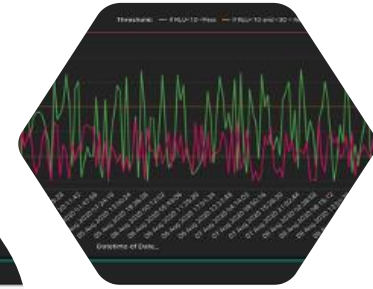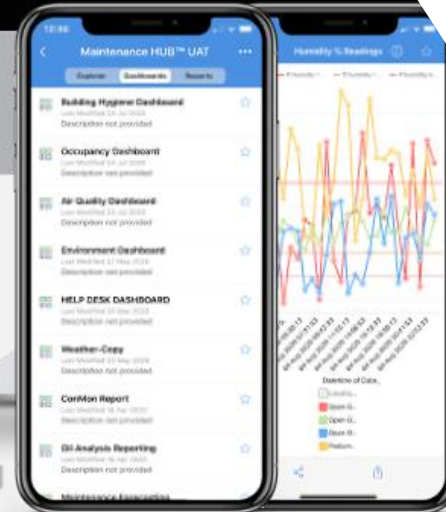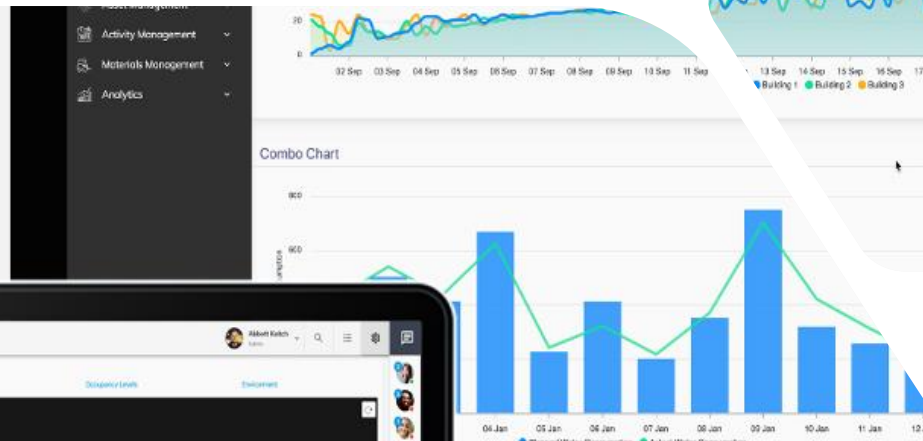ioX-Connect®

Partner With US

# Why Partner with Us?

Not all companies required complex ioT solutions.

- **All-in-one IoT Solution** - Simplify your IoT landscape by leveraging our fully-integrated solution that enables your customers to gather, examine, and then utilize data effortlessly. Free your clients from the burden of managing multiple disjointed systems.
- **Distinct Competitive Edge** - Elevate your offerings beyond mere data collection. Our software provides for cutting edge data analysis tools coupled with an advanced maintenance management features.
- **Co-Branding** – Co-Brand our platform to reflect your brand, and offer personalized, high-touch support at every step.
- **Flexibility** – Adapt our systems to meet your customers specific needs
- **Analytics/Reporting –** Customized to your customers exact requirements. Embed link to access your dashboards from anywhere.
- **Lighten fast set up and deployment –** Up and running in days rather than weeks or months.
- **Subscription Based Revenue**
- **Upfront and transparent pricing**

# The Problem

Easily solve your customers most pressing issues.

- Dispersed and siloed software solutions **that do not interact/ communicate** with each other

- Asset, maintenance and condition data scattered across **multiple systems** with aging infrastructure resulting in higher asset maintenance costs, unpredictable asset performance, limited visibility, integrity and context

- Complex systems that are not user friendly and difficult to navigate resulting in poor user adoption, poor data and poor reporting

- Expensive legacy systems and tools that offer nothing new, is cumbersome to maintain and is often locally hosted **making integration complex and costly**

- Accessing real-time asset data requires implementing **multiple systems** with **limited reporting**/ analytical capability forcing companies to implement additional BI/ Analytical tools

- No standardized processes

- *Most solutions offer **no customization***, forcing companies to fit into a particular "box"
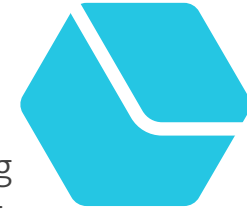
# The Solution: Fully-Integrated Software Solution for IoT, Analytics and Advanced Maintenance

**ioX-Connect is a cloud based PAAS/SAAS solution.**

As a PAAS/SAAS solution we can optimize our core solution/technologies and customize to your unique requirements.

