



INTRODUCTION

AI SMART TECHNOLOGIES (M) SDN BHD, is a local company that delivers smart and reliable solutions in Telemetry, Instrumentation & Control, Test & Measurement, SCADA, and Industrial IoT (IIoT) systems.

Empowering automation through intelligent system

VISION & MISSION

Where We're Going

To be a trusted leader in delivering innovative, reliable, and secure engineering solutions that empower industries through smart technology.

To provide high value, technology driven solutions by combining specialized expertise with a commitment to excellence while building strong, long term partnerships with our customers.



WHAT WE DO

At AI Smart Technologies (M) Sdn Bhd, we deliver innovative, cloud-based and device-driven solutions across multiple industries. Our systems are designed to enhance efficiency, accuracy, and sustainability through advanced monitoring and control technologies.

We provide intelligent monitoring solutions for

Water Quality Monitoring

- Rivers, Streams, and Lakes
- Industrial Drainage Systems
- Aquatic Water Circulation

Pump House & Water Distribution

- Reservoir Water Quality & Level Monitoring
- Water Flow Rate & Totalizing
- Pump House Equipment Monitoring

Environmental Data Collection

- Air Pollution Monitoring
- Weather Stations
- Indoor Agriculture

Agro Technology

- Soil Condition Monitoring
- Soil Nutrient Analysis
- Smart Irrigation and Fertigation Systems

Energy Management

- Energy Monitoring across all Industries
- Carbon Footprint Measurement and Analysis



SENSOR



AP



CLOUD



CLIENTS

OUR SERVICES

Our services cover the complete digital journey from system design and hardware integration to software development, cloud connectivity, and maintenance.

We also provide customized dashboards, predictive analytics, and early warning systems for optimized performance and safety.



DRIVEN BY EXPERIENCE, DEFINED BY TECHNOLOGY.

1

System Integration & Automation

We design and implement end-to-end automation systems, integrating IoT devices, sensors, and controllers for seamless data flow and process control.

2

SCADA & IoT Platform Development

We develop customized IoT dashboards and analytics platforms that provide real-time insights, performance tracking, and early warning alerts for smarter decision-making.

3

Support, Maintenance & Optimization

We offer ongoing technical support, system maintenance, and performance optimization to ensure long-term reliability, scalability, and efficiency.

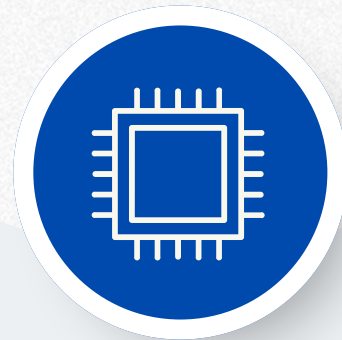


OUR INDUSTRIAL INTERNET OF THINGS (IIOT) ECO SYSTEM



Sectors

Manufacturing
Agriculture
Fisheries
Environment
Utilities



Device Layer

Collect physical data (temperature, vibration, pressure, etc.) and perform local control actions.



Network Layer

Transmits data securely and reliably between devices, gateways, and cloud.



Middleware Layer

Integrates data from various sources, performs local analytics, and ensures interoperability between systems.



Data Layer

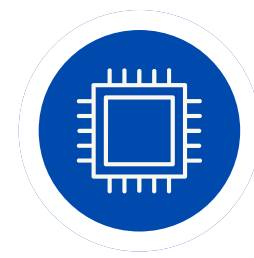
Stores, manages, and analyzes large volumes of industrial data.



Application Layer

Provides insights, decision support, and business value.





DEVICE LAYER

WATER SENSOR

- PH Sensor
- Electro-Conductivity Sensor
- Dissolved Oxygen Sensor
- Turbidity Sensor
- TDS Sensor
- Temperature Sensor
- ORP Sensor
- Selective Ion (Ammonia) Sensor
- Pressure Transmitter
- Ultrasonic Flow and Totalizer
- Ultrasonic / Radar Level Transmitter

ENERGY SENSORS

- Power Meter Measuring
 - Voltage
 - Power
 - Power Factor
 - Frequency
 - Demand
 - Carbon Foot Print

