UEM EDGENTA  N.XT

asseto Insights

# Actionable Insights for Building Excellence

# Introduction to UEM Edgenta: Tech-Enabled Company

**EDGENTA**
HEALTHCARE SUPPORT

- Over 300 hospitals in Malaysia, Singapore, and Taiwan
- Provides non-clinical healthcare support and technology solutions to public and private healthcare institutions

**EDGENTA**
PROPERTY & FACILITY SOLUTIONS

- Over 500 buildings & facilities under our care
- GBI Certified property & facilities manager
- Present in Malaysia, UAE, KSA
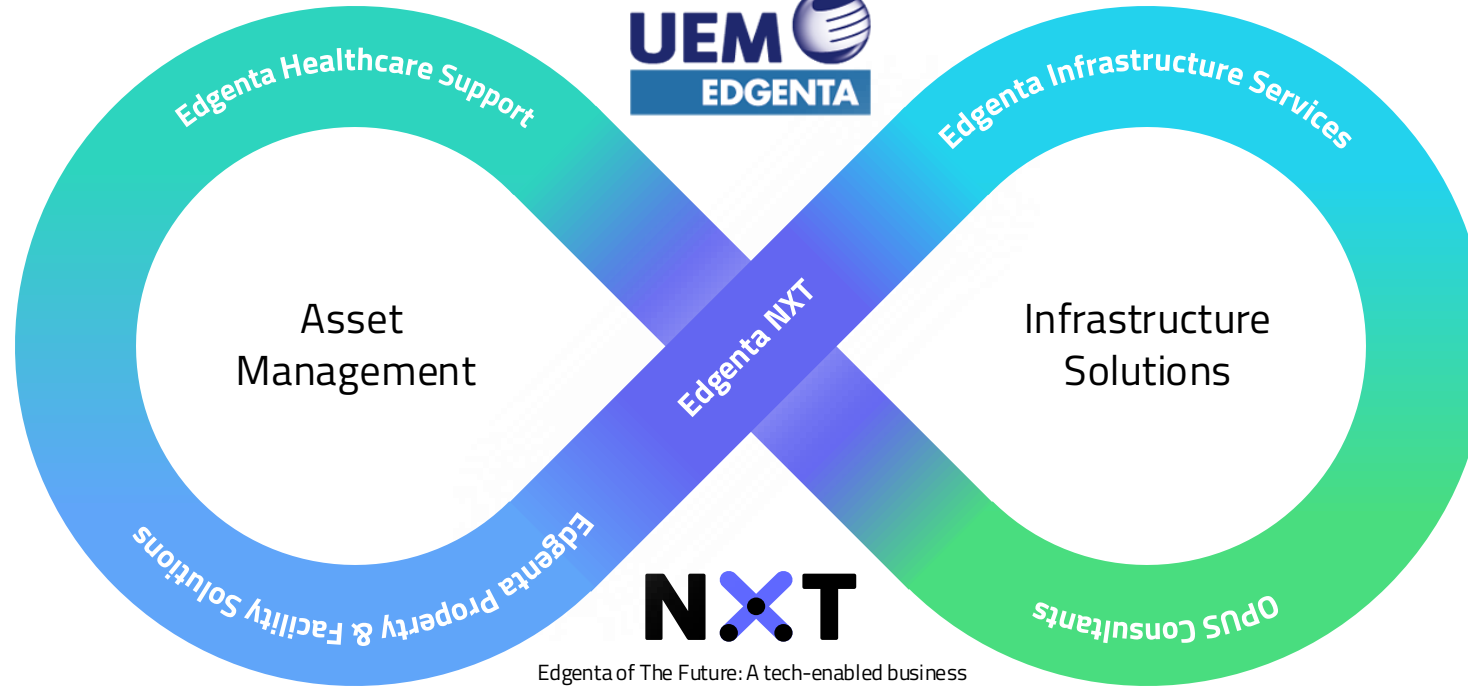
**EDGENTA**
INFRASTRUCTURE SERVICES

- Manages the maintenance of 3,500 KMs of highways & state roads
- Present in Malaysia & Indonesia