**All-in-one Wireless Monitoring Solution that keeps you informed**

Allows you to remotely and securely collect data from sensors all over the building, campus...earth. Everywhere. Use our sensors /devices /solutions or yours.

**Easy to use, cost effective, CMMS**

ioX-Connect CMMS is a cloud based computerized maintenance management solution that revolutionizes the way you manage and maintain your equipment. Easy to use, cost effective, gain valuable insights into equipment performance & health, reduce equipment downtime, understand your failures, optimize manpower, understand material requirements, improve regulatory compliance.

**Gain deep Actionable Insights into your data like never before**

Connect and blend data from any source and anywhere. Completely customizable to your specific requirements.
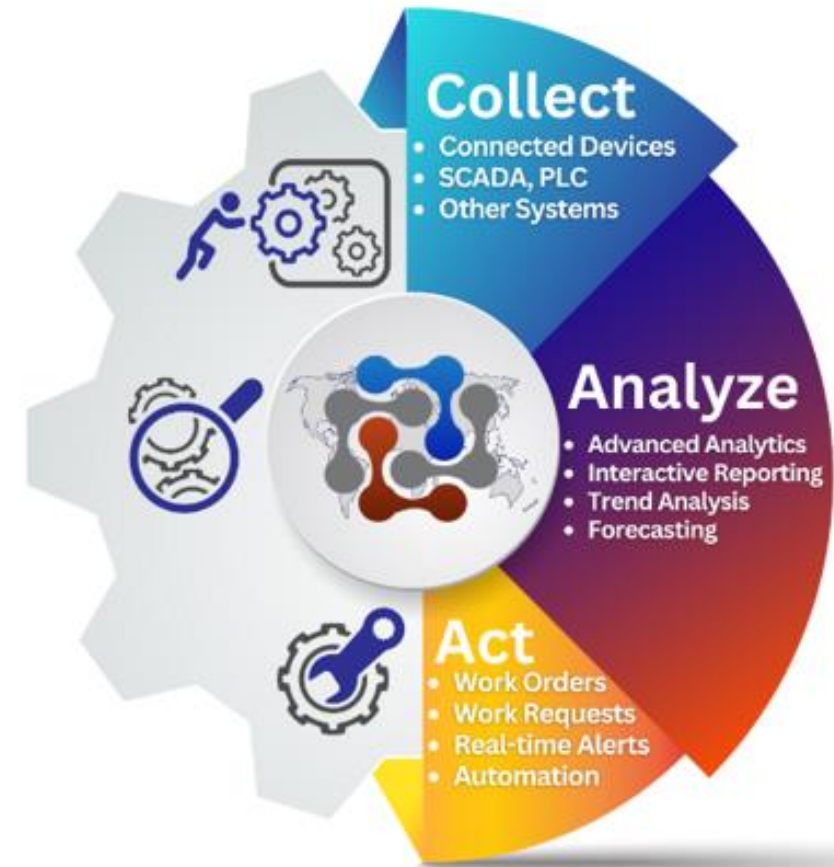


*ioX-Connect modules can be implemented as stand-alone/ targeted solutions, addressing specific operational and asset reliability concerns or as an end-to-end platform for asset performance management.*

# Monitoring & IoT Module At A Glance

Allows you to provision, manage and monitor multiple IoT networks across multiple regions & sites

- Bring all your dispersed and siloed monitoring solutions under one platform

- Connect ioX Wireless Sensors to equipment to monitor abnormal behavior and **receive text/ email notifications** when readings exceed or fall below set thresholds.