AGRICULTURE SENSOR

- Soil Sensor
 - Temperature
 - Moisture
 - EC
 - PH
 - NPK
- Radiation Sensors
 - Photosynthetically Active Radiation
 - Pyranometers

ENVIRONMENT SENSOR

- Atmospheric Sensors
 - Temperature
 - Humidity
 - Air Pressure
- Precipitation Sensors
 - Rain Detection
 - Rain Intensity
 - Rain Accumulation
- Anemometric Sensors
 - Wind Speed
 - Wind Direction
- Air Quality Sensors
 - Carbon Dioxide, CO₂
 - PM2.5/10
 - Nitrogen Dioxide, NO₂
 - Ozone, O₃
 - Carbon Monoxide, CO

This layer is responsible for detecting, measuring, and transmitting real-world parameters such as temperature, vibration, pressure, humidity, flow rate, or electrical current to higher layers (like the edge or cloud) for processing and analysis.





NETWORK LAYER



The network layer is responsible for transmitting data securely and reliably between devices, gateways, and the cloud. It enables seamless communication using wired or wireless networks such as Ethernet, WiFi, LoRa, or 4G. This layer ensures data integrity, low latency, and encryption while managing communication protocols like MQTT, Modbus, or HTTP to deliver accurate and real-time information across the industrial IoT system.



MIDDLEWARE LAYER



REMOTE TERMINAL UNIT



PLC & HMI

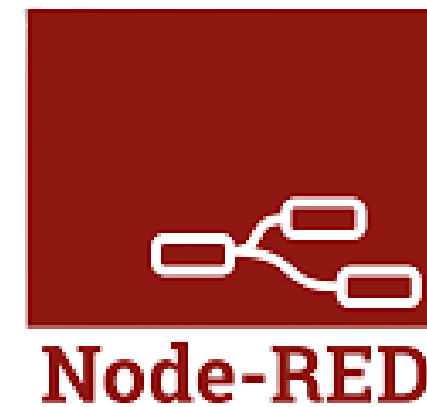


EDGE GATEWAY

Acts as a bridge between field devices and higher-level systems or the cloud. It integrates data from sensors, PLCs, RTUs, and edge devices, performing local processing and analytics. This layer ensures protocol conversion, data standardization, and seamless interoperability across industrial systems.



