

Harnessing AI and automation for smarter operations

For many home-grown enterprises, digitalisation once meant simply digitising paper records. But this year's E50 winners show a very different picture: Digitalisation has evolved into a driver of productivity and competitiveness across many sectors, regardless of the size of the company. Increasingly, this also means using artificial intelligence (AI) to automate routine work, enhance decision-making and unlock new sources of revenue.

No sector shows the shift towards technology-driven operations more clearly than facilities management. Kim Yew Integrated, which was founded in 1985, now uses Internet of Things or IoT-based energy tracking, lift monitoring and predictive maintenance, supported by a Computerised Maintenance Management System and real-time dashboards that give clients a clearer view of asset performance.

It is collaborating with the Singapore University of Technology and Design to roll out intelligent AI-powered robotic



▲ PAL Container Line's commitment to process innovation and staff upskilling is driving greater efficiency and higher-value jobs, says managing director Andy Poh. PHOTO: PAL CONTAINER LINE

systems for environmental inspection and mosquito-risk detection.

The company's managing director Patrick Tan says: "What once served us well – relying on long years of experience and conventional hierarchy – must give way to collaboration, digital literacy and innovation. By embracing this mindset, we make the industry more appealing to younger professionals and ensure its relevance in the years ahead."

A similar story is unfolding in shipping and logistics.

Battered by freight swings, supply chain congestion and geopolitical uncertainty, PAL Container Line responded by building a cloud-based, AI-assisted logistics backbone.

The company introduced real-time fleet visibility, digital platforms that incorporate AI-supported load optimisation from both internal and external systems, digital documentation, and skills upgrading in generative AI and data analytics.

These innovations allow PAL to forecast disruptions earlier, reroute cargo quickly and maintain reliability even during uncertain times. Says company managing director Andy Poh: "Our focus on process innovation and staff upskilling has boosted efficiency and created higher-value jobs – contributing directly to Singapore's logistics competitiveness and long-term economic sustainability."

The drive to build deeper capabilities runs across sectors. In the scientific and medical arena, one firm has been doing this for nearly half a century. Founded in 1978 by Mr Lawrence Tan, the father of current group chief executive officer Dennis Tan, ITS

Science & Medical Group has grown over 47 years into a regional enterprise with more than 550 employees and annual revenues exceeding \$135 million.

For decades, the company has introduced advanced scientific and medical systems that helped to strengthen Singapore's research and clinical capabilities. It now operates from its Singapore headquarters with direct offices in Malaysia, Indonesia, Thailand, the Philippines, Vietnam and Cambodia.

Once focused on selling stand-alone equipment, the company has transformed into a full turnkey specialist, delivering modular operating theatres, radiology centres, diagnostic core labs, biosafety spaces and pharmaceutical production environments.

During the Covid-19 pandemic, ITS supplied ventilators to local hospitals and supported projects that expanded laboratory readiness. Today, it continues to play a role in national preparedness, from supporting healthcare-accessibility initiatives to specialised engineering for vertical-farming research and alternative-protein production – both critical to Singapore's 2030 food-resilience goals.

ITS is now modernising its own operations, upgrading its enterprise systems and analytics to improve decision-making, deepen customer relationships and scale consistently across South-east Asia.

Mr Dennis Tan says the company's priority is to strengthen its portfolio and performance within seven South-east Asian markets.



▲ ITS Science & Medical Group group chief executive officer Dennis Tan (left), and his father and founder Lawrence Tan. PHOTO: ITS SCIENCE & MEDICAL GROUP



▲ The shift towards technology-driven operations is attracting young talent to join the sector, shares Kim Yew Integrated's managing director Patrick Tan. PHOTO: KIM YEW INTEGRATED