

**HDB AWARDS 2018**

# Embracing change

Rich Construction Company proactively stays updated by constantly adopting new technological innovations

BRYANT CHAN

THE construction industry is constantly faced with a great deal of change and disruption, and few know this better than Mr Li Xiao Qian, vice-chairman of China Construction (South Pacific) Development Co (CCDC).

Having been with the company for the past 22 years, Mr Li has weathered many winds of change.

He says: "The group faces increasingly difficult economic conditions, stiff competition and disruptions from technological advances."

"With the rapid onset of changes in the industry, those capable of responding to the said changes will survive, while those who do not adapt will be left behind."

According to Mr Li, to maintain its position as an industry leader, CCDC needs to adopt new technologies to improve productivity and efficiency. To that end, its subsidiary company, Rich Construction Company (RCC), has successfully implemented two technologies:

**1. Design for Manufacturing and Assembly (DfMA)**

DfMA is one of the key areas that is adapted into the Building and Construction Authority's Construction Industry Transformation Map.

It aims to automate offsite production facilities and streamline the process of on-site installations.

Most of RCC'S latest projects, including



Mr Li believes that adapting to change through technological advancement is the best way to stay afloat. PHOTO: KELVIN CHNG

Lake Grande, Twin VEW and Stirling Residences, made use of DfMA for jobs such as prefabricated bathroom units and cross laminated timber.

Traditional onsite work was moved to an offsite-controlled factory environment, making it easier to manufacture. This has led to significant improvements in quality and productivity.

Says Mr Li: "Through the off-site modularisation and prefabrication system, our workflow becomes more efficient. This reduces the need for manpower on-site, keeping construction work deadlines within schedule."

**2. Using Integrated Digital Delivery (IDD)**

IDD technology ensures connectivity between various stakeholders through digital information.

RCC employed IDD in three different areas: digital design, digital construction and digital asset delivery and management.

It is also embracing the use of virtual design and construction technology

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MR LI XIAO QIAN  
vice-chairman  
China Construction (South Pacific) Development Co

to maximise accuracy during the pre-construction stage, and uses drones to gather information on sites and monitor work progress.

And when it comes to digital asset delivery and management, staff use proprietary mobile apps to monitor construction defects, submit safety documents, manage quality control and track subcontractors' progress in real time.

The push to improve IDD capabilities has helped minimise human errors and delays, and increased overall efficiency and safety on-site.

In addition, employees are encouraged to upgrade themselves through skills development and lifelong learning plans.

Reflecting on RCC'S two Construction (Housing) awards for Tampines GreenEdge and West Valley@Bukit Batok projects — both of which utilised IDD — Mr Li says: "With this approach and philosophy, we have adopted a future-ready technology platform with highly motivated skilled employees who facilitated our HDB Awards accolades this year."

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