

How Malaysia's AI park is driving innovations in agriculture and health

"A goal without a plan is just a wish," said pioneering aviator Antoine de Saint-Exupéry. His words resonate well with the Malaysian Research Accelerator for Technology and Innovation's (MRANTI) mission to help tech companies bring their ideas to life.

MRANTI was recently allocated over US\$ 7 million during Budget 2022. It has announced plans for a new AI park that will help developers in agriculture and health bring their products to the market. MRANTI is also opening a new learning centre to expand the pool of tech talent in Malaysia.

Dzuleira Abu Bakar, CEO of MRANTI shares how the organisation will accelerate the development of technology and enhance innovation in Malaysia.

The future of agritech

MRANTI's latest addition is the AI Park, where various facilities will support the testing and development of AI-enabled technology. The sustainable urban farming facility aims to drive acceleration and adoption of AI in the agriculture sector.

The organisation supported Phytopia, a social enterprise that helps small farmers grow produce in a resource-efficient manner. Farmers connect to an app that tells them exactly how much water is needed for their crops to thrive. This has led to higher yields of vegetables while using up to 98 per cent less water than traditional farming methods, Eden Green technology reported.

Phytopia then purchases the harvest from farmers and prepares the ingredients into meals. The food is sold to the local community through the organisation's cafe and the money is used to buy back from farmers again. This cycle incentivises vendors to continue adopting eco-friendly farming practices.

The agritech zone of the AI park also addresses challenges related to urban farming, such as limited land and the high cost of infrastructure. The park worked with BoomGrow, a smart farm that grows its crops in vertically stacked layers to overcome space constraints, according to its website.

The system also includes controlled environment settings, allowing farmers to adjust conditions such as lighting and temperature for optimum plant growth. This has helped the organisation to conserve energy and made the farm more environmentally friendly.

Many in Malaysia rely on the agriculture sector to sustain their livelihoods. Tech developers are exploring how they can help farmers run their businesses more efficiently through the AI park.

For example, agri-fintech startup Kapitani allows farmers to record their income and expenses through its book-keeping app. It provides them with a better overview of their financial situation, informing how they should budget and whether they are in a position to take on more loans.

The app is currently in its trial stage and is the first initiative in a series of plans to help farmers run their businesses more smoothly, Vulcan Post wrote. Kapitani is looking to develop a marketplace platform that

connects farmers to companies in the agriculture supply chain. This enables farmers to easily reach partners for their storage, transportation, and retailing needs.

The agriculture sector is important as Malaysia produces 70 per cent of its own food, wrote the Food and Fertiliser Technology Sector Agricultural Policy Platform. It also serves as a lucrative export business for the country, contributing to 7.4 per cent of Malaysia's Gross Domestic Product in 2020, according to the **Department of Statistics Malaysia Official Portal**.

Health tech's race against Covid-19

The AI park will also house a facility to help develop health tech. Innovations from this facility helped the country throughout the Covid-19 pandemic.

The park helped health tech startup Biogenes Technologies create Malaysia's first digital rapid Covid-19 test kit, Malay Mail reported. It allows users to upload their test results in real-time via a mobile app, allowing authorities to easily keep track of the number of Covid-19 cases. The app also tracks device location and alerts surrounding users to potential health risk exposures.

While it would have normally taken at least a year of clinical trials before being released, MRANTI sped up the process by coordinating discussions on regulatory procedures and obtaining approval from the relevant agencies.

Only five to ten per cent of Malaysia's technology and innovation reaches consumers, according to Disruptive Tech Asia. "This reflects a disconnect between public sector research and development and what the market needs," Dzuleira says.

"You can compare this situation to a broken bridge and MRANTI as the connector," she explains. "Our goal is to help developers create products and services that can reach their target audience by providing greater support for commercialisation," Dzuleira adds.

This could look like connecting tech companies to the right corporate partners and working on the marketing of their products and services.

Increasing awareness of R&D

Aside from helping companies to deliver tech, MRANTI will be opening a new learning and development centre. The MakersLab will allow innovators to experiment with the latest tech tools, such as 3D printers and augmented and virtual reality.

"This will provide an opportunity for tinkering to happen where developers get to play with tech. Creating and destroying tech is part of the creative process," Dzuleira shares. The MakersLab will be a dedicated space where their ideas can come to life, she adds.

The MakersLab will be available to companies in MRANTI's science park by May 2022, with plans to open it to students and hobbyists in the future. Members of the public will be able to access tools and equipment under the guidance of facilitators, Dzuleira elaborates.

This will raise awareness about what happens behind the scenes of developing tech. "Almost all of us are users of tech, but most don't even know what it takes to build a website or a mobile phone," Dzulei notes. The MakersLab could potentially attract those interested in understanding this process and address Malaysia's shortage of tech talent.

“The kids who visit the MakersLab might just become engineers or startup owners one day,” Dzuleira says. Early exposure to a hands-on environment can inspire the next generation of tech developers.

MRANTI’s AI park can help agritech and health tech innovators translate ideas into impact faster. Aside from tackling Malaysia’s low commercialisation rate, they are encouraging innovation via the MakersLab to deal with the country’s shrinking pool of tech talent.

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