**OPUS**
CONSULTANTS
AN EDGENTA COMPANY

- Over RM100 billion worth of projects delivered in Malaysia
- Multi-disciplinary infrastructure and asset consultancy services and project management in roads and rails

**UEM EDGENTA**

Edgenta Healthcare Support

Edgenta Infrastructure Services

Edgenta Property & Facility Solutions

OPUS Consultants

Asset Management

Infrastructure Solutions

Edgenta NXT

**NXT**

Edgenta of The Future: A tech-enabled business enabling Digital Transformation and productisation of proprietary SaaS/PaaS solutions for Edgenta

| C&C Deployment With Digital Twin | Smart Cleaning & Waste Mgmt. | Smart Security & Surveillance | IoT For Smart Building | Robotics & Drones | Sustainability & ESG | Energy Management |

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# With an International Client Portfolio Across 6 Countries



## Malaysia
EDGENTA PROPERTY & FACILITY SOLUTIONS
EDGENTA INFRASTRUCTURE SERVICES
EDGENTA HEALTHCARE SUPPORT
OPUS CONSULTANTS AN EDGENTA COMPANY

## Singapore
EDGENTA HEALTHCARE SUPPORT

## Taiwan
EDGENTA HEALTHCARE SUPPORT

## Indonesia
EDGENTA INFRASTRUCTURE SERVICES

## UAE
EDGENTA PROPERTY & FACILITY SOLUTIONS

## KSA
Edgenta Arabia Limited

Notable Clients

KEMENTERIAN KESIHATAN MALAYSIA · KLCC · TRX TUN RAZAK EXCHANGE · Changi General Hospital · PLUS · JKR · MOT · KKR · Taipei Medical University Hospital · DUBAI GOLF · EMIRATES

Khoo Teck Puat Hospital · PRIME MINISTER'S OFFICE PUTRAJAYA, MALAYSIA · SILTERRA · URBAN REDEVELOPMENT AUTHORITY · Shangri-La hotel SINGAPORE · CIMB BANK · JUMEIRAH GOLF ESTATES · TOPGOLF DUBAI · ENBD REIT Managed by Emirates NBD Asset Management · wasl properties

