

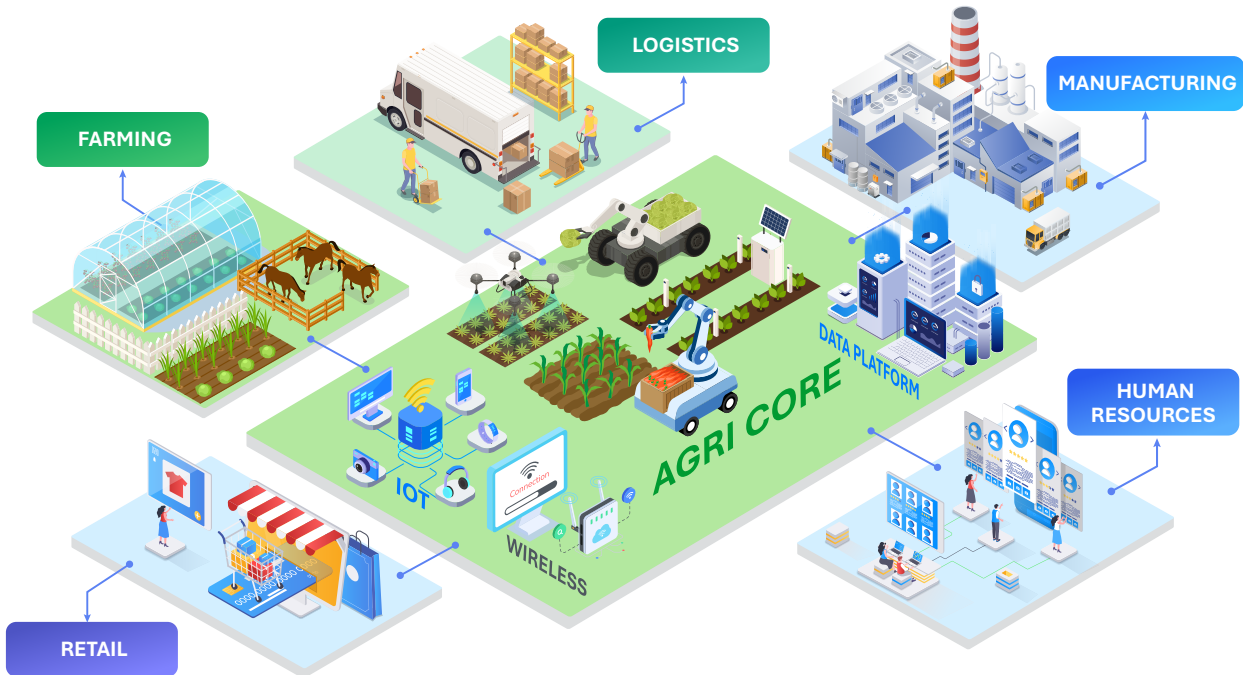
AI Solutions for Agriculture

Farming

- Pest Detection
- Checking the Age and Ripeness of Agricultural Products
- Monitoring & Controlling Agricultural Operating Environments

Manufacturing

- Access Control System
- AI-Based Predictive Maintenance
- Computerized Maintenance Management System (CMMS)
- Personal Protective Equipment (PPE) Detection System



Human Resources

- Automated Dashboard Generation System
- Forecasting and Decision Support System
- Document Intelligence Solution
- Internal Process Support Chatbot
- Market Intelligence & Sourcing Supplier Finder

Retail & Logistics

- Image Monitoring & Analytics for Agricultural Retail Counters
- Automatic Container Loading
- Remote Container Monitoring System



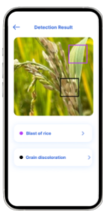
Farming

Pest Detection

An AI, Machine Learning, and IoT sensor-based solution for monitoring and detecting pests and diseases across various environments such as fields, warehouses, greenhouses, and residential areas

KEY FEATURES

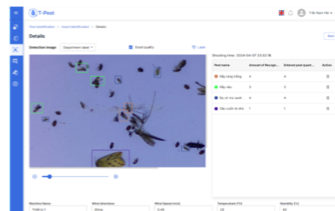
- Continuous real-time pest monitoring at farms
- Early detection of potential pest and disease outbreaks before they spread
- Support for zoning, alerts, and timely intervention decision-making
- Shift from reactive handling → proactive risk management



