Building communities, boosting productivity

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Wifi-enabled void decks could become a reality as the Housing Board embarks on a three-year social behavioural study to better understand evolving resident needs.

A $6 million memorandum of understanding to embark on this study, titled New Urban Kampong Research Programme, was signed with the Singapore University of Technology and Design (SUTD) yesterday.

The study, which will steer future town planning and housing design, will use a data-driven approach to understand resident preferences and build stronger communities.

Information from traditional census and surveys – as well as big data from sensor networks around the neighbourhood, such as human traffic and movement sensors – will help identify lifestyle trends and sentiments in a community.

For instance, using big data on smart lighting could help HDB understand how residents move around and use community spaces in their estate. Residents can then be engaged to co-design under-used spaces, said an HDB statement yesterday.

Common interests of residents can be identified and result in new ways of bringing communities together.

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— HDB chief executive Cheong Koon Hean

For instance, if data shows that residents in an estate are fond of cycling, customised cycling apps can be introduced to link cycling enthusiasts, allow them to share their cycling mileage and make recommendations on scenic or safer cycling routes.

Minister for National Development Lawrence Wong also signed a $4.7 million agreement to collaborate with Nanyang Technological University (NTU) to boost construction productivity at the International Housing Forum yesterday.

NTU will develop a Smart Integrated Construction System that will serve as a collaborative workspace between industry partners through a central digital platform.

This streamlines data sharing among partners such as architects, contractors and construction material suppliers, enabling them to better keep track of budgets and timelines.

The platform will be powered by a Smart Tracking System to better manage the logistics of construction inventory, such as precast components for HDB buildings.

HDB chief executive Cheong Koon Hean said: “The fast-changing urban landscape brings along with it increasingly complex housing issues and needs. To meet these challenges, HDB wants to advance the ‘science’ behind how we plan, design and build our HDB towns and estates.

“With behavioural science studies and data analysis, we can better understand our residents’ needs and changing lifestyles and their likely responses to our plans and initiatives.

“Smart construction solutions will also enable us to build more productively and achieve better quality.”

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For more, see page 15