IoT Asset Monitoring: POC

Through our innovative solutions and expertise, People Tech Group demonstrates how your organization can surmount the challenges of lowering operational costs while efficiently deploying resources. Implement real-time monitoring and predictive maintenance of assets to reduce downtime and extend equipment lifespan. Address labor shortages by automating routine tasks, enhancing process integrity with continuous oversight, and ensuring regulatory compliance. Streamline operations to optimize resource allocation, leading to more efficient use of energy and materials. Transform these challenges into growth opportunities and stay competitive in a dynamic market environment.
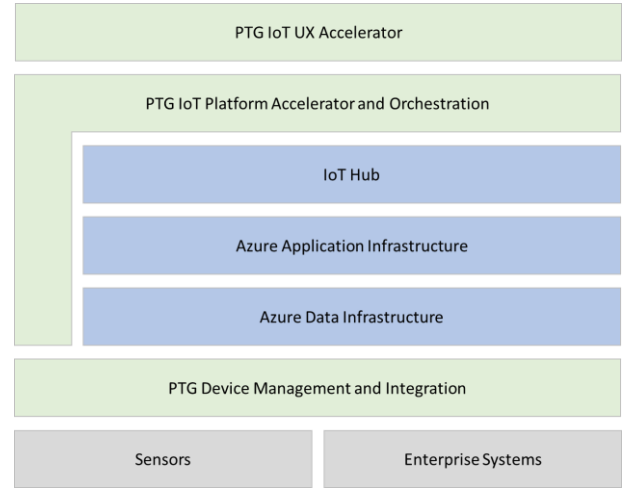

Deliverables and Key Benefits:

- Real-time Monitoring and Predictive Analytics.
- Establishment of a framework to ensure regulatory compliance and maintain high standards of process integrity.
- Tools and methodologies for efficient use of energy and materials, leading to cost savings and sustainable operations.
- Strategies and solutions to transform operational challenges into growth opportunities, maintaining a competitive edge in the market.
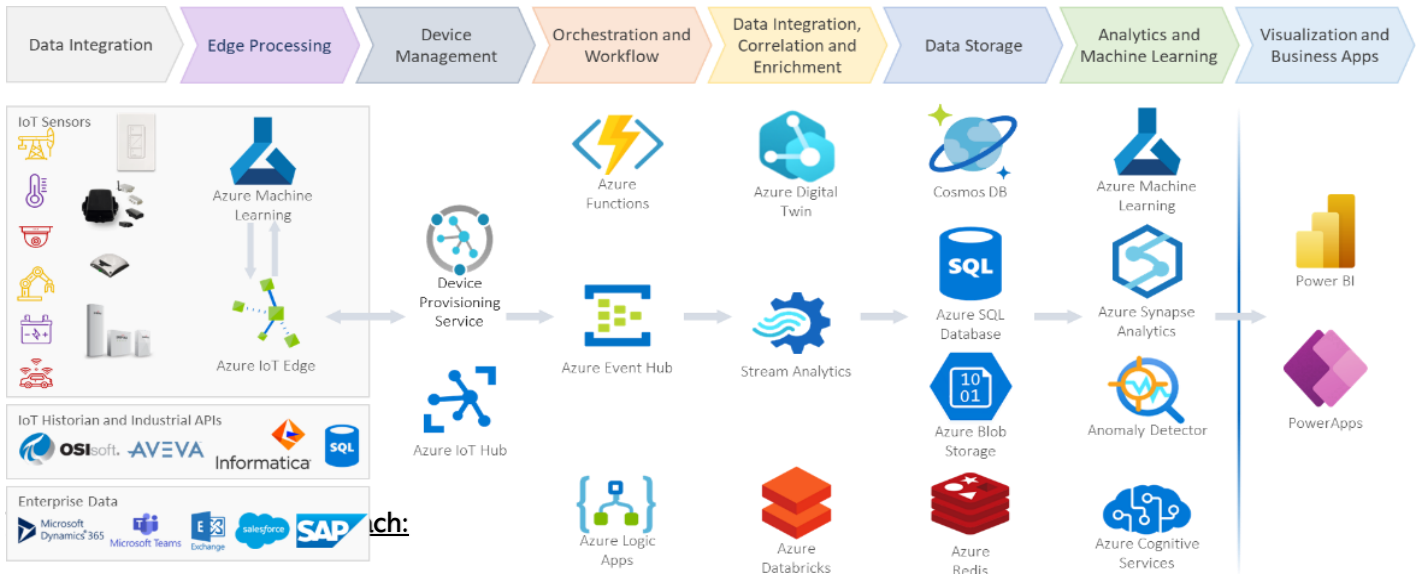
Our solution:

Our advanced IoT solution integrates seamlessly with leading hardware partners, featuring wireless and easily deployable sensors for efficient performance and swift customization. It includes a robust data management platform that enables rapid application of AI technology, providing real-time insights and informed decision-making. Our AI capabilities drive predictive maintenance, automate routine tasks, and enhance process integrity for strategic advantages. We accelerate digital transformation through the development of digital twins and data models, as well as streamlined device management and user interfaces. Experience quick deployment and robust integration into existing operations and alert systems, with secure and controlled access through role-based features. Our solution optimizes resource allocation, reduces downtime, ensures regulatory compliance, and transforms operational challenges into growth opportunities, maintaining a competitive edge in the market.
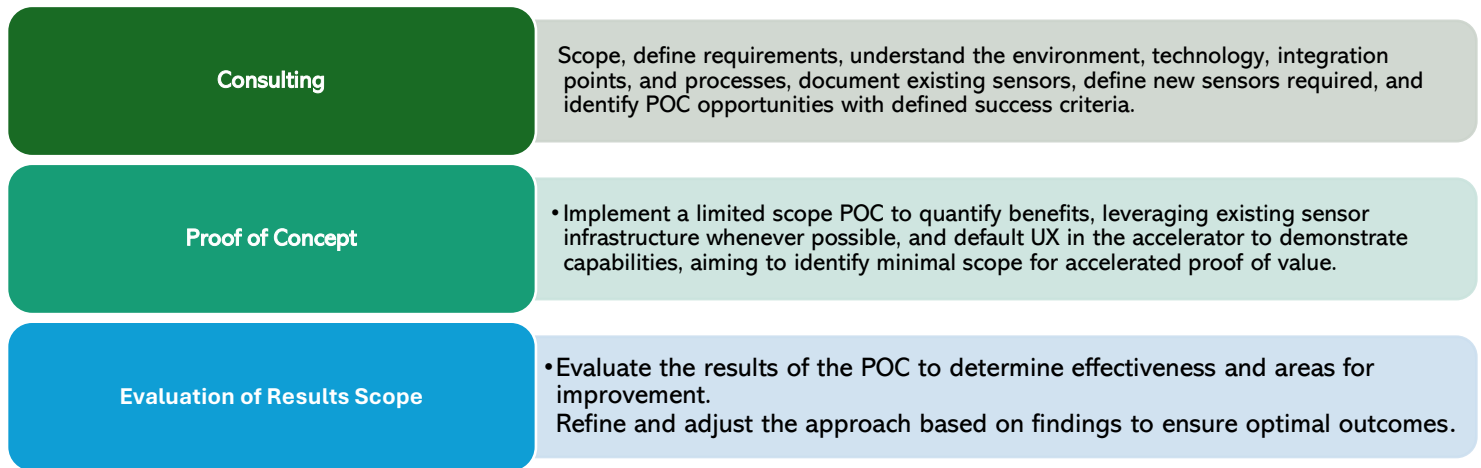
Architecture

Cloud Components

The Solution Delivery Approach:

Consulting	Scope, define requirements, understand the environment, technology, integration points, and processes, document existing sensors, define new sensors required, and identify POC opportunities with defined success criteria.
Proof of Concept	• Implement a limited scope POC to quantify benefits, leveraging existing sensor infrastructure whenever possible, and default UX in the accelerator to demonstrate capabilities, aiming to identify minimal scope for accelerated proof of value.
Evaluation of Results Scope	• Evaluate the results of the POC to determine effectiveness and areas for improvement. Refine and adjust the approach based on findings to ensure optimal outcomes.

Engagement Timeline

Project Scoping and Requirements	Proof of Concept Leveraging Accelerators	Evaluation of Results Scope
30 Days	90 Days	120 Days

CASE STUDY:

Company: WHYgrene Energy Monetization

Overview: WHYgrene focuses on monetizing the transfer of energy between parties, aiming to optimize energy usage and create value across various sectors.

Challenge: WHYgrene needed a software product to efficiently manage energy transfer and monetization for Residential, Commercial, and Industrial users. The solution required integration across a wide variety of SCADA and industry partner data endpoints to ensure seamless operation.

Solution:

People Tech Group collaborated with WHYgrene to develop a comprehensive software product. The solution included the following key components:

IoT Data Platform: Leveraged to create efficiencies in integration across various SCADA and industry partner data endpoints. Enabled seamless data collection and transfer, ensuring reliable and accurate information flow.

Digital Twin Infrastructure: Provided taxonomy and context for the AI and ML infrastructure. Enabled the creation of digital replicas of physical assets, facilitating advanced monitoring, simulation, and optimization.

Results:

The implementation of the IoT data platform and digital twin infrastructure resulted in enhanced operational efficiency and improved energy management for WHYgrene. The integrated AI and ML capabilities allowed for advanced analytics and predictive maintenance, driving better decision-making and value creation across Residential, Commercial, and Industrial sectors.This successful collaboration between People Tech Group and WHYgrene showcases the potential of leveraging advanced technologies to optimize energy transfer and monetization, providing significant benefits and growth opportunities for the client.