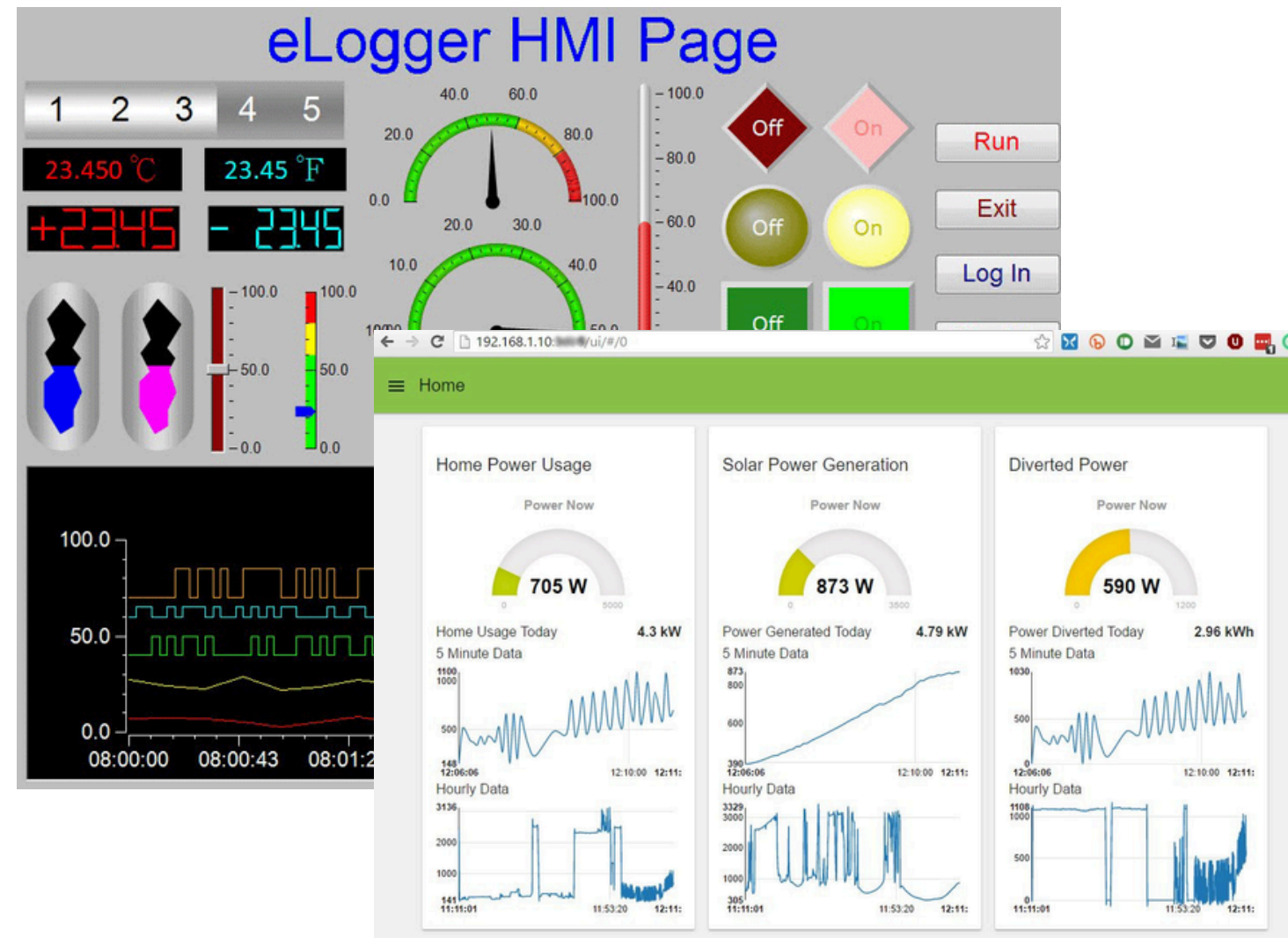
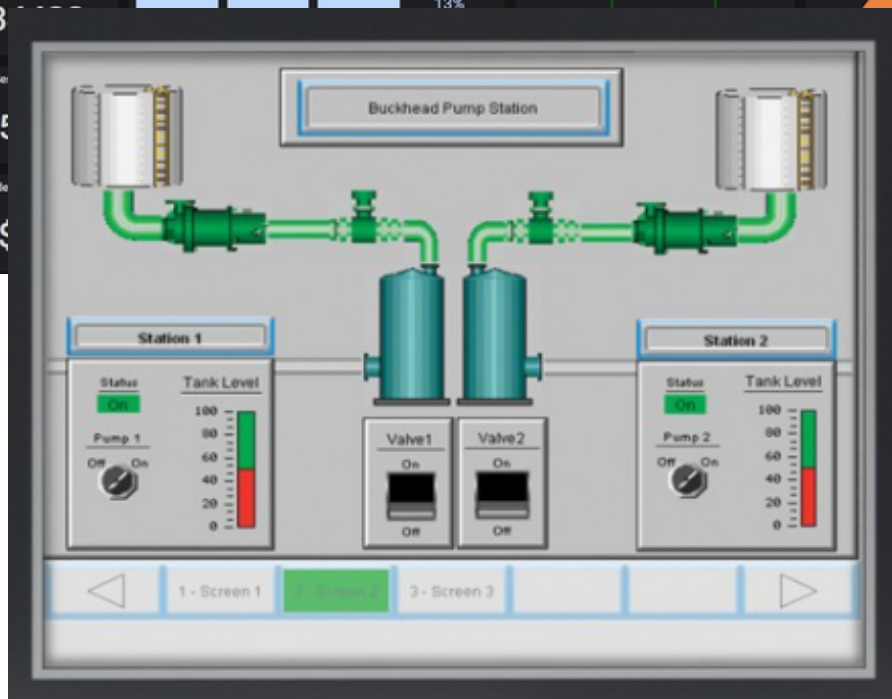
