DYM Labs

Debug Your Mind Labs

DYM ENERGY MONITORING SOLUTIONS

RESPONDING TO YOUR CURRENT ENERGY MONITORING PROBLEMS

ENERGY WASTAGE

Not knowing where, when and how the **energy is getting consumed or wasted**, and also what the reason is for it, whether it is **incorrect settings, faulty timers or poorly maintained equipment?**

RISK OF HUMAN ERROR

Usually, industrial operations, devices e.g., reactor, pumps, machinery, etc. **operate in silo** and **data collection** for energy is conducted manually which increases the **risk of human error**. Unavailability of granular data on **energy usage** makes it difficult for energy managers to **discern energy consumption patterns** and that leads to **high GHG emissions, exorbitant utility bills,** etc.

OT/IT CONVERGENCE

Typically OT applications required for **energy data collection** run in silos resulting into IT catching up with new application deployments resulting in **unstructured deployment** across plant level. There is an urgent need for **IT /OT convergence** leading to dashboard for EMS across the plant. (Shop floor, utility, maintenance operations and admin areas).

IMPROPER DATA COLLECTION

Unavailability of granular data related to energy usage makes it difficult for energy managers to **discern energy consumption patterns** and results in **high GHG emissions, exorbitant utility bills,** etc.

ENERGY MONITORING SOLUTION FEATURES

Energy Consumption at machine level

Avoid unplanned downtime

Voltage and Current Fluctuation

KPIs and dashboard configuration

Notification & alerts Reporting module

Business rules integration

Secure remote monitoring

Secure access to multiple solutions

Flexible to mix& match devices

90+ sensors in-built support

No-code platform with end-to-end IoT services

White labelled portal

SENSORS

PYM
IoT Marketplace

PYM
IoT Platform

Edge Analytics

Edge Gateway

Artificial Intelligence

Visualisation & Analytics

INDUSTRIES
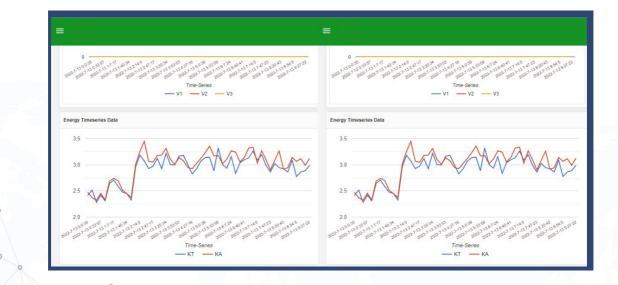
(ENERGY MONITORING SOLUTION)
SNAPSHOTS

ENERGY MONITORING SOLUTION BENEFITS

REDUCE RUNNING COSTS

EMS's ability to **reduce electricity costs** by monitoring and optimizing energy used by industrial operations e.g. lighting, heating and cooling, ventilation, reactor etc.

PREDICT ENERGY USAGE

By **collecting energy data**, it allows administrators to **predict energy usage** and budget for the same more effectively. It has **built-in cost-saving functions** including offering **revenue-generating programs, emitting less power during peak hours**, and **spotting any potential energy leaks.**

PREDICTIVE MAINTENANCE

Our EMS solution allows users to **monitor the issues in real time** so that the corrective measures can be taken immediately. For example, voltage fluctuation/overloading possibility before it happens get **notified to you via an alert.**

REDUCES ENERGY CONSUMPTION

Your plant's carbon footprint is the entire amount of greenhouse gases produced and is directly related to the amount of energy it uses. DYM Lab's solution will **regularly monitor and manage** this and aid in **identifying energy system flaws** that can be fixed to **decrease your influence on the environment**.

CUSTOMER SUCCESS STORY

BEST AGROLIFE

A leading agrochemical pesticide manufacturing company embarks on digital transformation journey. It targeted to achieve **Operational Excellence** through **manufacturing process automation and digitization of business processes**

BUSINESS OBJECTIVE

The project's goal is to use digitalization in process automation and data analytics to:

• Increase overall plant productivity
• Increase transparency through online data visibility
• Improve quality both in-process and finished goods

OUR SOLUTION

- **Stage-0**: Blueprinting and dipstick analysis
- **Stage-1**: Implementation of Energy Management System for chemical reactors
- **Stage-2**: Digitalization of the reactor process by retrofitting digital sensors, e.g. temperature, pressure, humidity, etc.
- **Stage-3**: Advanced data analytics, ML to optimize the monitoring parameters and scale up the solution

BENEFITS AND KPIS

Reactor-level monthly billing, optimize run-hours, and save energy
Track effluent output and environmental compliance w.r.t ejected gases
Preventive maintenance, Overall Equipment Efficiency (OEE)