- Connect sensor readings to meters in the CMMS module to drive and **automate your scheduled maintenance.**

- Pull in data from **external data collection** points or systems through the ioX integration layer.

- Set-up real-time/ **live sensor dashboards** and monitor what's going on across all your operations.

- Install ioX Wireless Sensors throughout your facilities to remotely monitor everything from environmental conditions, air quality, building occupancy to unauthorized access to restricted areas.

- Provide easy access to analytics and reporting via Analytic Link
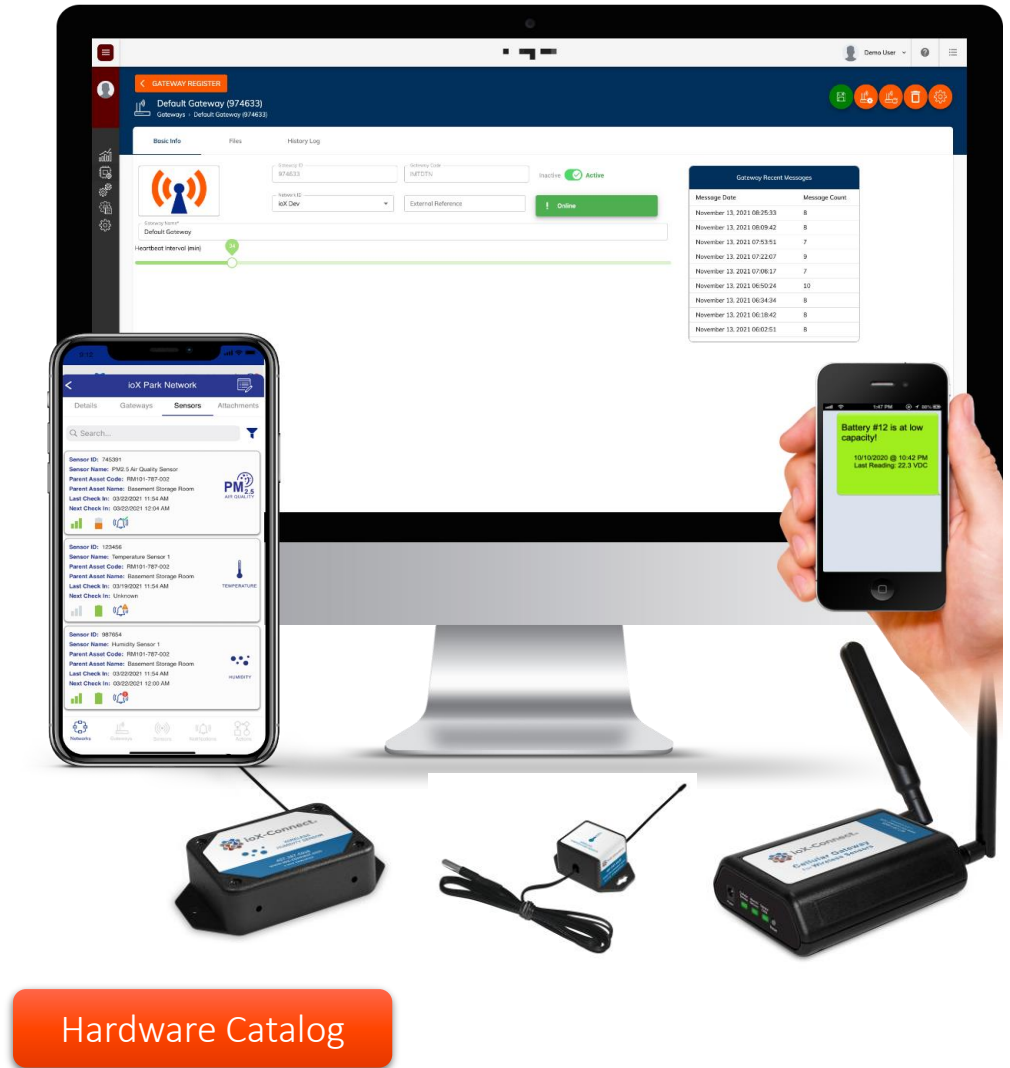
Hardware Catalog

*Click to download catalog*

# Analytics Module At A Glance

No more static reports that only gives users a snap-shot view of operations.

