UEM Edgenta
pursues revolution to power better tech solutions

Syahrunizam: Technology-driven platforms and solutions form the backbone of our offerings to the market

For UEM Edgenta Bhd, the pandemic that has shaken the world this year has weighed down its performance amid an unusually challenging operating environment. But that has not stopped the asset management and infrastructure solutions company from continuing to deliver value and best-in-class services to its clients.

That is particularly important as its digital healthcare solutions are powering critical healthcare infrastructure nationwide, playing a crucial part in front-line efforts to contain the spread of Covid-19.

"Technology-driven platforms and solutions form the backbone of our offerings to the market. In addition, our ability to be resilient, agile and adaptable in our approach to delivering continued services to our clients is proven by the contracts secured amid the pandemic," says UEM Edgenta managing director and CEO Syahrunizam Samsudin.

Syahrunizam adds that the company is in the process of developing a Covid-19 strategy playbook that will enable it to maximise the impact of its contributions towards national recovery efforts, both in terms of providing essential front-line services and delivering innovative solutions.

Among the company's digital healthcare solutions that took centre stage in 2020 is its Crisis Preparedness and Resource Centre (CPRC) Hospital System. According to the company, CPRC, under the Medical Development Division of the Ministry of Health, has been leveraging this solution to connect all hospitals and quarantine centres that are caring for Covid-19 patients.

Providing real-time monitoring and updates, the CPRC Hospital System dashboard is an efficient tool for managing capacity utilisation across the ministry's network of hospitals. It also facilitates the management of resources such as personal protective equipment, manpower, laboratories as well as patient details.

The CPRC Hospital System is one of many digital healthcare solutions managed by the company, alongside its UETrack™ solution, which is designed to be a complete and efficient management system for hospitals and healthcare facilities. UETrack™ offers uptime optimisation, downtime management, predictive maintenance and data analytics as among its key features.

UETrack™ is in use across a network of 34 public hospitals in Malaysia as well as 32 top private hospitals, including Pantai Hospital Kuala Lumpur, Gleneagles Hospital Penang, Pantai Hospital Penang, Pantai Hospital Ipoh, Cardiac Vascular Sentral Kuala Lumpur, Tung Shin Hospital, KPJ Kajang Specialist Hospital, Mahkota Medical Centre, Oriental Melaka Straits Medical Centre and Thomson Hospital Kota Damansara.

All solutions under UETrack™ come with multi-level dashboards, which provide actionable data visualisation for technicians, supervisors, engineers, managers and executive management. The module comprises multiple solutions that clients can choose from to deploy at each asset.

Each of the 66 Malaysian hospitals using UETrack™ has at least one functioning solution under the module in use.

These solutions include a toilet demand inspection system that manages hygiene upkeep on a needs basis to drive efficiency; a unified clocking system to manage large workforce attendance across multiple sites; and a set of Internet of Things (IoT) solutions that include Chiller Monitoring Systems, Ambulance Monitoring Systems and Energy Monitoring Systems.

One solution in the pipeline is a virtual video-based consultation platform for patient care. The idea is to connect doctors and patients for consultation with contactless referrals that leverage quick access to digital notes and records.

Overall, the group's operations are overseen by the Command and Contact Centre (C&C), essentially the heart of the company's operations. It functions as the main communication nexus that oversees and tracks 287 properties, 34 hospitals and about 1,000km of highway across Malaysia and Indonesia.

With an in-house team of data scientists and powered by Edgenta Cloud — which allows remote monitoring and asset management in real time — the C&C also tracks 974 Edgenta vehicles and 231 ambulances, more than 2,100 portering services and 24 chillers in hospitals daily, as well as 24,600 RFID-tagged hospital linen.

According to Syahrunizam, the C&C deploys IoT and uses cloud computing algorithms such as anomaly detection and machine learning to analyse data streams. The team then leverages predictive analytics to detect potential faults, develop insights and enhance predictive maintenance for a smarter asset management approach.

NEXT FRONTIER

Despite an unusually challenging operating environment this year, UEM Edgenta is pushing on towards its next frontier in the asset management space: remaking the way it provides its services across various business segments.

The idea is to allow its proprietary systems and solutions to be deployed by clients and asset owners within a cloud-based platform. In essence, these systems and solutions would be accessible in a way similar to a software-as-a-service model.

To do that, the company is currently in talks with several potential technology partners to expand its tech solutions and develop complementary cloud solutions that can be scaled quickly as needed.

"This is a new and intelligent way of managing assets from our C&C, where we will use different types of sensors, intelligent power meters, drones for data collection, identify maintenance requirements and improve service delivery via machine learning and artificial intelligence (AI)," says Syahrunizam.

The drive is in line with its accelerated approach towards digitisation, optimising cost, process improvements and seizing opportunities in new adjacent sectors and geographies, he adds.

It is important to note that UEM Edgenta is more than a digital healthcare solutions provider. As one of Malaysia's largest infrastructure solutions businesses, its existing operations encompass more than 3,100km of highways and state roads in Malaysia and Indonesia as well as other properties and infrastructure.

In respect of highway maintenance, UEM Edgenta is currently refining its Road Asset Management System (RAMS), says Syahrunizam. With RAMS, the company aims to minimise the total cost of highway maintenance while ensuring that the highways are safe and reliable for all users.

While already in use to manage all highways under its care, the company envisions a potentially seamless application of the same system into rail asset management as they have the same fundamentals.

"The backbone of RAMS came from over 30 years of extensive engineering knowledge in managing highways, equipped with technical teams that contributed to the digitisation of engineering services. Our plans include leveraging expertise in the engineering knowledge base to support the integration of latest technologies in the market, which include drones, weigh-in-motion capabilities and sensors," says Syahrunizam.

In addition, UEM Edgenta deploys a smart facilities management approach using data insights to drive efficiency and cost savings for its clients, powered by its Smart Connect platform.

In essence, Smart Connect captures real-time data for each property it manages to provide a complete live overview of a building's data points, from air conditioning and lighting to water supply systems and card access systems. This enables predictive maintenance and anomaly detection to manage the assets effectively as well as provide insights into the building information for optimised operations.

Successfully remaking its offerings to be accessible in a cloud-based platform at scale will be a game changer for UEM Edgenta and further enhance its DNA as the nation's leading asset management and infrastructure solutions company, says Syahrunizam. "We believe this will revolutionise the way UEM Edgenta works. Our vision is to be a tech-driven solutions company with an asset management/integrated facilities management solutions approach anchored in the adoption of technology, data analytics, AI, IoT, digitisation, mechanisation, automation and R&D dubbed 'Powered by Edgenta.'"

UEM Edgenta Command and Contact Centre