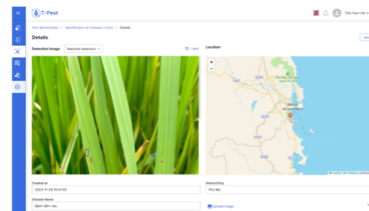
Display diseases



Control measures



Pest Identification



Rice Disease Identification



Statistical Report

BENEFITS

- Support pest management throughout the entire farming season
- Reduce reliance on manual inspection and personal experience
- Lower crop protection chemical costs and minimize the risk of crop loss

APPLICATIONS

Crop cultivation

Farming operations



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Checking the Age and Ripeness of Agricultural Products

A solution that applies sensor technology, artificial intelligence (AI), and acoustic analysis to evaluate the ripeness and quality of agricultural products in real time

KEY FEATURES

- Evaluate the age, ripeness, and quality of agricultural products using on-site measuring devices
- Combine sensors and AI to analyze physical signals, replacing subjective manual assessment
- Deliver fast, consistent results that can be standardized at scale

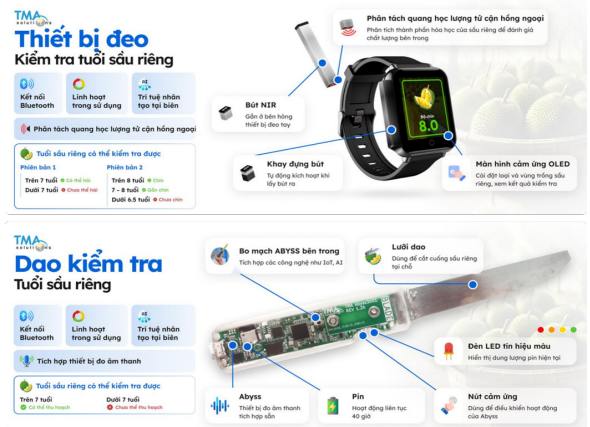
BENEFITS

- Standardize quality criteria for domestic processing and export to high-standard markets
- Reduce reliance on personal experience
- Minimize risks such as shipping products that are not fully ripe or facing quality complaints from import markets

APPLICATIONS

Processing and sorting stages

Pre-export inspection

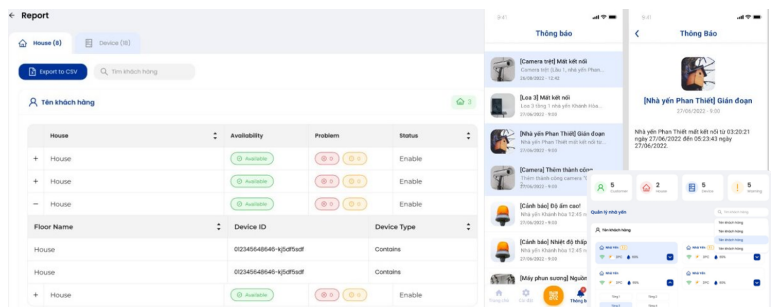


Monitoring & Controlling Agricultural Operating Environments

A solution that applies IoT, smart sensors, and AI to monitor key environmental factors such as temperature, humidity, air quality, and operational activities in agricultural production areas

KEY FEATURES

- A centralized monitoring platform that helps track, control, and optimize environmental conditions across agricultural production areas
- Real-time environmental data collection to enable early risk detection and support operational decision-making



BENEFITS

- Improve monitoring by tracking environmental conditions that directly affect crop quality and productivity
- Reduce reliance on manual inspections and standardize operating conditions across different areas
- Provide environmental data as inputs for quality control and traceability

APPLICATIONS

Farms

Processing areas

Storage warehouses

Production areas



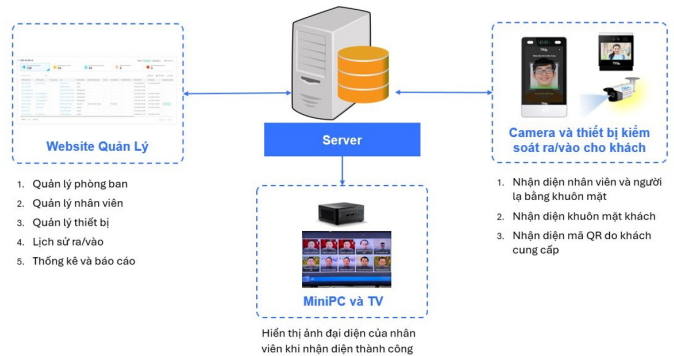
Manufacturing

Access Control System

A solution that helps businesses enhance security, automate entry and exit processes, and ensure workplace safety