- Do away with traditional static/ snapshot reporting by utilizing the **built-in analytics** module.

- Blend data from external systems to create **powerful cross-functional reports** and dashboards

- Drill-down into your data to identify trends and **analyze key metrics for better insights** into issues with your operations.

- The analytics module, its dashboards and reports can all be **customized to fit your needs**.

- **Analyze your data geographically** with interactive map charts. Compare and measure key metrics across countries, regions, states, counties, postal codes and even with latitudes and longitudes.

- Be prepared for any future events with the help of **smart forecasting** built right into all of our dashboards. ioX's Analytics Module can help you predict future trends accurately based on past data presenting you with accurate projections.
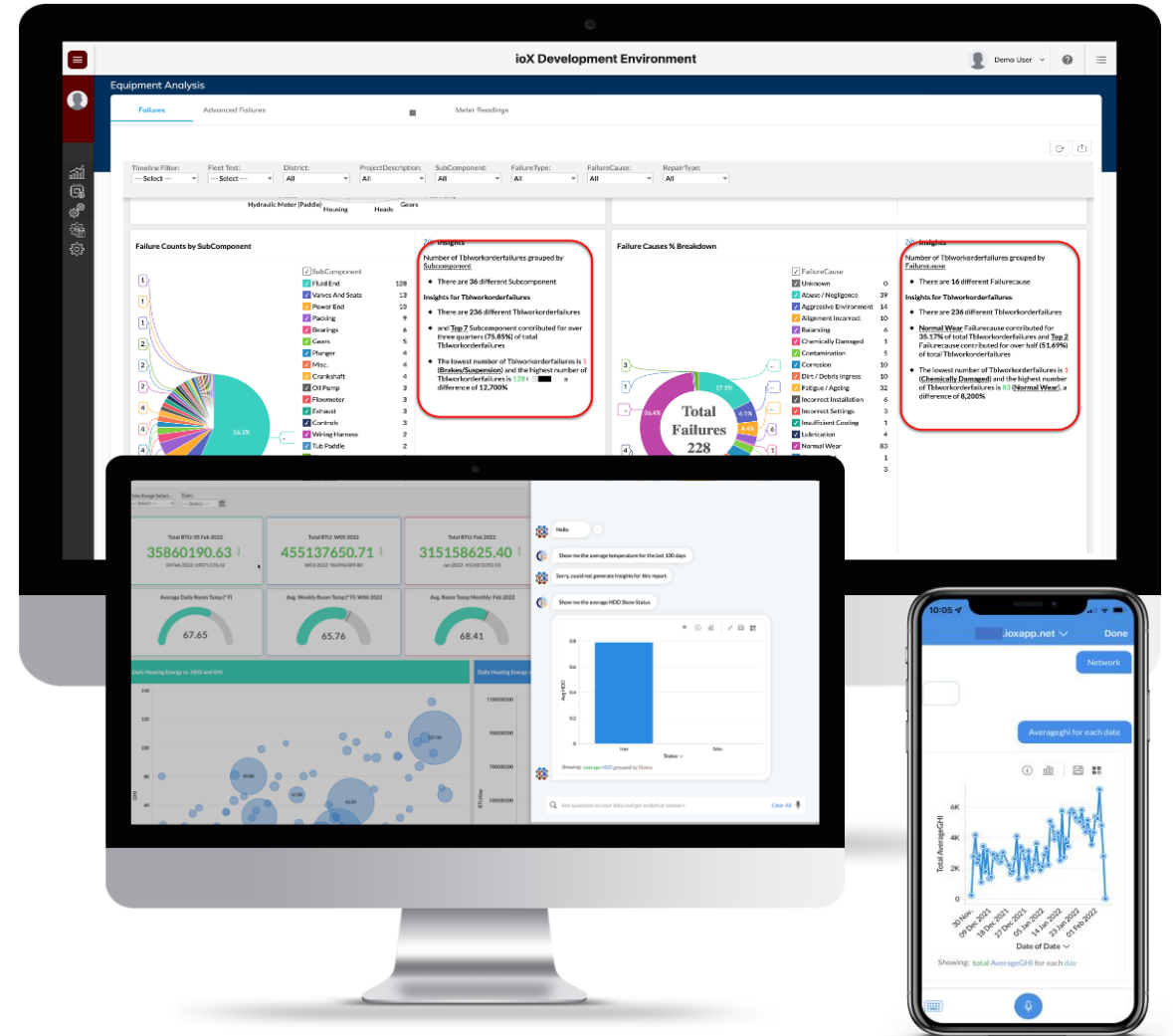
# CMMS Module At A Glance