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**UEM EDGENTA**  **NXT**

## Built Environment Digital Transformation Experts

**Built Environment as a Service (BEaaS)**

Seamless Asset
Lifecycle Management

- OPEX BASED
- CRADLE-GRAVE-CRADLE
- MANAGED SERVICES

**Integrating IT/OT**
*Information Technology/
Operational Technology*

Fusing Assets with
Innovative Technologies

- BMS/EMS INTEGRATION
- IOT DEPLOYMENT
- PREDICTIVE MAINTENANCE

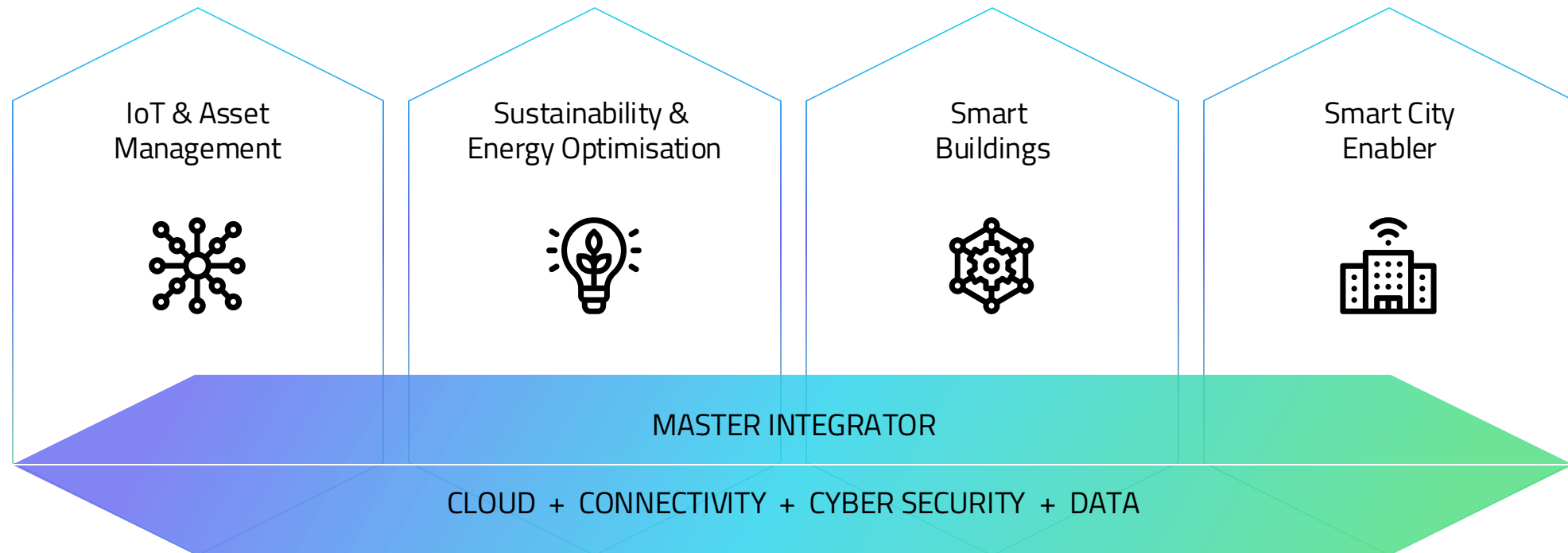**Enabling Smart & Sustainable Cities**

Modernising Assets &
Ecosystems for a Greener Future

- ENERGY OPTIMISATION
- CARBON NEUTRALITY
- SUSTAINABLE BUILDINGS

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# Asseto Overview

## Use Cases


Environmental Monitoring


Smart & AI Driven Buildings


5G In-Building Solutions


AI-led Energy Optimisation


Green Building Compliance

Powered by **asseto**

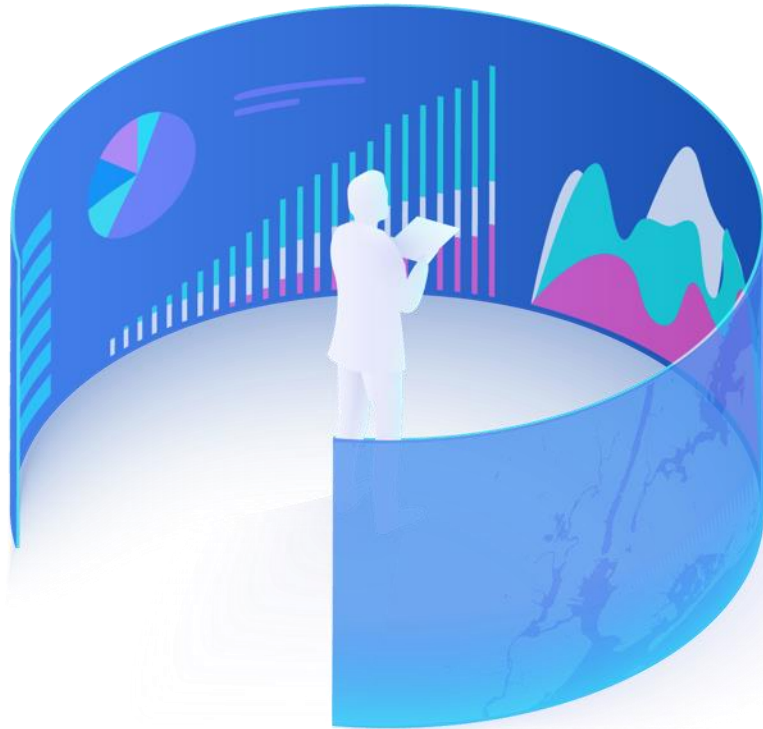| asseto BCA | asseto CMMS | asseto ePTW | asseto BMS | asseto IoT | asseto Energy AI | asseto Insights |
|---|---|---|---|---|---|---|
| Ensuring structural integrity includes routine surveys, deficiency tracking, and automated workflows. | Proactive and predictive maintenance with comprehensive asset lifecycle management. | Oversee and monitor the approval process for high-risk maintenance activities, ensuring adherence to safety protocols. | Centralised control of HVAC, lighting, and critical systems with real-time monitoring and alerts. | Scalable IoT platform for seamless device and sensor integration across protocols. | AI-driven energy management with real-time consumption tracking and optimisation. | Actionable insights and customisable dashboards for enhanced building performance and real-time monitoring. |

