

2 hot news

Search on for ways to make flat construction speedier, more productive

SINGAPORE – Flats in the future could be built by smart cranes that can find the quickest and safest path to hoist building components, saving time and improving safety.

Inventory at the worksite, such as construction materials and building components, will also be tagged with sensors so that contractors know which supplies are running low and replenish them in a timely manner.

Over the next three years, the Housing and Development Board (HDB) will work with the Nanyang Technological University (NTU) to make this more productive construction process a reality here.

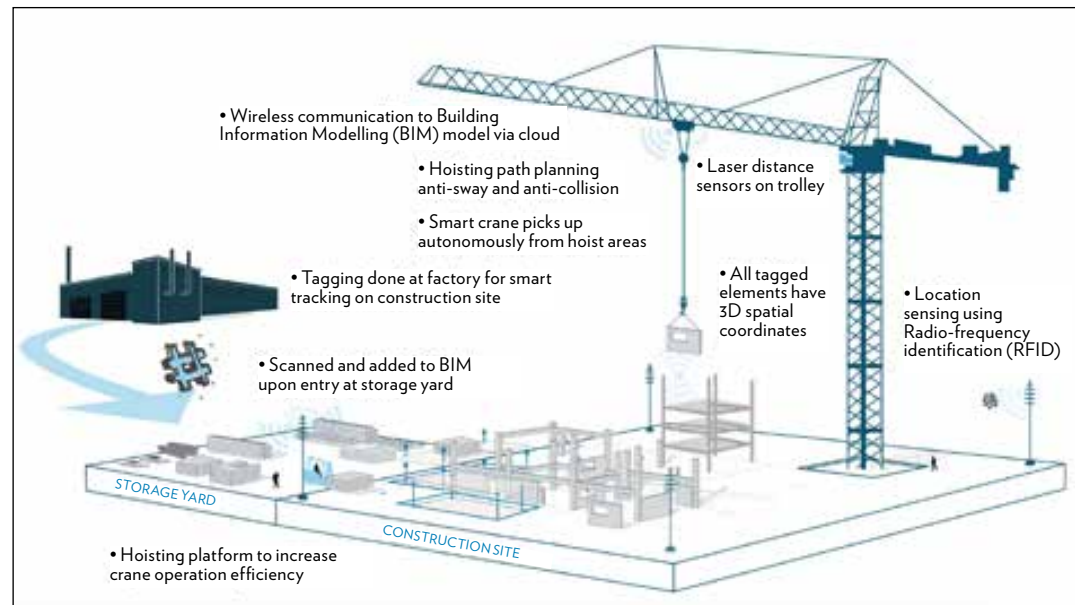
A S\$4.7 million collaboration was inked yesterday to develop a Smart Integrated Construction System.

The goal is to better manage logistics for construction, and speed up the building process, using smart technology.

The system will include a central digital database that various parties in the building process can access, from architects and contractors, to pre-casters and construction material suppliers.

This means all on the entire con-

SMART CRANES THAT SAVE TIME, IMPROVE SAFETY



SOURCE: NANYANG TECHNOLOGICAL UNIVERSITY & WITTEVEEN+BOS

struction supply chain can see in real-time the progress of the project, and manage their budgets and timelines better.

If there is a snag somewhere, for instance, architects can work with con-

tractors to quickly sort out the problem. Smart sensors with geo-tagging capabilities will also be attached to building components that will flag wrong deliveries to a site, among other things. All this, said the HDB, will

minimise disruptions to the construction process and ensure the work progresses smoothly.

Speaking at the International Housing Forum yesterday, National Development Minister Lawrence Wong said the construction sector is in need of a productivity boost as it consistently lags behind other sectors in this aspect.

“Construction is just a laggard when it comes to productivity, somehow,” Mr Wong said. “For Singapore, it hits home particularly hard because we cannot sustain our current ways of building with a high reliance on foreign workers. It is just not sustainable, and so we need to move towards more advanced and productive technology.”

Professor Tan Kang Hai, associate chair for research at NTU’s School of Civil and Environmental Engineering, added that the smart system will help construction firms move towards “just-in-time” construction — a production model in which items are created to meet demand rather than in surplus — as a way to minimise the time HDB’s prefabricated parts are kept in storage. **ADDITIONAL REPORTING BY WONG PEI TING**