## A World Class CMMS built for IoT.

- Work Requests + **Work Orders** + Locations + Assets + Calendar Based PM + Meter Based PM + Sensor Based PM + Predictive Maintenance + Inventory Control + Detail Tasks List + Checklists

- Track everything you need to know about your assets, from GEO location to manuals, open work orders to complete work histories. **Take control of your assets** throughout their entire life cycle.

- Measure uptime and downtime to calculate KPIs such as MTTR and MTBF. Create and assign custom codes so you can **automatically trigger work** based on downtime events and sensor alarms.

- Generate, approve, delegate, and **track on-demand and preventive maintenance** work orders. Our mobile technician app delivers everything techs need out in the field to work independently and close out jobs efficiently.

- Schedule and track a complete facility maintenance program. Cut downtime and save money by catching minor issues before they become major problems. **Automate your preventative work** by using our built-in sensor alarm/ event triggers.
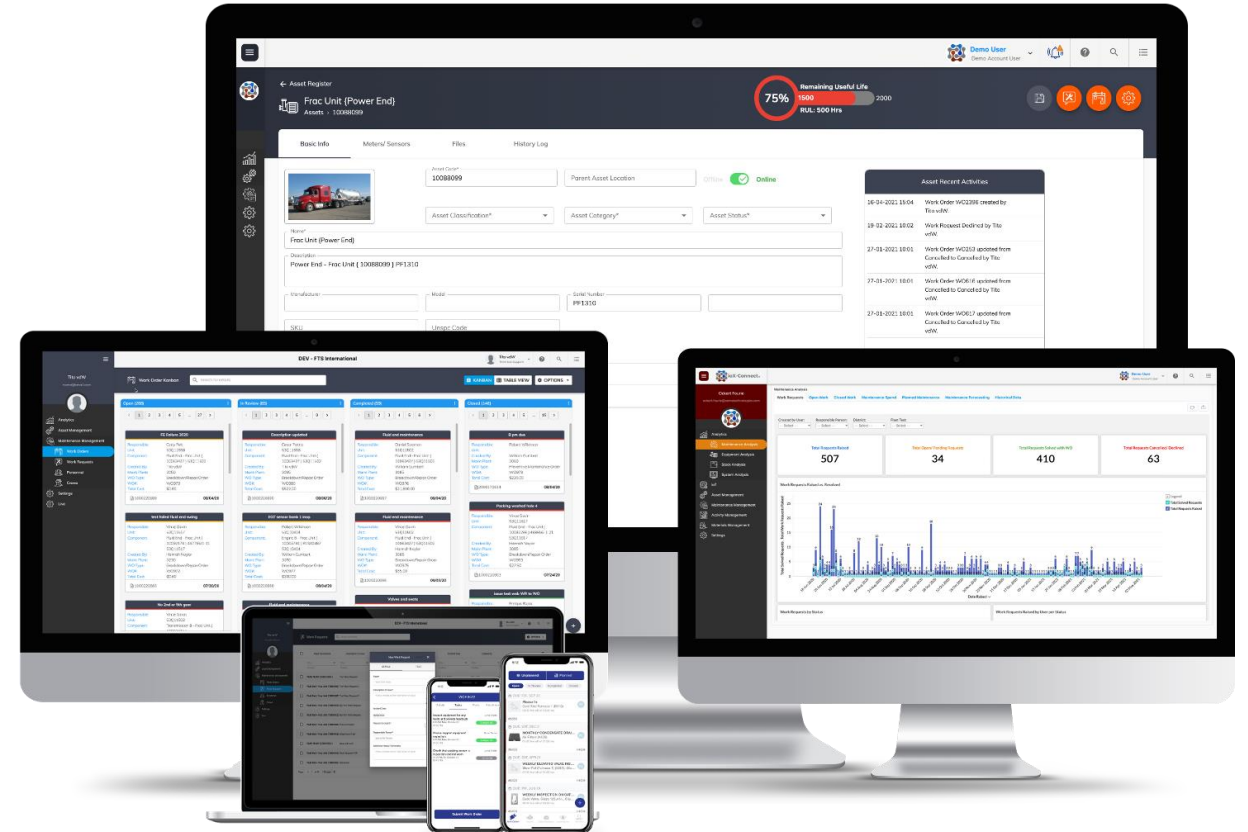
# Data has never been easier…