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# asseto
# Insights

- Transform raw data into actionable insights
- Anticipate and address issues proactively
- Gain critical insights for asset and workforce optimisation

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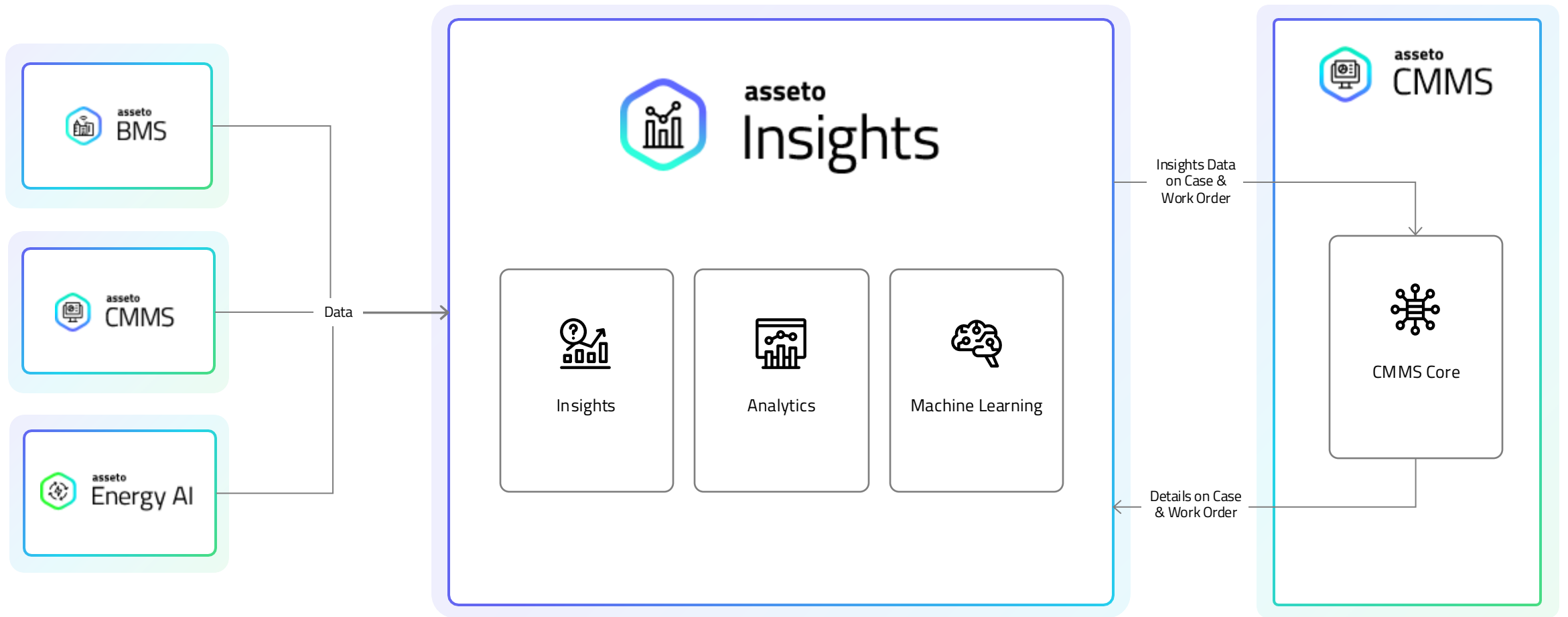
# Intelligent, Context-Rich Insights For Data-Led O&M

