future-ready AI-powered analytics and predictive maintenance models.

**Managed Services**

Ongoing monitoring, maintenance, and optimization of your IoT ecosystem.

**Security & Compliance Audits**

Ensuring end-to-end data security and regulatory adherence.

# Why EIC PROPEL™? - EIC PROPEL™ is the Smartest Choice for IoT Acceleration

More than a platform-an accelerator built for innovation and impact.

**Enterprise-Grade Security**

Built-in **zero-trust architecture, multi-layer encryption.**

**Fully Scalable & Future-Ready**

Handles **millions of IoT devices** without performance bottlenecks.

**PROPEL™**

**Modular & Customizable**

Adaptable to **any industry use case** including Industrial, Healthcare, Consumer, Security/Surveillance, EV Charging/Solar Energy

**Monitor & Control**

Real-time insights & Automated workflows for seamless device operations and management

**Seamless Azure Integration**

Works effortlessly with Azure **IoT Hub, Synapse, Data Explorer.**

# Industry - Specific Challenges & How EIC PROPEL™ Solves Them

Real challenges demand real solutions - how EIC PROPEL™ delivers results.

## CHALLENGES

### HEALTHCARE
Challenges in secure data handling, constant connection, and device compatibility for unified medical monitoring

### SMART BUILDING
Unexpected equipment failures in buildings like elevators or HVAC systems can disrupt operations and can be costly

### EV CHARGING
Growing number of EVs necessitates a robust charging infrastructure EV battery health directly impacts range and performance

### INDUSTRIAL
Unplanned equipment failures in factories or on production lines can cause significant disruptions and financial losses

### SECURITY/ SURVEILLANCE
Low Latency streaming, cost and reliability of connected devices eco system and intelligent alerts based automated security actions.

## USE CASES

### HEALTHCARE
Collect and analyze data from wearable devices at patients' homes
Track the real-time location and status of these devices, ensuring their availability

### SMART BUILDING
Monitor energy consumption patterns across heating, ventilation, and HVAC systems
Check equipment health and predicts potential issues before they escalate

### EV CHARGING
Monitor charging station availability, track energy usage and even identify potential maintenance needs
Monitor battery health data and predicts potential issues

### INDUSTRIAL
Analyze sensor data from equipment to detect early signs of wear and tear
Get insights into asset health, allowing for targeted maintenance interventions only when necessary

### SECURITY/ SURVEILLANCE
Subscription based home/building security, license management, streaming and analytics, NLP based real-time search from terabytes of video data

# EIC PROPEL™ Availability Options – Flexible & Scalable for Every Business

Deploy IoT your way—on your terms, at your scale

## Available As

### Customer-Owned Deployment

EIC PROPEL™ acts as an accelerator, allowing enterprises to build and manage your own IoT platform on Azure with full control over infrastructure and costs.

### Enterprise Implementation

Easy and Quick to customize for your end-to-end needs, ensuring seamless integration, scalability, and security tailored to the business needs

## Flexible Pricing & Support Packages Available

**Contact Us**
marketing@einfochips.com

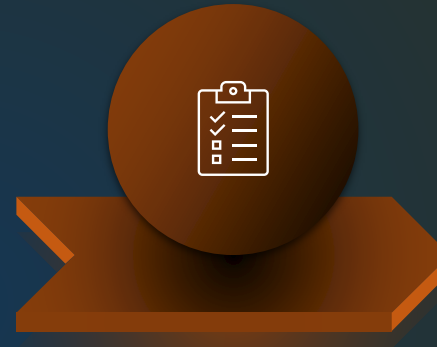# Next Step & Call to Action

Experience the EIC PROPEL
Today!

**Request a Demo**

*Get a live demo of platform*

**Talk to our Experts**

*Our consultants will engage to understand your need*

**Get an Assessment Report**

*We will assess, identify customization & provide assessment report*

**Get a Private Offer**

*We will make private offer with customization cost Support to deploy on Customer Azure subscription*

# Get in Touch

**Contact Us**

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**Thank You!**

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