KEY FEATURES

- Multi-factor authentication: facial recognition, QR code, and access cards
- Automatic door opening and health screening (mask detection, body temperature)
- Centralized management of employee, visitor, and identity data
- Stable operation even during network outages



BENEFITS

- Enhanced security: prevent unauthorized access and ensure safety for critical areas
- Fast and contactless entry/exit: reduce waiting time and provide a more convenient experience for employees
- Flexible scalability: easy integration with existing control systems, suitable for various business models

APPLICATIONS

Server rooms

Vaults

Events / conference centers

Industrial zones

Offices / high-rise buildings

Premium residential areas

AI-Based Predictive Maintenance

A solution that applies AI and IoT to monitor equipment, predict failures, and optimize maintenance planning

KEY FEATURES

- Digitize sensor data such as vibration, sound, and temperature
- Multi-channel alerts (Email/SMS/Call) when anomalies are detected
- Use AI to analyze data and predict potential failure timing
- Automatically schedule maintenance based on actual machine conditions



BENEFITS

- Reduce unexpected downtime
- Lower maintenance costs
- Extend equipment lifespan
- Improve operational safety and efficiency

Dashboard Overview

TOTAL DEVICE: 7 (devices) | ACTIVE: 7 (devices) | WARNING: 1 (Gen AI)

Device Name	Gen AI Alarm	Trial AI Alarm	Protocol	Temperature (°C)	Humidity (RH %)	Velocity X (mm/s)	Velocity Y (mm/s)	Velocity Z (mm/s)
Motor-001	OK	OK	MQTT edge-central	84.0141	45.946	5.3237	5.3091	5.3489
Motor-002	OK	OK	MQTT edge-central	27.8079	41.183	2.3251	2.152	2.1141
Motor-003	OK	OK	OPC-UA edge-central	33.67	47.1555	2.2724	2.4284	2.2782
Motor-004	OK	OK	OPC-UA edge-central	29.2564	40.4901	2.4223	2.4407	2.3551

APPLICATIONS

Machinery systems

Industrial motors

Conveyor systems

Automated production lines

Technical infrastructure

Power stations



Computerized Maintenance Management System (CMMS)

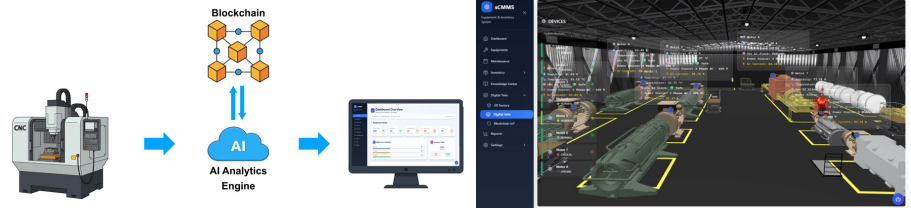
A digital platform solution that centralizes and streamlines factory operations management

KEY FEATURES

- 3D simulation (Digital Twin) for interaction and data traceability
- Blockchain security to prevent tampering with operational logs and IoT data
- AI-powered data analysis to support troubleshooting and incident resolution
- Real-time monitoring of equipment, warehouses, and production status

BENEFITS

- Extend equipment lifespan
- Optimize maintenance costs
- Increase production productivity
- Enable faster decision-making



APPLICATIONS

Manufacturing plants

Industrial zones

Logistics

Warehouses

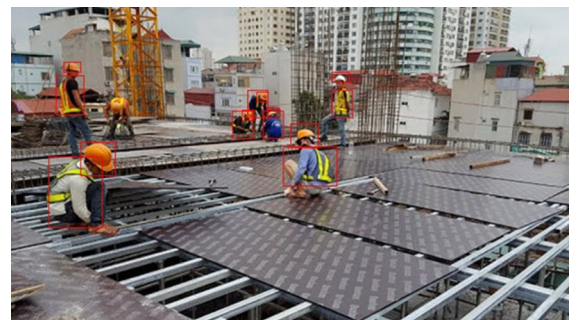
Buildings and data centers

Personal Protective Equipment (PPE) Detection System

A solution that uses Edge AI technology to monitor compliance with safety regulations in real time