Leverage your organisation's existing stack and connect your data, tools, and teams to move from scheduled maintenance to data driven maintenance
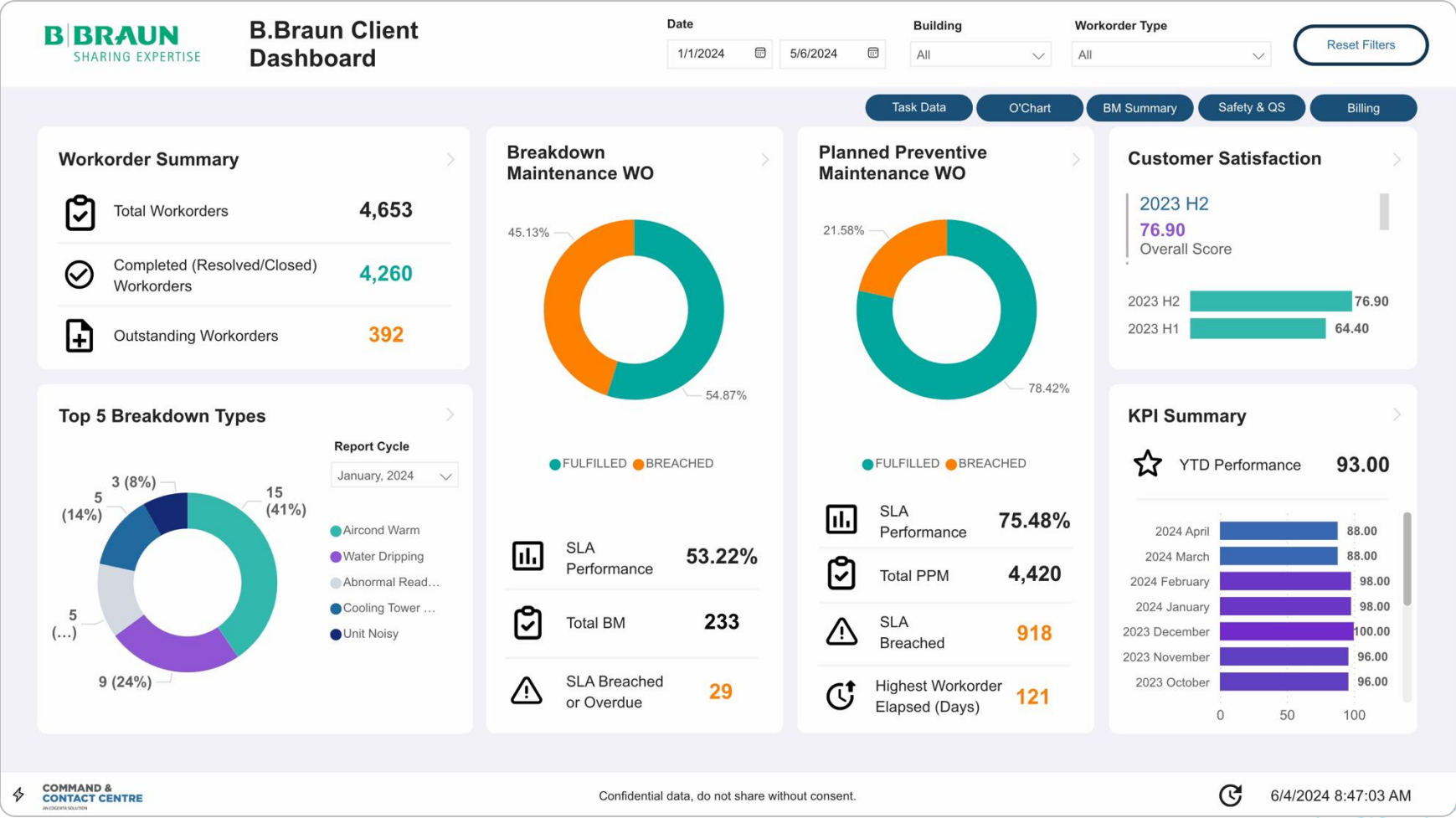
USE CASE