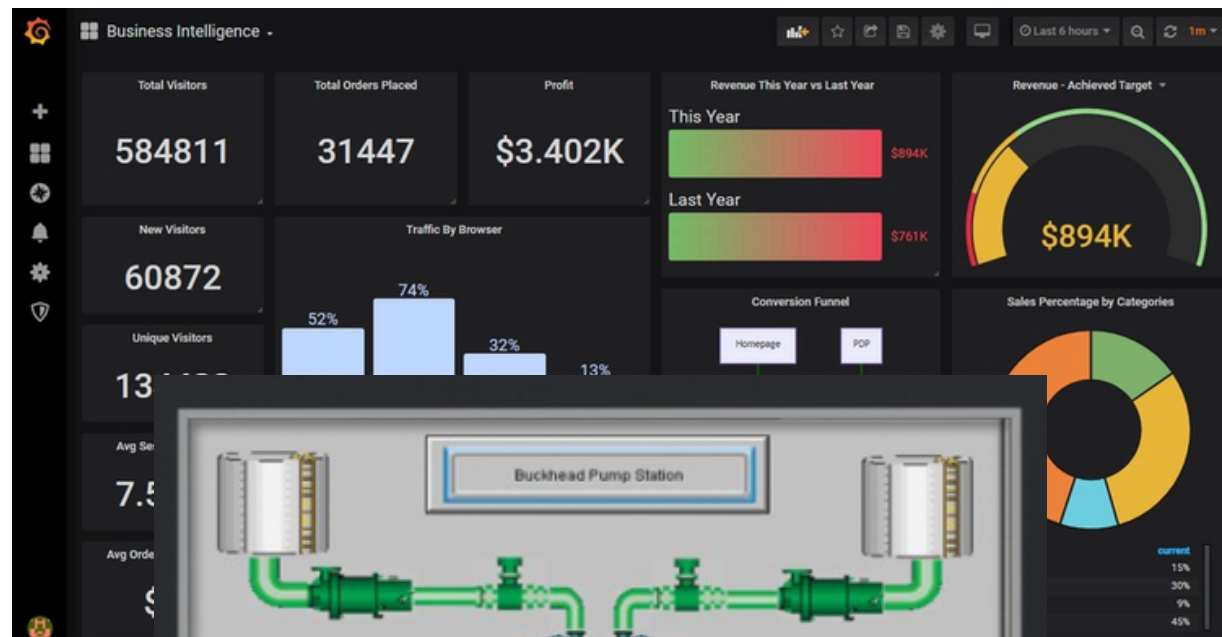
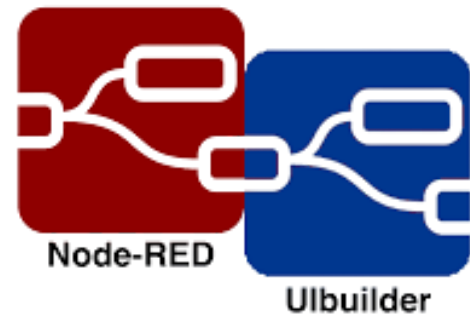
DATA LAYER