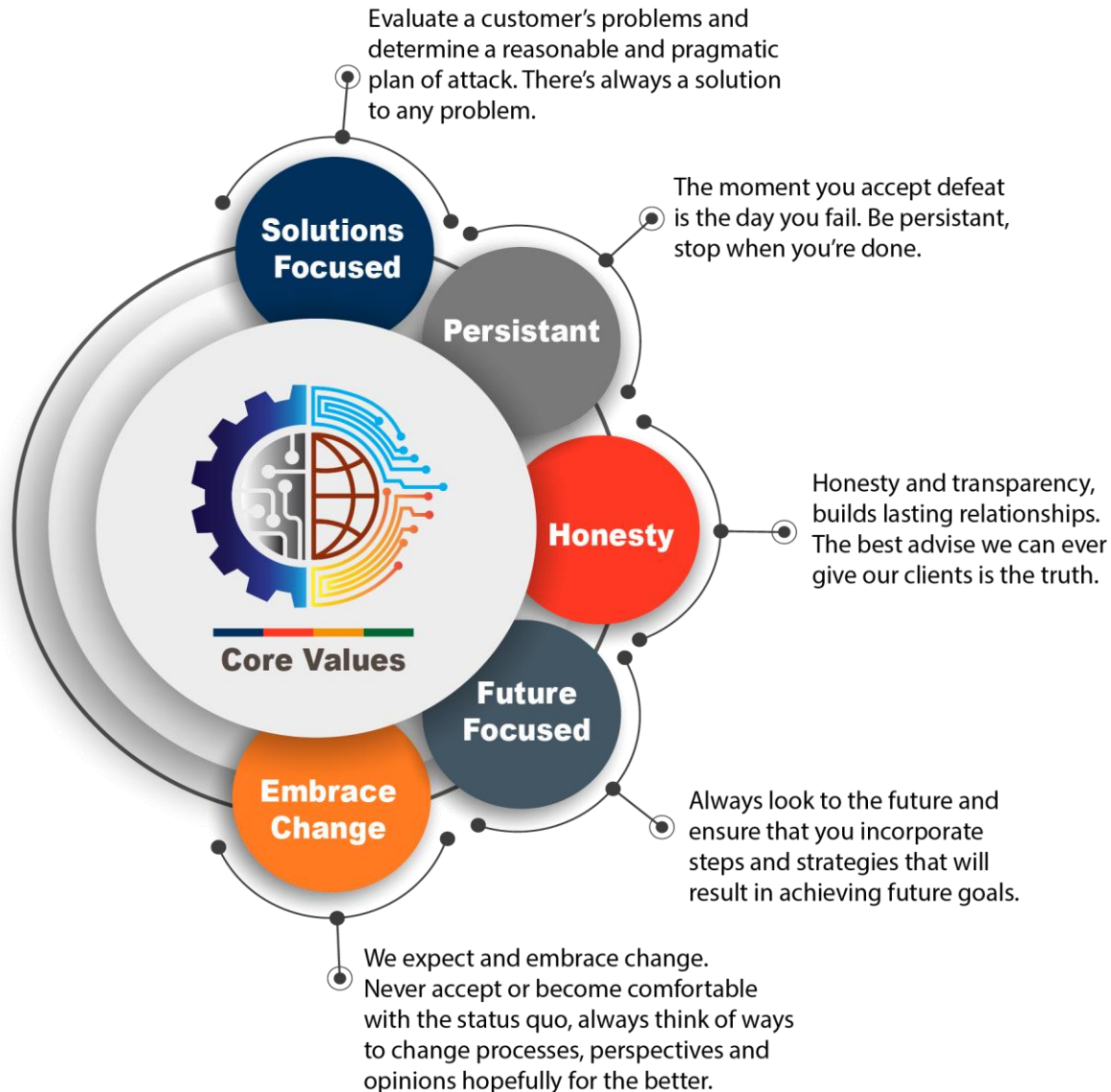ioX-Connect was built in the cloud with integration at the forefront of the platform's design and architecture. ioX's unique **integration framework** offers a lot more flexibility, customization and multiple ways to **sync with external applications**, data, end points, external form data, vendor data sources, business systems and much more. Capture key data by connecting to 1000s of endpoint sources across multiple systems including:

ioX-Connect is **hardware independent** and not limited to sensors/ devices we offer. The platform **can ingest sensor data from virtually any external platform that allows sensor data transmission**.  If you are starting from scratch or wish to add new capabilities, ioX-Connects partners with leading sensor hardware manufacturers and can offer a complete solution; from software, hardware to implementations services.



Examples

Fleet telematics data, readings, faults and GEO data from Fleet Tracking Solutions

Production data from production systems like MES, SCADA etc.

Data from business systems (ERP's) like SAP, Dynamix, Oracle, IBM

Real-time data from HMI's, PLC's

ioX Cloud

Integration Layer

Data Blending

Sync parts and materials, consumption, availability, stock levels etc.

Track and record additional asset condition data from external forms/ lab results etc.

On-premise data sources from hosted solutions/ SQL Databases etc.

Digital twin platform data and end-point inputs.

# Our Core Values

Evaluate a customer's problems and determine a reasonable and pragmatic plan of attack. There's always a solution to any problem.

**Solutions Focused**

The moment you accept defeat is the day you fail. Be persistant, stop when you're done.

**Persistant**

**Core Values**

Honesty and transparency, builds lasting relationships. The best advise we can ever give our clients is the truth.

**Honesty**

**Future Focused**

**Embrace Change**

Always look to the future and ensure that you incorporate steps and strategies that will result in achieving future goals.

We expect and embrace change. Never accept or become comfortable with the status quo, always think of ways to change processes, perspectives and opinions hopefully for the better.

Since EAMS Technologies' establishment in late 2019, we have developed a host of value adding asset management technologies, software tools and asset management processes, and combined these to offer integrated packaged solutions to customers.

We deliver best in class solutions in various industries, balancing asset and business performance, risk and maintenance spend.

# Use Case – Large US Fracking Company, Texas

## Before ioX Implementation

- Tried several times with several vendors to implement a solution that would fit their requirements. Most solutions offered by other vendors were too complex and difficult to use.

- Implemented systems where not connected or communicating with each-other, making it difficult to standardize maintenance practices and processes across multiple districts as well as causing poor operational visibility for management.

- Equipment downtime and running hours were being manually recorded in logbooks and often incorrectly.

- Most maintenance activities were recorded using paper-based work orders and only electronically logged sometimes weeks after work was already done.

- Management had no visibility on asset conditions, hours, labor, parts, equipment failures and replacements.

- Expensive system maintenance and hosting costs, difficulty maintaining multiple user accounts due to multiple software tools being used across the organization

- Users had to access multiple systems and export data to excel in order to produce weekly, monthly and quarterly reports

## The solution; ioX-Connect

- Integrations to SAP, Microsoft NAV, ODOO
- Fluid end component life and replacement tracking down to valve and seat life; packing per hole.
- Power end major component life tracking down to bearing block hours per hole
- Tracking and management of fracking fleets as well as fleet assets and personnel assigned to each fleet.
- Serialized component hours and replacement tracking across asset's life including reman and refurb assets
- Recording and tracking of serialized assets as the move between units, as well as the current units these assets are installed on and where they are deployed
- Capturing all maintenance work and operations executed against serialized assets; including parts and labor.