# Tenant dashboards: comprehensive insights for performance and satisfaction

- Work order breakdown and sla fulfilment analysis
- Customer satisfaction and KPI score tracking
- Agent performance metrics and insights
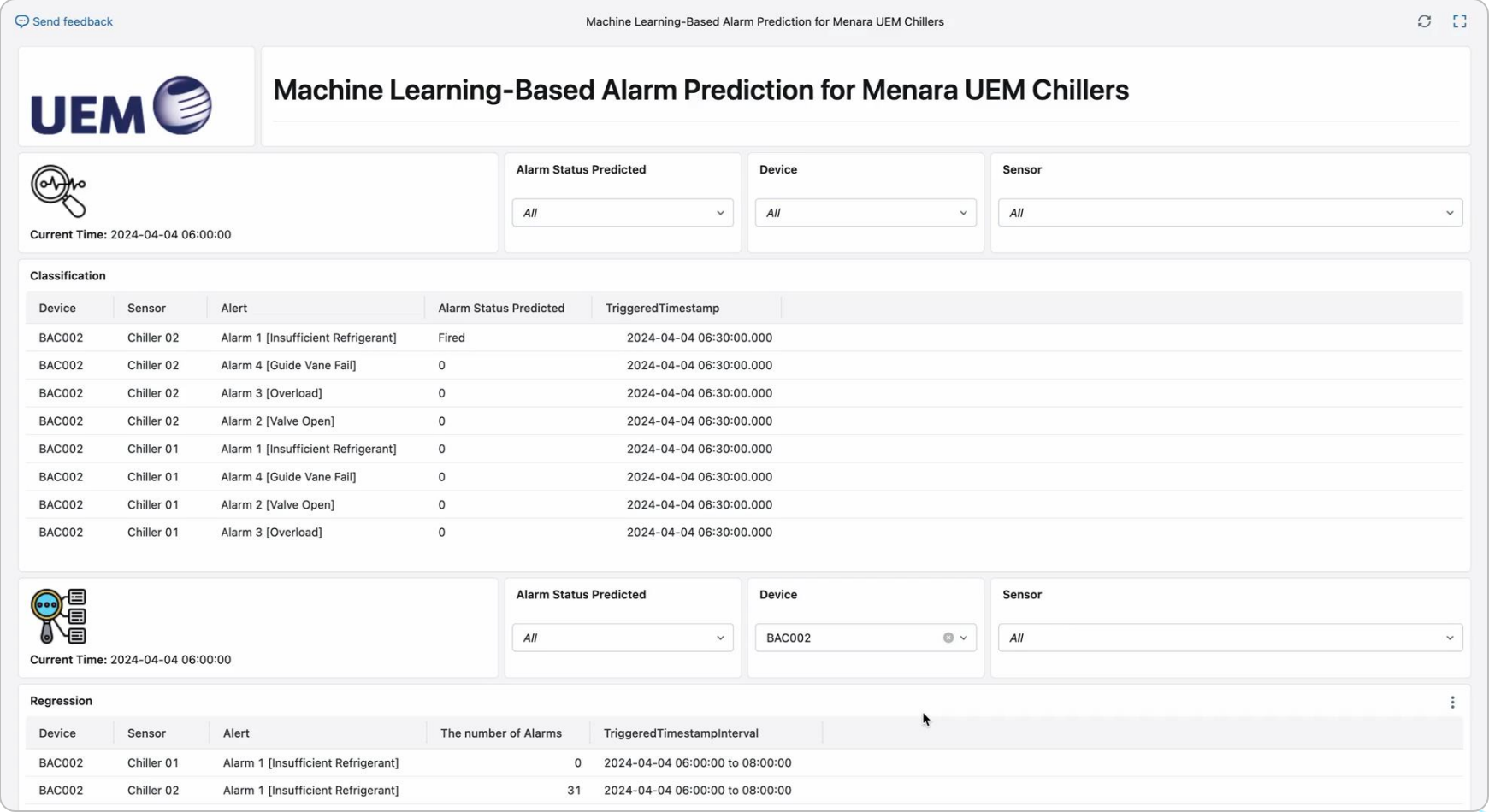
## Asseto predictive alarms: early warnings and performance insights for chillers

- Predictive alarm system using machine learning for early warnings
- Detailed alarm analytics with interactive charts and root cause insights
- Performance optimisation and integration with BMS

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**Machine Learning-Based Alarm Prediction for Menara UEM Chillers**