KEY FEATURES

- Improve workplace safety with AI cameras that automatically detect dangerous behaviors or incidents in real time and trigger access control or emergency responses
- Real-time detection of employee and vehicle movements
- Detection of compliance with personal protective equipment (PPE) regulations (helmets, uniforms, safety shoes)
- Analyze and alert abnormal activities and unauthorized access to restricted or hazardous areas



BENEFITS

- Help reduce operational risks
- Reduce incident response time
- Strengthen compliance monitoring across facilities without increasing workload

APPLICATIONS

Warehouses

Industrial zones



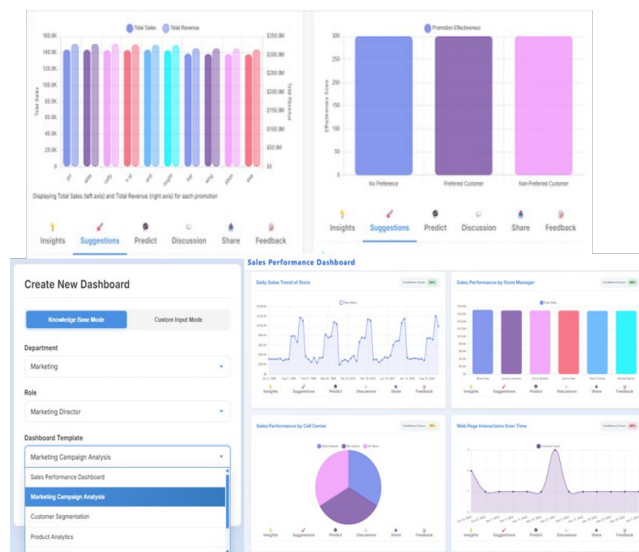
Human Resources

Automated Dashboard Generation System

A solution that helps collect, process, and visualize data in real time, enabling performance monitoring and faster decision-making

KEY FEATURES

- Transform complex data into clear, actionable insights, helping leaders identify trends, make predictions, and take confident actions through AI-powered dashboards and real-time intelligent recommendations
- Create interactive dashboards to visualize data, trends, and forecasts
- Detect anomalies and provide contextual analysis with actionable recommendations
- Forecast trends and outcomes to enable proactive planning
- Query data and receive personalized insights through an AI chatbot



BENEFITS

- Save decision-making time with clear and actionable insights from complex data systems
- Make smarter and faster decisions with AI-driven recommendations
- Improve performance and reliability with accurate forecasts and planning

APPLICATIONS

Manufacturing plants

Offices

Forecasting and Decision Support System

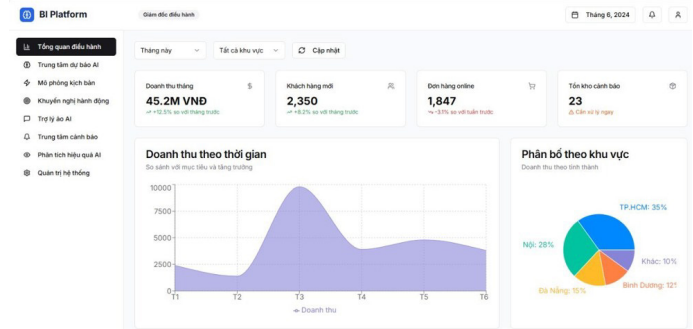
A solution that builds an AI-powered forecasting system integrated directly with the enterprise's digital data warehouse

KEY FEATURES

- Apply advanced AI algorithms and forecasting models trained on standardized real-time data
- Combine domain knowledge and business rules to improve model accuracy
- Provide BI dashboards integrated with AI recommendations to support faster, optimized, and data-driven decision-making

BENEFITS

- Accurately and timely forecast market demand, enabling proactive business planning
- Significantly reduce decision-making time
- Improve inventory management, reducing overstock and stock shortages
- Enhance operational efficiency and profitability across the entire retail supply chain



APPLICATIONS

Agricultural export companies

Warehouses

Document Intelligence Solution

An intelligent document management system that enables businesses to process documents faster, smarter, and more accurately by leveraging multimodal LLMs, self-learning agents, and proactive workflow orchestration. The solution helps optimize document-related business operations while reducing manual effort

KEY FEATURES

- Extract structured data from complex and unstructured documents
- Automatically map data into ERP, CRM, or custom platforms
- Detect errors and suggest corrections in real time
- Support scanned images and various digital file formats