Stores, manages, and analyzes large volumes of industrial data. It uses databases or cloud platforms to organize and process information from multiple sources. This layer enables real-time insights, predictive maintenance, and data-driven decision-making.

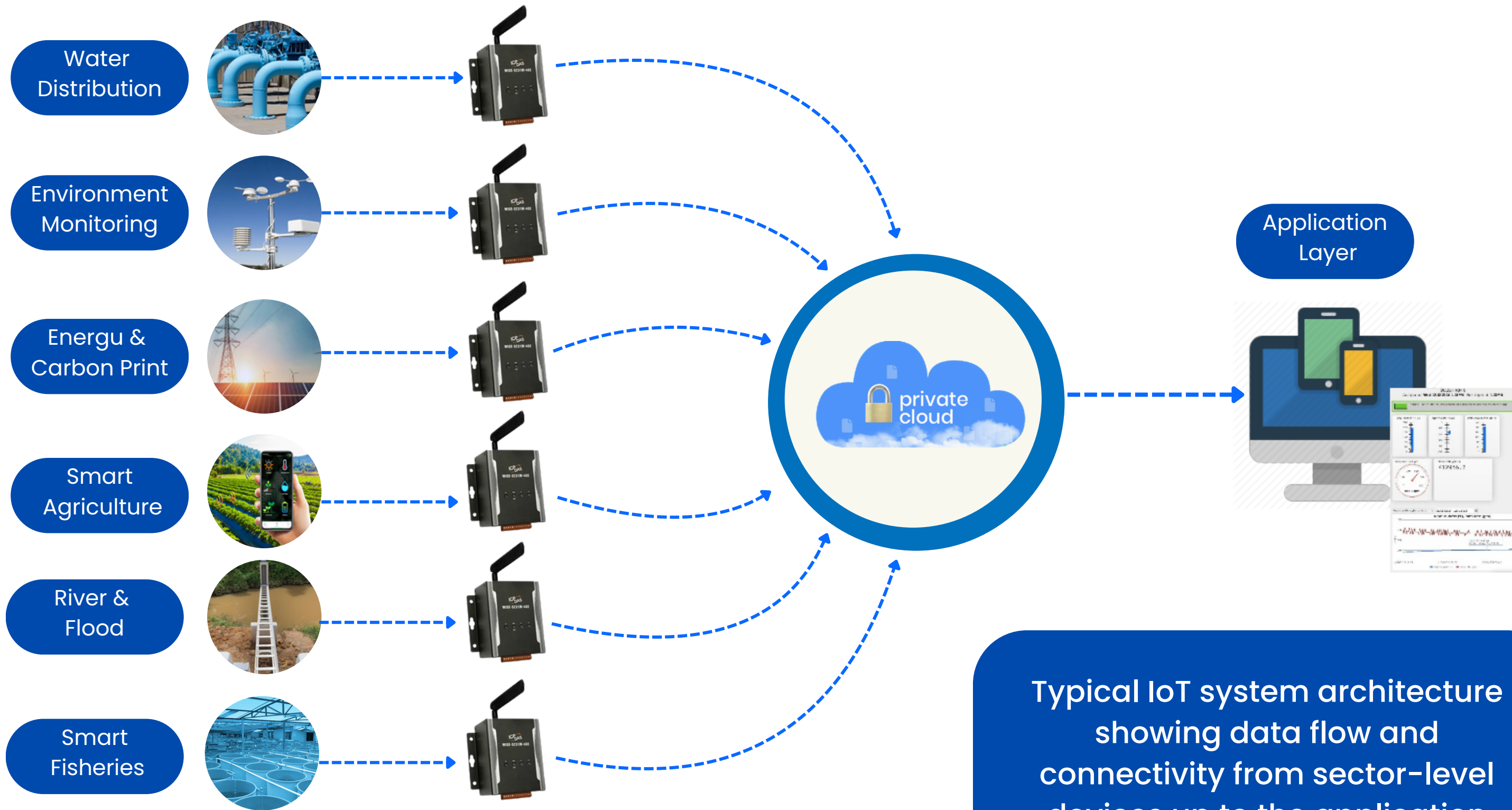


APPLICATION LAYER



The Application Layer (OSI Layer 7) is the top layer where users interact with network services. It converts process data into useful information, providing insights, decision support, and business value.

TYPICAL SYSTEM CONNECTIVITY





PROJECT SUCCESSES SINCE 2004

Turning Vision Into Reality



River NH3 Monitoring Station
(2020 ~ 2022)



Pump House Monitoring
2023 - 2024)



Water Distribution Monitoring
2023 - 2024)



Light House Monitoring
(2004 - 2006)



Weather Station
(2018 - 2019)



Smart Fisheries
(2022~2023)



Hydroponic Plant Factory
(2023 - 2024)



Soil Monitoring
(2023 - 2024)



Indoor Farming System
(2021 - 2022)



Green House Irrigation System
(2024 - 2025)



OUR CLIENTELE



The University of
Nottingham



TASEK CORPORATION BERHAD



Thank You

As the company moves forward, our focus remains on driving innovation, expanding partnerships, and delivering lasting value to our stakeholders. We are grateful for the opportunities and support that have fueled our progress so far. With continued collaboration and commitment, we can achieve even greater success and shape a stronger future together.

We are ready to assist you



AI SMART TECHNOLOGIES (M) SDN BHD

(202501017893(1619307-T))

A-5-05, BLOCK A, LOBBY 2 DAMANSARA INTAN BUSINESS PARK, JALAN SS20/27, 47400 PETALING JAYA, SELANGOR, MALAYSIA



info@aismartsys.com



www.aismartsys.com