Send feedback

**Current Time:** 2024-04-04 06:00:00

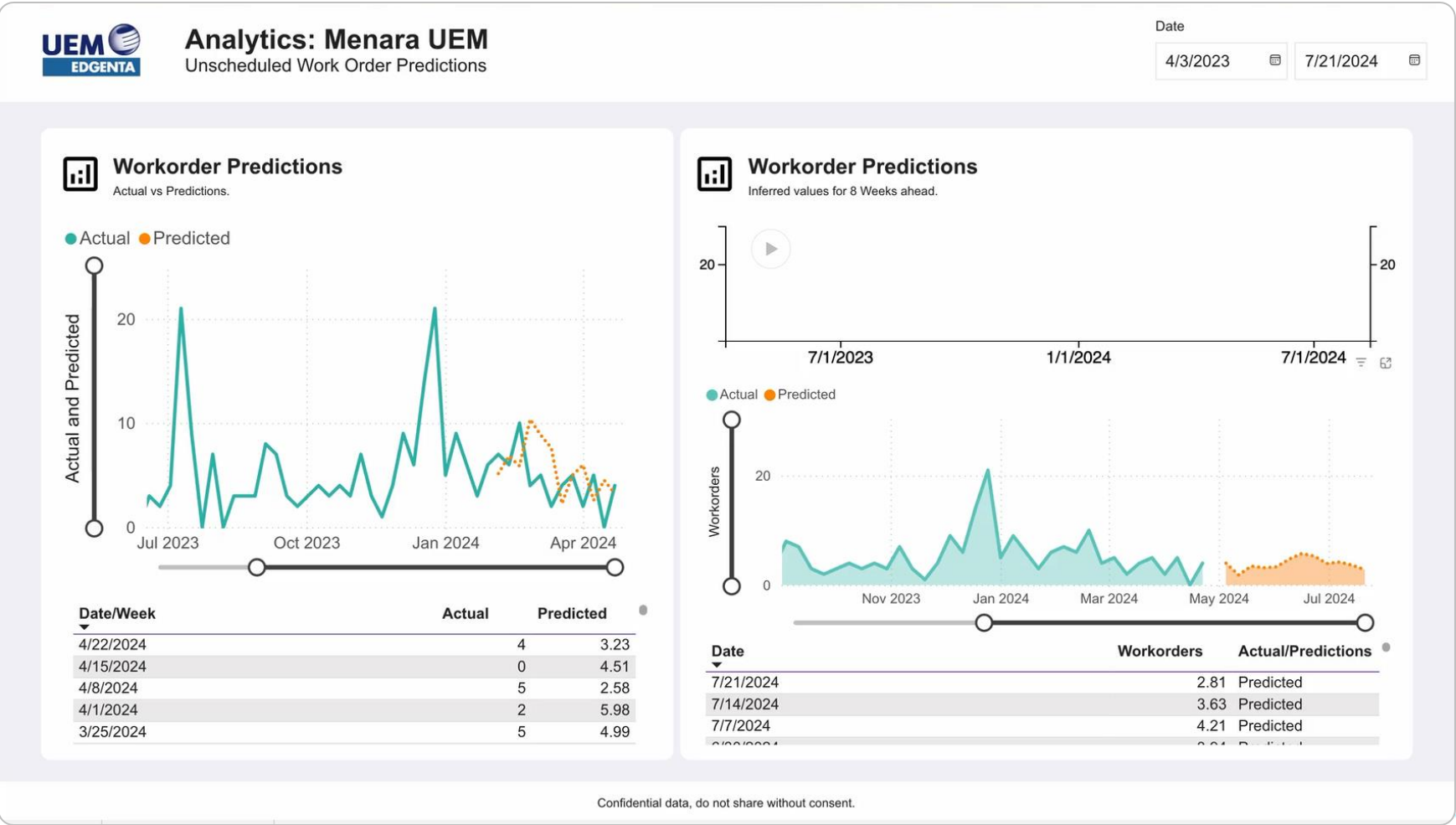| Alarm Status Predicted | Device | Sensor |
|---|---|---|
| All | All | All |