- Replaced paper-based work order processes with standardize electronic maintenance recording processes through ioX Mobile Technician app.Turn-around time for recording maintenance activities, parts and labor consumed was reduced from 2-3 weeks down to 1 day.

- Using ioX's integration layer and IoT capability we automated the recording of equipment hours and mileage. As a result, operators no longer have to record meter readings manually, this greatly increased the accuracy of reported equipment hours as well as visibility on the performance of the company's entire fleet across all states and districts.

- With meter readings automated, maintenance teams now have real-time visibility on equipment part life allowing them to properly plan and execute part replacements at the right time, saving them a lot of money on unnecessary part replacements and inventory wastages.

- Users now only access a single platform where all their maintenance and equipment data can be consolidated. This also saved this company over $ 150,000 annually in subscription fees across multiple tools that are no longer required.

# Use Case – Federal Building, Wisconsin

Part of a pilot project for Dept. of Energy on how outdoor & indoor air temperatures affect the building's energy/ daily BTU consumption.

## Before ioX Implementation

- Limited to no visibility regarding the daily usage/ runtime of HVAC, gas & oil boilers.

- BTU daily consumption being manually recorded then captured in excel spread sheet and often these where best guesstimates.

- Limited to no visibility regarding the impact of external air temperatures on building's energy consumption.

- Could not determine how efficiently the type of windows installed in the building retained internal heat/ temperatures during wintertime. Also, could not determine what impact doors left open in certain parts of the building had on heat retention and how all of this affects the daily energy consumption.

## The solution; ioX-Connect

- Installed 40+ ioX Wireless sensors to monitor internal room temperatures. Installed ioX Wireless sensors to monitor runtime for boilers and HVAC units. Installed 20+ ioX Wireless sensors on exterior facing windows to monitor and track window temperatures. Installed 10+ ioX Wireless sensors to monitor door open/ closures, how long certain doors stay open and how that impacts heat loss across multiple floors and main rooms.

- Using ioX integration layer, integrated with external data source to supply heating degree days temperatures, solar irradiation and cloud cover on specific days for the building's geo location.

- Using all the data being collected by ioX Wireless sensors and external data sources within ioX-Analytics to visually see the impact of hot and cold days on building energy consumption, heat loss due to certain window installations and door activity. Trends are now being used to better understand how the HVAC and boiler systems need to be optimized in order to maintain building comfort levels while saving on energy consumption costs.

# Use Case – Diamond Mine, Southern Africa

Modernization project for remotely monitoring key equipment as well as automatically capturing production tonnages of a diamond sorting plant.

## Before ioX Implementation

- Manual capturing of belt scale/ production tonnages being fed into a sorting plant using clipboard and paper then capturing it into excel for reporting.

- Due to the remote location of the mine, there are frequent power outages so back up generators are used often. However, management has no idea how often these generators kicked in and for how long each generator ran, making it difficult to determine running hours in order to service the equipment properly.

- Maintenance activities being captured on paper and often not at all.

- Planned/ Preventative maintenance activities being scheduled using excel sheets with no collaboration across departments causing friction between engineering and operations managers.

- Due to the paper-based maintenance processes, parts consumptions where inaccurate often causing the plant to stop due to certain parts missing to fix key equipment/ breakdowns.

## The solution; ioX-Connect
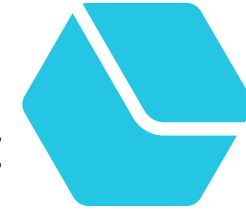
- ioX Wireless sensors installed on key equipment to monitor production tonnages, equipment runtime hours and status. Email and text notifications set up to notify relevant staff of any power outages on the plant.

- All paper-based maintenance processes converted to electronic processes, ensuring maintenance activities are recorded more often, with more detail and accuracy.

- Automated the triggering of maintenance plans through sensor data readings.

- Data, trends and upcoming maintenance visually presented and reported on in ioX-Analytics gives all department heads access to what is going on in the plant as well as what to expect from a maintenance perspective, significantly reducing friction between departments.

- Parts consumptions now being properly tracked, allows the parts manager to stay ahead of what parts are reaching the minimum stock count.

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