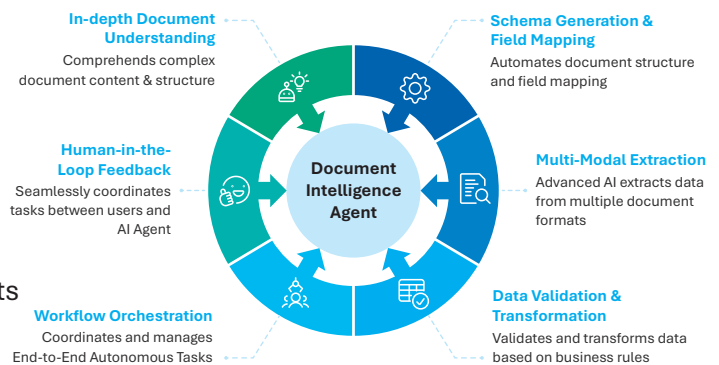
BENEFITS

- Reduce manual workload by automating data entry and data validation
- Improve data accuracy through intelligent error detection
- Accelerate operations through seamless system integration

APPLICATIONS

Offices

Warehouses



Internal Process Support Chatbot

A solution that enables businesses to build AI-powered support workflows that automatically respond to users based on existing knowledge bases, while seamlessly integrating with websites, applications, and social media channels

KEY FEATURES

- Ingest and integrate knowledge bases from multiple data sources
- Visual chatbot workflow builder with a drag-and-drop interface
- AI agent framework for task-specific automation
- Multi-platform integration with websites and social media

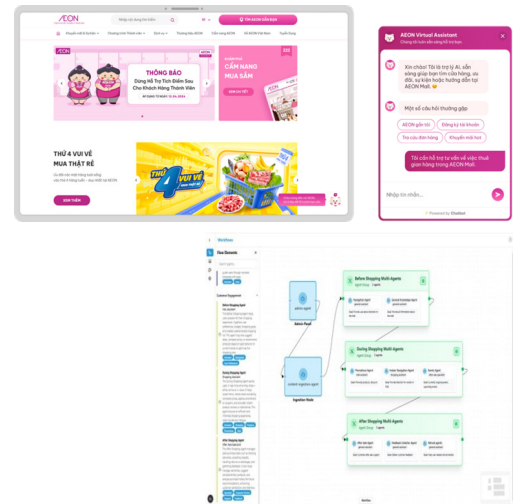
BENEFITS

- Strengthen brand identity with customizable chatbot interfaces
- Enhance customer service with instant 24/7 support
- Reduce manual workload through intelligent automation

APPLICATIONS

Human Resources

IT Helpdesk



Market Intelligence & Sourcing Supplier Finder

A solution that helps quickly identify and select suitable suppliers by searching internal databases and the internet, evaluating and ranking vendors to support smarter and faster sourcing decisions

KEY FEATURES

- Collect market data from multiple sources, including commodities, economics, policies, and geopolitics
- Assess risks and their potential impact on the business
- Provide actionable strategic recommendations based on analyzed data
- Deliver real-time reports and alerts to support timely decision-making

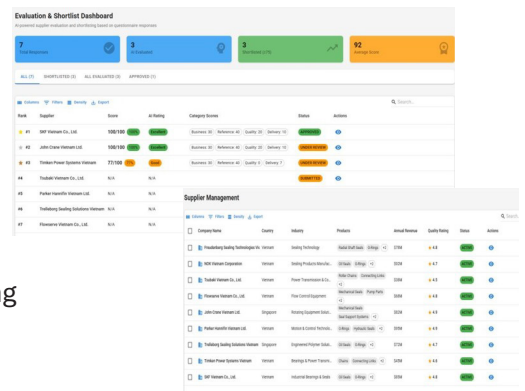
BENEFITS

- Reduce supplier registration and approval time from days to minutes, accelerating the onboarding process
- Ensure accurate, complete, and validated supplier information to improve data quality
- Quickly identify top-performing suppliers and improve overall procurement efficiency

APPLICATIONS

Strategic procurement

Market research and analysis





Retail & Logistics

Image Monitoring & Analytics for Agricultural Retail Counters

An AI-powered solution that collects and analyzes customer data in real time to optimize store operations and improve business performance

KEY FEATURES

- People counting
- Management dashboard
- Heatmap visualization
- Demographic analysis
- Dwell time analysis