**Classification**

| Device | Sensor | Alert | Alarm Status Predicted | TriggeredTimestamp |
|---|---|---|---|---|
| BAC002 | Chiller 02 | Alarm 1 [Insufficient Refrigerant] | Fired | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 02 | Alarm 4 [Guide Vane Fail] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 02 | Alarm 3 [Overload] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 02 | Alarm 2 [Valve Open] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 01 | Alarm 1 [Insufficient Refrigerant] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 01 | Alarm 4 [Guide Vane Fail] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 01 | Alarm 2 [Valve Open] | 0 | 2024-04-04 06:30:00.000 |
| BAC002 | Chiller 01 | Alarm 3 [Overload] | 0 | 2024-04-04 06:30:00.000 |

**Current Time:** 2024-04-04 06:00:00

| Alarm Status Predicted | Device | Sensor |
|---|---|---|
| All | BAC002 | All |

**Regression**

| Device | Sensor | Alert | The number of Alarms | TriggeredTimestampInterval |
|---|---|---|---|---|
| BAC002 | Chiller 01 | Alarm 1 [Insufficient Refrigerant] | 0 | 2024-04-04 06:00:00 to 08:00:00 |
| BAC002 | Chiller 02 | Alarm 1 [Insufficient Refrigerant] | 31 | 2024-04-04 06:00:00 to 08:00:00 |

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## Asseto unscheduled WO predictions: proactive maintenance and efficiency insights

- Predictive maintenance for unscheduled work orders using machine learning
- Comprehensive analytics on work order trends and patterns
- Optimisation of maintenance operations and resource allocations

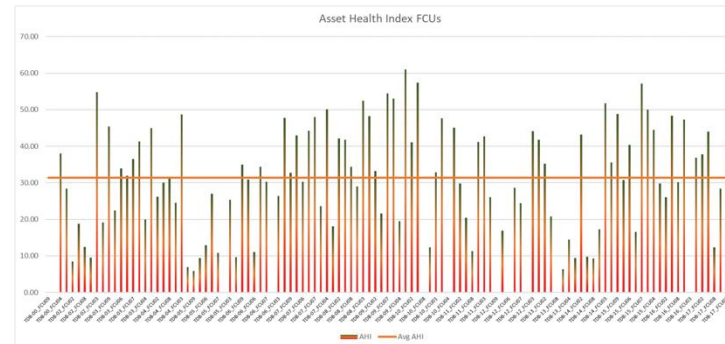# Client Showcase

## FCU Performance Analysis

Asseto intelligence was implemented as the core decision system on driving data led O&M to monitor and manage asset performance for a portfolio of around 100+ FCUs.



Asset Health Index FCUs



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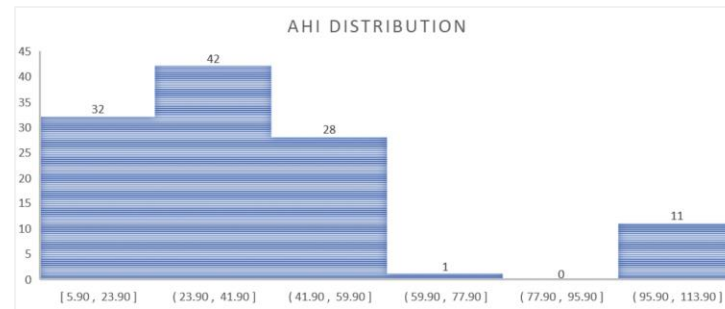
**CAPABILITIES & SOLUTIONS PROVIDED**

1. Analysis of all FCUs in relation to 3 key outcomes:
   a. Energy Efficiency
   b. Reliability
   c. Thermal Comfort
2. Utilised forecasting model to derive the position of Cooling Valve for each of the FCUs for each specific time.
3. Based on the proprietary Asset Health Index, the 20 Worst Performing FCUs are identified, with specific assessment recommended to the engineering team
4. Enabled UEM Edgenta to move from scheduled maintenance to data led maintenance, with direct integration and recommendation from Asseto Intelligence to Asseto CMMS's Work Order Management system.

# NXT
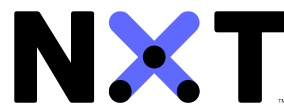
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