**Overview**

Vixtera is developing the IIoT edge distributed software framework (vEDGE) and delivering integrated solutions for the mission-critical applications within asset-intensive industries. The vEDGE enables out-of-the-box operational experience delivering broad and robust device, event and data management governed from a Single Pane of Glass dashboard. It boosts operational productivity with automated discovery, mass configuration and upgrades, data curation (collection, processing) and real-time failure detection, while guiding event data analytics and predictive analysis.

The framework allows instant provisioning of essential IIoT ecosystem, whereas stipulating requirements for new technologies, applications and phased deployment. We empower it with variety of services assisting with rapid productization and integration of the solution. The patent-pending algorithms and techniques accelerate asset management and decision making, expand operational visibility and reduce the cost to automate asset and infrastructure radically improving cost-efficiency of Industrial Enterprises and profitability of Manufacturers and VARs.

**Unique Value Proposition & Patented Technologies**

- **Acceleration (x10) of onboarding and maintenance across multiple types/brands of devices**
  Using patented declarative Protocol delivers in order of magnitude higher velocity of device onboarding and maintenance (upgrades/config) than writing and adapting a software driver or SDK - no coding and minimum effort is required. Provides ubiquitous connectivity across ANY communication protocol or device model/type.

- **Real-time failure detection and prevention**
  Promptly identifies the root cause and a chain of events that’s leading to a problem providing unparalleled ability for instant failure detection and radical improvement of device serviceability and use of resources.

- **Auto-generation of AI labeling allowing accurate and dependable predictive analysis**
  A source of failure (root cause) and chain of events that’s leading to a problem can be used as a reliable label (and patterns) for automatic NN training and AI/DL modeling helping to aid predictive insights and decision making.

- **Multifaceted data curation at the edge**
  Collects, processes and analyzes event and data. Eliminates duplication of metadata whereas reducing frequency of transmission and size of collected data; contextualizes and aggregates relevant events yielding meaningful information to the outcome-based applications while tuning and optimizing performance of the end2end IIoT ecosystem.

- **Analytics Connector**
  A descriptive mechanism for extraction, aggregation and classification of meaningful event data guiding analytics, instant decision making and predictive analysis. A “drag-n-drop” query builder for rapid delivery of custom analytics and applications. A configured and automated data pipeline.
Vixtera Business Primer

The Crux

Vixtera IIoT distributed software (vEDGE) is architected as an “intelligent connector”, a cloud gateway - a synergetic framework of content plane to ANY control plane-based solution like AWS/Azure IoT or IBM/SAP/Oracle Asset Monitoring platforms, providing consistent and coherent physical to logical interconnection, including construction of well-defined uniformly formatted MQTT payload messaging, furnishing the opportunity for device/cloud-agnostic communications, rapid deployment and industry-wide IIoT open practices.

The vEDGE collects, processes and configures the data, and feeds it, in a snap, without needs for additional coding or software, to ANY monitoring, application or analytics platform, enhancing the offering and benefits of its services.

Vixtera Value Offerings

* IIoT edge Software Framework (vEDGE) for rapid PoC & deployment
* E2E Architecture, Reference Design & Application development
* Customization & Productization to end-user’s spec and requirements
* Integration with platforms and clouds

Target Verticals

* Industrial Automation
* Electrical/Electronic Manufacturers
* Mechanical & Industrial Engineering
* Mining & Oil/Gas Industries
* Power Utilities

Segments Served

* Enterprises
* Manufacturers
* Value-Added Resellers (VARs)
* System Integrators
* Data Centers
Use Case - Industrial Enterprise

**Problem-Challenge**
- Low visibility of Devices & Operation
- High operational cost
- Low operational efficiency

**Objectives**
- Improve Productivity
- Reduce Downtime & Time-to-Repair

**Vixtera Offering**
- E2E Architecture & Design
- Rapid PoC & Deployment
- Integration & Customization

**Benefits**
- Significant performance improvement
- Minimized maintenance cost
- Improved operational cost-efficiency

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Use Case - Industrial Manufacturer

**Problem-Challenge**
- Hardware commoditization
- Reduced revenue and profit
- Depressed market share

**Objectives**
- Improve revenue and profit
- Increase market share

**Vixtera Offering**
- Phased implementation & ROI
- Comprehensive management
- Cloud-based applications

**Benefits**
- Increased revenue and margin
- Improved serviceability of devices
- Subscription-based services
- Significantly improved offering