BENEFITS

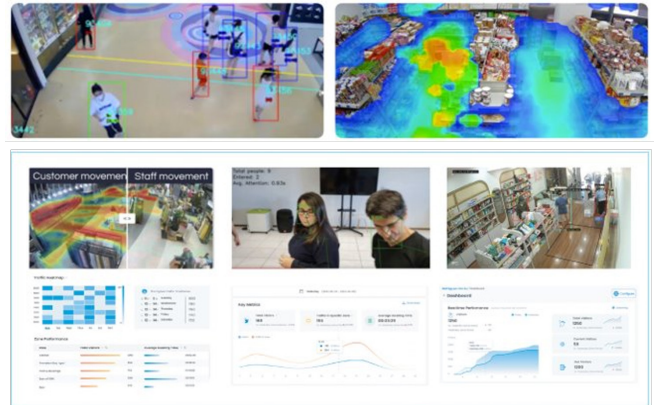
- Improve operational efficiency and counter management
- Gain deeper insights into customer behavior
- Support faster and data-driven decision-making
- Enhance customer shopping experience

APPLICATIONS

Agricultural product counters in supermarkets and modern markets

Agricultural product display areas

Food retail chains



Automatic Container Loading

A solution that optimizes container loading plans by ensuring balanced weight distribution and optimal arrangement. It reduces wasted space and manual effort, prevents damage, and speeds up the loading process

KEY FEATURES

- Optimize cargo placement inside containers
- Support constraints such as weight, volume, and dimensions
- Minimize empty space and maximize loading efficiency
- Support multiple containers within a single shipment

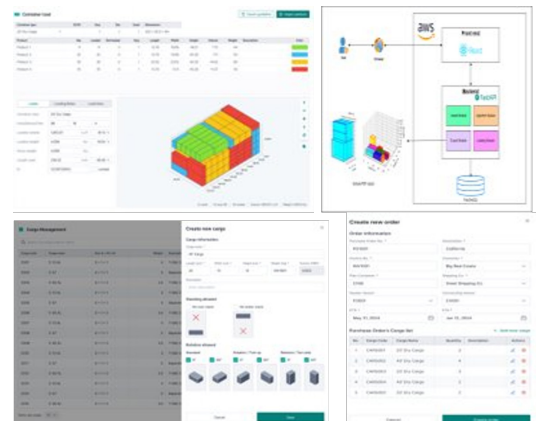
BENEFITS

- Maximize space utilization and reduce unused capacity
- Lower transportation costs and minimize cargo damage
- Accelerate loading and cargo handling processes

APPLICATIONS

Agricultural export companies

Cold chain supply networks



Remote Container Monitoring System

A solution that leverages IoT technology and 4G connectivity to monitor container conditions in real time. It enables logistics teams to track temperature, humidity, and container location from anywhere, reducing the risk of cargo damage and improving operational efficiency

KEY FEATURES

- Continuous collection of temperature, humidity, and container status data
- Instant alerts when operating parameters exceed safety thresholds
- Remote monitoring and control via web and mobile applications
- Digital storage of complete historical data for traceability

BENEFITS

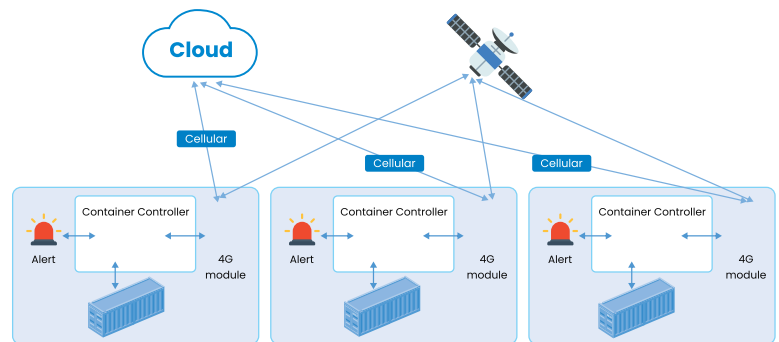
- Effective remote monitoring
- Automatic alerts
- Reduced risk of cargo damage
- Full visibility and operational control
- Cost optimization

APPLICATIONS

Seaports and inland container depots (ICDs)

Cold storage facilities for retail and distribution centers

Cold chain logistics for food and pharmaceuticals



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