OTHER READY TO USE SOLUTIONS

Fire Pump Monitoring

LPG Monitoring

Diesel Generator Monitoring

Smart Factory

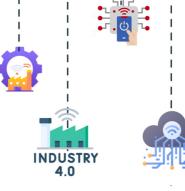**Process Capability**

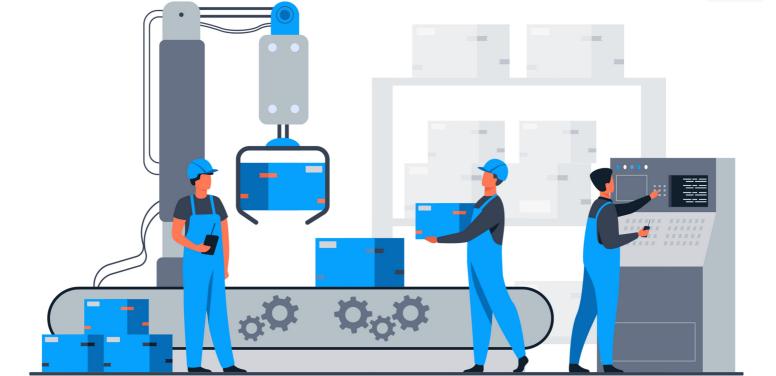**Digital Log Book**

And many more

DEBUG YOUR MIND LABS

INDUSTRY 4.0

WELCOME TO DYM

» We look around and see the cutting-edge technology is making a positive impact in every sphere of our life– **Simply & Subtly**. However, on introspection of industrial digital transformation (sorry have to use the CLICHÉ!!) surrounding us across **SMBs, process and discrete manufacturing** the things are not so direct and simple.

» In 2014, we incorporated DYM to bridge the gap of easily available technology and simplification for an industrial scale transformation

» By no means it was a simple journey but with our partners, **"open to innovation"** customers, we bring together the solution with **"CLICK and PLAY"** ease to let you focus on running the business and leaving technical complexity to us.

2014 — **01** — DYM Labs incorporated with vision of simplifying the Iot for industrial customers

02 — **2016** — DYM Iot platform and gateway-our strong backbone ; Pointed solutions on: Digital signage, smart lighting, video analytics

2018 — **03** — Process capability solution for a German- based automobile adhesive manufacturer, Industrial pump efficiency monitoring solution;

04 — **2020** — Scaling the process capability solution for multiple lines; building the partner ecosystem to provide EMS, logistics, Digital reactor solution;

2022 — **05** — Platform of choice - for industrial customers, for partners to build new and reuse current solution templates e.g. sustainability, Light control System;

DYM OFFERINGS

● DYM IoT PLATFORM

- **Unified-Cost effective-Secure-Open standard** based IoT platform
- Easily configurable with industrial devices
- Business computation provisioning at each layer
- Enriched visualization and AI modelling

ᗪYM
IoT Platform

● DYM IoT MARKETPLACE

- **Pilot Fast and Scale Fast** for partners & customers
- No code digital platform with end-to-end IoT services
- "Build your own" IoT solutions OR use "Ready to use" library of solutions
- At an exceptionally lower price point

ᗪYM
IoT Marketplace

● "READY TO USE" IoT SOLUTIONS

- **Process capability**, OEE, Reactor monitoring
- **GHG emissions compliance**, EMS, BMS
- **Cold chain monitoring**, production planning, track and trace

DYM UNIQUE SELLING PROPOSITION

CREATE BUSINESS KPIS IN MINUTES WITH DYM

OEM DEVICES

Use **DYM Plug-in** and connect your **device to cloud** (one time set-up)
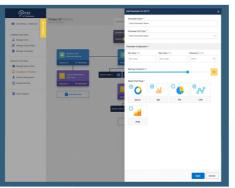
CONNECT

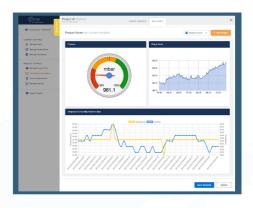Define pilot, connect device & **visualize the data in user-friendly format**

BUSINESS KPIS

Define **customer solution**, drag-drop data sources, **monitor actionable Business KPIs**

READY TO USE

WITHIN MINUTES | WITHIN MINUTES | WITHIN MINUTES

BUILD YOUR OWN

MINUTES - 1ST WEEK | 1st - 2nd WEEK | 2nd - 4th WEEK

WHY DYM?

DYM
IoT Marketplace

IoT PLATFORM

Unified-Secured-Open
Standard-**AI Powered**

READY TO USE

Metering, Energy monitoring, Manufacturing templates

COST-EFFECTIVE

Economic **plug-and-play, cloud agnostics** solution

ECOSYSTEM

Deep **partner and technology** ecosystem, **100+ sensor/devices support**

END-TO-END SERVICE

E2E IoT: h/w (RS232, Profinet, GPIO, Modbus, etc.), **s/w, connectivity**, cloud , analytics